Lifespan Development of Women: Psychosocial Context

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These charts are used for defining how interrelated parts of a whole relate to one another. Pie charts typically capture the contribution of one item relative to another. This could be the total number of chickens vs. fish vs. beavers for Tequito's restaurant sales in a given month, or the percentage of customers who order his family's word-famous tamales at the restaurant. Uses the picture (no pun intended) to show a pie chart that illustrates the market share of food and competing restaurants in Dallas, Texas.
ALLAMA IQBAL OPEN UNIVERSITY  
GENDER & WOMEN STUDIES DEPARTMENT  

INTRODUCTION

Dear Students,

Welcome to the textbook of the course “Lifespan development of Women: Psychosocial context” C-4642. It is a three credit hour course comprising of 9 units. The present course is the bifurcated form of the original six credit hour course “Psychology of Women” C-871 which was the first course to be offered when the department of Women’s Studies at AIOU initiated its PGD program in 1998. In 2008 according to HEC Guidelines of course revision, the course was bifurcated thematically in 3 credit hour courses, resultantantly two new courses “Psychology of Gender” C-4641 and “Lifespan development of Women: Psychosocial context” C-4642 emerged.

Course Description
The present course “Lifespan development of Women: Psychosocial context” C-4642 is designed to provide an overview of biological, cognitive, social, psychological development from conception through old age. This course is an exploration of the entire human lifespan, beginning with conception and the prenatal period in which Psychological, sociological and biological determinants of development and mental health factors are considered.

Another purpose of developing this course relating to life span development of women is to explore a wide variety of psychological issues that concern women in general and Pakistani women more specifically. There are some special circumstances which are faced by Pakistani women while growing up in Pakistan. In this course the effort has been to use as much local research evidence as possible to make it more relevant to Pakistan.

The units of the course encompasses topics related genetics, hormones, puberty, menstruation, pregnancy, child birth, menopause etc. In this course the effort has been to use as much local research evidence as possible to make it more relevant to Pakistan.

The present text book has the following special features which should make it interesting to read for students of Psychology or Gender Studies.

- It has been written in self study type text which encourages the reader to study on his own.
- The self assessment questions along with activities and reference are included to assist in understanding the text material effectively.
- The local research studies have been used to make the book more relevant to Pakistan.

How to study:
The study material for this course comprises of a text book. The course outline spreads over 9 units/topics. Each unit requires two week's study. If you spend three hours weekly to study your course you can complete the course in eighteen weeks. In mid of the study period a workshop will also be held which is an effort to help you to prepare for examinations and meet peer group and listen to the subject experts and exchange knowledge.

Please do not confine yourself to the materials, which are being supplied by the university. To enhance knowledge at postgraduate level the students are expected to extensively use library and Internet.

Tutors Guidance:

In distance learning system basically the students have to study on their own. However, if there is a viable group of 10-15 students the university does appoint a part-time or a correspondence tutor. Part-time tutors hold tutorial meetings in study centers established by the university. The students are required to regularly attend these fortnightly meetings. Otherwise you are assigned a correspondence tutor who not only checks your assignments but you are encouraged to be in contact with the tutors for guidance regarding the course as is convenient for both of you. The Regional office as well as your tutor will inform you about the appointment of the tutor.

Assessment and Evaluation:

According to university system your performance in the course will be evaluated through two modes that are:
- Continuous Assessment (Home Assignments)
- Final Examination

You will be required to do two assignments for this course. The assignments are spread over course units and according to the schedule provided in your student kit each assignment is to be submitted to the tutor for checking.

The main objective of the assignments is to encourage you to study and appraise your performance. The tutor’s assessment will guide you for the preparation of your next assignment.

The marks obtained in assignments add up to the final examination. The papers for final examinations are prepared based on the complete course. The final examinations are held in specified examination centers. For passing a course one has to pass both the components of assessment that are take home assignments and final examination as well as workshop attendance.

Course Coordinator
Maria Mustafa
OBJECTIVE OF THE COURSE

1. To learn about the growth and development patterns of the female child.

2. To critically examine the life episodes in a girl's life which influence her cognitive and emotional growth.

3. To scientifically study the biological changes during adolescence years and their impact on their biological and physical growth.

4. To study the later adulthood and the phenomenon of menopause as a biological landmark in the growth process.

5. To summarize the impact of various social, cultural and economic factors on development of gender concepts.

6. To learn more about some specific psychological traits like achievement, self-concept and motivation in the light of socio-cultural forces which shape the personality of every child.

7. To encourage students of Psychology to study female at their various stages of development to add new knowledge to Psychology.
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UNIT - I

The Psychology of Women
Objectives

- To study women as a separate entity.
- To learn more about the individual differences in developmental processes of girls and boys.
- To separate the myth and reality of female body.
- To learn accurate and scientific realities of human biology and growth patterns of girl babies and women.
- To differentiate between being different and being inferior.
1. INTRODUCTION

This unit will familiarize the reader with:

a) History of psychology of women and the need to study/research in the area of psychology of women

b) The controversies related to psychology of women.

c) The emergence of psychology of women as a discipline.

d) Early studies on sex differences.

e) Problem of research on the psychology of women.

At the end of the unit the reader should have familiarity with the important names in the development of Psychology of Women as a discipline as well as the issues facing the researchers in this area.

1.1 The History of Psychology of Women as a Discipline in Pakistan

Why should there be a need for the psychology of women? Why should there be a need to understand that women (though physiologically different from men) are humans too. It is because women and their issues have been neglected or treated with indifference far too long. The role of women in Pakistan is complex: on some social indicators women are accorded esteem and importance; but on most accounts, the status of women in Pakistan is among the lowest in the world, including the rest of South Asia (World Bank Country Study, 1989).

It is a fact that women receive less than one tenth of the world's income but do two thirds of the work. They earn less than men even though they work longer (2-5 hours in developed countries, 5-6 hours in Latin America and as much as 12-13 hours in Africa and Asia). If all the household chores and child care are taken into account it becomes a massive 60-80 hours per week (Rowbotham, 1992).
What does this super machine feel like, what does she go through during her biological cycles such as menstruation, childbirth, menopause etc., is something which the scientific world in general and the women in particular want to know and understand.

Women though in touch with their bodies and their selves, neglected themselves or relegated themselves or physical changes to a secondary status. They would work untiringly in fields when their bodies would tell them to stop. They would stay awake all night nurturing children and work all day for the reward of being told they are good mothers and housewives. They have now taken on additional responsibilities of full time careers along with their household duties. Women who work in the non traditional jobs such as advertising, film, and television etc., face even more difficulties at work and at home. The Pakistani women cannot or will not complain. She will be told that she has brought it all on herself. The women going through the changes, the strains, the stresses, the hopes and the failures of work and home life manage to cope through a mechanism of sisterhood or networking. This is part of the study of Psychology of Women.

The awareness to study women as a separate organism from men grew along with an increased consciousness of women psychologists who under the influence of feminist movement started questioning the very subject they were studying and teaching as psychologists. The feminists claim that most of the subjects being taught at the universities are biased and need to be re-written from a woman's perspective. The serious culprits have been the biological sciences which have not only ignored the contribution of women scholars in the field but have also neglected the studies of women as a subject. To the feminists this is a serious social and moral issue which has resulted in lowering the women’s status in the human societies, thus a movement to review the existing knowledge as it was being taught in the universities, has started.

The psychologists have known all along that women not only physically grow and develop at different pace but also their reactions differ from men both, quantitatively and qualitatively. However, no serious effort has ever been made to study the girl babies as separate identity from boy babies except a general statement that girl babies are ahead of boy babies
in development. When it came to the study of adolescents and young adults,
some of the specific areas of female development were either ignored or
made fun of. Developmental Psychology acknowledges variation in
physical growth of female child as well as differences in emotional
reactions but no serious study is done on this aspect. In fact most of the
studies concentrate on harmful impact of girls accelerated growth on boys.
The phenomenon of puberty, menstruation, pregnancy and menopause are
important landmarks of women's life but instead of being subject of
research and study are presented in humiliating terms as if these were
abnormalities associated with female gender (McPhcasson, 1988; Martin,
1987).

The courses in Psychology of Women started being offered in late
60s and early 70s along with other courses being offered by women faculty
activists in the American universities. In the beginning most of these
courses were offered as non-credit courses or at the most elective courses.
However, Psychology of Women is now an established branch of
Psychology in most of the developed world. The gender related courses
have widened the horizon of the discipline of Psychology and have had a
beneficiary effect on related areas like biology medicine and allied sciences
(Bardwich, 1971; Bohan, 1992; Banks, 1986; Rowbotham, 1992). More
than anything else it is a fresh look at the existing bodies of knowledge
which is very stimulating and have given birth to new insights in the
existing established theories of many prestigious disciplines and has opened
new areas of research and investigations.

1.2. Controversies Related to Psychology of Women

There are numerous queries which women themselves need answers
to understand their sexuality, their mental and physical health and their
roles. They need to separate the 'myths from reality' and only after sorting
this out can women lead healthy, fulfilling lives.

The areas which come under female psychology are biology,
physiology, bodily functions, roles, personality, cultural and social norms
and women's response to them. The need to understand this is all the more
important as most, if not all, of what is passed on to women in Pakistan is
through unwritten communication i.e. codes of behaviour, menstruation, birth, marriage roles.

Box 1.1. A senior lecturer in a Women's College came to work one morning with red and swollen eyes. She had been sitting up all night caring for her five children who had caught a flu virus. Where was her husband? Was the query from her colleagues. He was sleeping in the next room after having told her that she will go to Heaven for being such a good mother - was the answer.

There were women in the Indo-Pakistan sub continent who followed the beat of a different drummer inspite of living in an Eastern society. They were rulers and king makers e.g. Razia Sultana and Noor Jehan. They were writers who wrote what they saw and went to jail for it i.e., Asmat Chuughial. They were mothers who sent their children to fight jehad alongwith their Muslim brothers on foreign lands such as Maulana Muhammed Ali Johar and Maulana Shaukat Ali’s mother. They were sisters who worked untiringly to support their brothers in the making of a nation i.e., Mohtarama Fatima Jinnah. There was Razia Sultana who fought odds because her father entrusted her with his Kingdom, instead of giving it to her brothers.

How did these women achieve what many women of their times found it difficult, if not impossible to achieve. How were these women different from other women. The answers to these questions lie in the Psychology of Women.

Thus, we need to learn the psychology of women of Pakistan to understand what these women share in spite of each being unique and different from women of other countries. Furthermore, since women and their concerns have been relegated to a back seat in psychological theory research and practice (not just in Pakistan but also in the West), there is a need to study women in the context of Pakistani society (keeping their psychological variables in view).

One of the first papers published on the psychology of women was in 1968 by Naomi Weisstein 'Kinder, Kirche and Kiiche as scientific law:
Psychology constructs the female. This paper reflected the biases, stereotypes and fantasies in psychology's views of women. This was the beginning of a new era of awakening of reframing and researching women from a different point of view. This set the stage for development of a new academic discipline, the Psychology of Women.

As Sherif (1992) puts it in 'Bias in Psychology' Naomi Weisstein fired a shot that ricocheted down the halls between psychology's laboratories and clinics hitting its targets dead in the center. Psychology has nothing to say about what women are really like, what they need and what they want essentially because psychology does not know. Ignorance about women prevailed academic disciplines in higher education where the requirement for the degree seldom include thoughtfully inquiring into the status of women as part of the total human condition. Since the 1960s, the women's movement has provided the needed content for critical examination of biased theoretical assumption and working practices in psychology's diverse area. Psychologists provided the inputs for this discipline from every perspective and specialization (clinical, social, biological, anthropological etc.). Thus, it now has a very rich, well researched, well grounded and well rounded overview of an area which had been neglected for a long time.

In America, the psychology of women has acquired an academic status on its own as evidenced by research on sex differences, text books devoted to psychology of women and the A.P.A. Division of Psychology of Women (Shields, 1992).

The movement of awareness of women as individuals emerged along with the feminist movement (though not necessarily because of it). In the late 1960s women's movements resurged (the first well known movement was that of the suffragette in the early 1900s). These movements were labelled as feminists and women's liberation movements. However, the ideas and concepts varied with political, economic, social and sociological perspectives. In the 1970s the concept of gender was developed by feminists to indicate that men and women are different and have different ways of communication with each other, (in all societies and cultures). The links between biological differences and social values of femininity and masculinity were also brought up by the feministic psychologists. The word
mandate that it would eventually be evolved into two separate departments of Home Economics and women Studies. During the period 1981-84, teaching and research was carried out by this Department. As a consequence of the research conducted by Dr. Hassan (1994 personal communication) in the Department on Women's Issues, Allama Iqbal Open University was forced to review the entire academic programme. The following steps/decisions were then taken:

a) The Allama Iqbal Open University had to maintain separate statistics in enrollment and pass percentage on gender basis.

b) The department at the AIOU had to develop new courses to attract women students.

Adaptation of these measures, the need to start courses for women in rural areas was felt, at Basic Education and High School level through distance learning. These courses were the first ever initiated in the world.

Due to these policies the ratio of female students which was 19% in 1981 rose to 30% in about 3 years time.

In April, 1984, due to changes in the administration of AIOU the department was renamed as Department of Women Education under the new name, the department offered two types of courses (undergraduate).

i) Women Studies

ii) Home Economics

These were offered alongwith High School and Higher Secondary Education courses.

In the 7th 5-year plan (1987-92) the committee on Women Development recommended opening a Women's Studies Department in at least 5 major universities of Pakistan, following the example of AIOU. This was implemented by initiating Centres of Excellence on Women Studies in the following major universities between 1986-89; Karachi University, Punjab University, Sind University, Quaid-i-Azam University
and Peshawar University. Out of these at least two are non functional (at Punjab and Baluchistan universities), whereas the others (Karachi, Quaid-i-Azam and Peshawar) are functional and operative. In June 1991, the Allama Iqbal University took another major initiative to start the master's level programme in Women Studies. The Ministry of Women Development gave a special rant to AIOU to start the programme.

The Department of Applied Psychology at Punjab University had initiated a Psychology of Women Wing in 1993. Seminars, colloquiums and research discussions were organized at the initial stages. The Punjab University and other organizations funding women's programmes were requested for funds but were turned down. The Women's group of International Council of Psychologists (U.S.A.) has donated books and journals to the wing. The female students (master's level) and faculty members utilize the resource room for research and reference material (This is a very good example of female Networking around the world).

1.3. Emergence of Psychology of Women

History has been written with a negative bias towards females. This includes not just the Cleopatras, the Helens of Troy, The Mata Haris but also the seductress, the High Priestess of pagan religions who wielded the power of life and death.

Freud the sexual liberator of females viewed women as mysterious. "The Great" question that has never been answered and which I have not yet been able to answer despite my 30 years of research into the feminine soul is 'what does a woman want?' (Jones, 1955, p 421, cf. Rohrbaugh 1987).

The controversies raised during women's movement led to intensive research on women's issues, these ranged from biological differences between sexes to social differences - each researcher either biology or socialization to explain why differences between men and women occurred.

The basic orientation was to explain why women were different from men. It was assumed that understanding of these differences would lead into understanding of the Psychology of Women.
It is only recently that women researchers have realized that psychology of women is not just psychology of sex differences. The areas which were really important had been neglected - sexuality, menstruation, pregnancy, childbirth (or no childbirth) rape, abuse, menopause. The issues of juggling several roles at the same time and the toll it takes to be a superwoman. While looking for sources one of the earlier books, the Psychology of women by Judith Bardwick (1971). Bardwick's Statements are reproduced below.

"Almost every woman alive is aware that she is part of some huge problem. Almost every magazine published has devoted large amounts of space to it yet hardly a sound is heard from the professional literature of psychologists, here the problem of the psychology of women has never become a widespread issue" (p. 1).

Bardwick was aware of this vacuum and was looking for a topic to do research. She adds,

"Still without a topic with deadlines approaching I decided to do a paper on role conflict in women - stimulated mostly by the unhappy letter from my friends, my interest was not in role conflict per-se but in the personality characteristics of women and their probable success in the market place and whether there really were any generalized personality differences between men and women and in the origins of any differences" (p. 2).

The reading material amazed Bardwick, a mother of two young children - 'that the idea of pregnancy and infant nurturance was motivated largely by an unresolved search for male genitals was nonsense beyond belief that this particular view was widely promulgated, repeated and enlarged - bordered on professional lunacy. She suggested that it was not the envy of the male organs but the female reproductive organs which were important in women which led to the teaching of a graduate seminar on psychology of women (Till, 1971), the psychoanalytic school had a major hold on psychology and thinking of psychologist, starting from Sigmund
Frued who perpetuated the theory of jealousy of missing genitals in the female child.

Re-examination of women and what the experts theories said of them revealed the male view of reality. Bardwick renounced the anxiety and envy of male organ by the female child forwarded by the psychoanalytic school. She said 'it is not the absence of the male organ but the presence of creative inner space that is important for girls'. (p. 2).

Bardwick during her teaching of the Graduate seminar on 'Psychology of Women' brought out the salient variables associated with women's personalities - passivity, dependence, lack of self esteem. During her explorations and discussions important focal areas which emerged are summarized as follows: Differences between men and women originate interactively, in genetic temperamental differences, in differences in the adult reproductive system, and in the sex linked values specific to each culture. 'What are the bases for differences between the sexes and how do they develop' (p. 3). There was an awareness in the psychological discourses that women and men are influenced not just by biological and personality differences but also by traditional values. Furthermore, that all women were judged on a male scale. 'The greatest esteem is awarded to women who distinguish themselves professionally, yet simultaneously these women are subjected to the risk of alienation, of the suspicion of being failures as women' (p. 4).

The discussion on psychology of women originated with what earlier psychologists had to say - the important target was Psychoanalytic theory (Karen Homey, inclusive). The focal point being the body, the differences which emanate from perception of bodily differences and effect the perception of the psyche.

The issue of sexual freedom was also important for the women of the 60s and 70s. Furthermore, interest in the sex differences (brain, play, development, traits, personality, etc.) were initiated at this time. Maccoby and Jacklin's book is in a class by itself. Though psychology of women had been initiated and the need for understanding women emerged, the focal point was still the male. Researchers were either trying to 'prove' that women were not different from men or to prove that though women are
different from men but equal or better than them. As Bardwick (1974) points out - "both men and women apply masculine criteria to their performance. The greater esteem is awarded to women who distinguish themselves professionally yet simultaneously that women run the risk of alienation of suspicion of being failures as women (p. 4). Women who achieved as errant (from the role of women) and were seen more male like. Even Professor Higgins (My Fair Lady) quired in exasperation - 'why can't a woman be more like a man?'

Box 1.2 The author's grand father asked her mother to give her daughter's Mura-tul-Arroos and Tauba-tun-Nasoooh by Deputy Nazir Ahmed when they reached puberty. This was to be done so that they could read it and know what women were supposed to be like!

Thus, there were discussions and researches on differences between men and women, the contribution of body to the sex differences in two sexes (throughout the life span), differences in personality qualities and abilities. There were thesis on differences in roles, self esteem, motivation, brain structure etc., between men and women.

The present day psychologists have moved beyond this to areas which are related to women's development and growth as women and as individuals in their own right. The women of Pakistan have come a long way - but they still have a longer way to go to achieve their goals, to understand themselves, to realize their full potentials. The psychology of women will help to understand women understand themselves and each other, instead of judging themselves by the 'male' standards.

Box 1.3. Women who excel in their careers who drive well, who walk and talk straight and assertively are seen as more male like by their more traditional counterparts. This has been commented upon generally by administrators in the Pakistan work environment. The working women was stereotypically seen as a feminine' and 'hardened' and 'mardana' in behaviour.
1.4. Early Studies of Sex Differences:

There is perhaps no field aspiring to be scientific where flagrant personal bias, logic martyred in the cause of supporting a prejudice, unfounded assertions and even sentimental and frivolous have run to such an extent as here. (Helen Thompson Woolley, 1910). Woolley had charged psychology of male dominance even to the extent of bias in research on sex differences.

As more and more women entered the field of psychology their research findings became eye openers. There have been thousands of studies done on comparing men and women and the results clearly indicate a pattern of responses. When women and men are put in the same situation they react differently only when they enter the situation with different expectations and sets (why can’t a woman be more like a man?). Does it mean that men and women are not different —. No, they are ‘Men and women live in a different world, with different sets of expectation, different behaviour, life choices and roles. Therefore we can expect differences at all levels of behaviour and psyche. Psychologically men and women are different in some basic ways in their life styles, in the organization of their egos, their personal qualities, in their motives and in their goals (Bardwich, 1971) (p. 3). Why and where men and women devote their major efforts is determined by tradition as well as basic personality qualities.

This area is full of interesting controversies. Early research on sex differences has been conducted primarily by male researchers living in a male dominated culture thereby their findings have a strong bias in favour of males. ‘Because we necessarily speak, think and perceive from a standpoint generated by our experience, position in the social hierarchy and ideological commitments, objectivity is impossible to attain. Empiricism, once thought to free our efforts to comprehend the world from bias, cannot do so. Indeed claims of objectivity only served to disguise the politics of meaning (Crawford and Marece, 1992, p. 26). Differences were found (as is obvious) but these differences were attributed to shortcomings and of course inferiority of women. Even the concept of mental health had been affected by this bias, traditional masculinity was viewed as healthier than traditional femininity (Rohrbaugh 1992).
Women fell short of the male standards! Researchers (females and males) have turned to efforts to develop a new psychology of women which tries to understand as much as possible where women are different from men and why? Also what effects women's psyche and behaviour (Sherif 1992) initiates her discussion on sex differences by remembering an important contributor, Helen Thompson Wooley who had critically exposed the bias in sex difference research and dismissed much of it as drivel in 1903 and 1910. Hollingworth completed her doctoral research at Columbia on whether women's performance is affected during menstruation (no evidence for it was found). Despite her advisers strong view to the contrary. Later it was also reported that a well known vocational interest for high school students developed separate tests for men and women (blue and pink forms).

The reason why only differences between the genders are considered to be significant for research or theoretical purposes is not hard to uncover. Many psychologists, including Julia Sherman in her notable survey of research on women as well as Maccoby and Jacklin in their survey or early childhood literature on sex differences have noted remarkable tendency not to publish, to ignore or even distort findings of no differences.

In early days it was assumed that any differences obtained through tests were biologically determined. Wasn't sex a biological variable? The sexes evolved through biological evolution, didn't they? On the average, were the differences great enough to impose any limits on, or indicate any especially promising directions for the kinds of lives that individuals of the two sexes may reasonably be expected to lead? And, perhaps most important, where differences exist, how did they come about? Are they inevitable or are they the product of arbitrary social stereotypes that could be changed if society itself changes (Maccoby and Jacklin, 1974, p. 3). These authors work on the assumption of null hypothesis of sex differences.

As has been related earlier the biases of male psychologists extend the research they conducted (and subsequently their findings). The older studies tend to take male as the norm with which the female was compared, any difference in the female was defined as a deficiency. This pattern is found throughout psychology - in studies of biological sex differences, in
theories of personality development and in studies of numerous areas of everyday life. (Rohrbaugh, 1987, p8).

This led to the development of a new psychology of women which focused on the experiences shared yet unique only among women. It has now extended its research to understand the changing roles of women. In Pakistan, this awareness was expressed later as compared to the West. The Women's Division of Government of Pakistan has a programme by which it finances Masters, M.Phil. and Ph.D. thesis on/related to women and their lives. These are important contributions to the study of women from a woman's point of view. The intensive and in-depth first hand knowledge and experience lends an important dimension to such researches.

Researchers have examined not only women but also the ways in which they interact with men, in the various roles they adopt throughout their lives. A woman is more complex and what we know is only the tip of iceberg.

"Only women have been studied separately and begun to define themselves apart from men, can we come to any realistic understanding of how and why the two sexes really differ from each other?" (Rohrbaugh (1992, p. 9).

Maccoby and Jacklin (1974) were among the first few psychologists who studied the psychology of sex differences and completed an extensive bibliography of literature. This now classic reference book begins with the questions still being asked today, though with a different background. Questions about the psychological nature of man and woman are currently under extensive debate. Do the sexes differ in their emotional reactions to people and events? Do they differ in vigor with which they attach the life problems confronting them? Do they have equal potential for acquiring the knowledge and skills necessary for a variety of occupation? If psychological differences do exist then, which are the major areas of differences.

One of the interesting issues in sex differences researchers has been the use of statistics and research techniques. Our belief or disbelief of our findings is frequently a subjective judgment which dictates continuing
statistical analysis, the decision to attempt a replication or to publish (Wallston, 1983, p. 32).

A study of history of research on sex differences revealed that whenever sex differences were reported in favour of female, a new interpretation and further research questions were initiated as the results were different from the expectations of males! Similarly the statistics employed to study sex differences have also been shown to have a particular bias. Instead of looking for similarities, differences were the focus of researchers play behaviour, aggression and sex difference. DePietro (1981) and Crady (1992) reported a large difference between boys and girls on some aspects of play behaviour (especially rough and tumble play). On the other hand, the researcher did not focus on similarities of play components which indicated that boys were very similar to girls on play behaviour. Sex differences on influence of ability account for 1% of variance and cognitive differences about 1-4% of variances.

Harlow and earlier researchers have reported that male are distinctly different from females in play and other behaviours even in infancy. Females tend to be more passive less active, more introverted. Play behaviour is initiated by males as compared to females. Play with body contact is more frequent in males i.e., more rough, and tumble (Parsons, 1980a; 1980b).

Bardwick (1974) states that though the girls constitutionally less likely to act on impulses, the boys physical aggression is prohibited by the parents and others. Girls can be tomboys without notice but boys can never be sissies. The boys turn outside for self esteem sources such as in achievement, not so in females.

Maccoby and Jacklin (1974) have effectively summarized all the early sex differences research under three major headings.

1.5. Unfounded Beliefs about Sex Differences

a) Girls are more 'social' than boys.

b) Girls are more 'suggestible' than boys.
c) Girls have lower self-esteem.

d) Girls are better at rote learning and simple repetitive tasks, boys at tasks that require high level of cognitive processing and the exhibition of previously learned responses.

e) That boys are more 'analytic'.

f) The girls are more affected by heredity, boys by environment.

g) That girls lack 'achievement' motivation.

h) That girls are 'visual', boys auditory.

1.6. Sex Differences that are Fairly Well Established

a) That girls have greater verbal ability than boys.

b) That boys excel in visual-spatial ability.

c) That boys excel in mathematical ability.

d) That boys are more aggressive.

1.7. Open Questions: Too Little Evidence or Ambiguous Findings

a) Tactile sensitivity.

b) Fear timidity and anxiety.

c) Activity level.

d) Competitiveness.

e) Dominance.
2. ORIENTATION IN RESEARCH ON SEX DIFFERENCES

Kahn and Yoder (1992) have pointed out to the conservatism in psychology of women as opposed to feminist perspective. These authors have argued that though it is from the women's movement of the 1960s and 1970s that Psychology of women developed as a science. There have been setbacks in the development and research in this discipline. These can be traced to researchers point of view and biases. There are two kinds of biases in psychology of women, the alpha and beta bias. Hare-Mustin and Marecek (1988, cf Kahn and Yoder, 1992) have elaborated this. "Psychologists can women and men either as being basically different, the alpha bias, or basically the same, the beta bias". Most Psychologists work from the alpha bias approach i.e., women different from men. As a result women see themselves as lacking or deficient in achievement, have fear of success, exhibit the impostor phenomenon and the mummy track. Researchers with this bias have:

a) That Women are less motivated to achieve success.
b) Women are afraid to succeed.
c) Women who succeed feel like impostors, that they have fooled everyone by succeeding. They cannot internalize feeling of success.
d) Women are inherently different from men because when they reproduce they loose their commitment.
Psychologists working with the beta bias see men and women as similar to each other. Gender differences are seen as a function of social forces. The beta bias researchers report results showing:

a) Men and women have similar work behaviours.

b) Men and women are not different on display of interpersonal behaviour.

c) Expectations for stereotypic behaviour.

The alpha and beta biases reflect two possibilities, women choose roles because of basic biological/sociological differences from men (alpha bias), if women make rational choices then acceptable responses should follow leading to changes in reduction in discrimination (Beta bias).

The aim of psychologists and others working in this area to create 'psychology of women that will foster, rather than inhibit social change aimed at improving the status of women' (Kahn and Yoder, 1992; p.416).

It may be too idealistic a goal for beginners but we should remember that 'Rome was not built in a day'. If we think of bringing about these changes, to understand what women are, what are the various biological factors and social forces, that make up women’s behaviour (and that of the other sex) only then we can manage the understanding of women by themselves and by others. Psychology of women is not only for women, but the society in general. Ideally psychology of women should aim at encouraging changes in socio-cultural values which have not nurtured the maximum development of women. Thus the aim of Psychology of Women in Pakistan should be to improve women’s own understanding of themselves of their potential for growth and output which would ultimately lead to development of a healthier nation.
BIBLIOGRAPHY


UNIT - II

Prenatal and Early Childhood Development
Objectives

The objectives of this unit will be:

a) To familiarize the reader with the basic biological determinants of development, the chromosomes, and hormones.

b) Major developments and influences during pre-natal period (especially brain development) will also be discussed.

c) The reader will get an overview of the sex differences in infancy and early childhood.

d) The reader will also be familiarized with the controversy related to the evidence of differences in male and female brains.

This is done with the view that the reader after going through this unit will have the basis of developing his/her point of view regarding the issue along with the basic information of biological differences.
INTRODUCTION

Men and women, boys and girls are biologically different and the biological difference begins at the molecular and genetic level i.e. in simplest terms a fertilized egg will become a female if there are two XX chromosomes and a male if there is one X and one Y chromosome.

This genetic difference leads to the development of different physiological characteristics, the physical appearance and in women, the estrus cycle, the reproductive capabilities, the menopause etc. Men and women are thus different physically and physiologically, their bodies, parts of their brains and their reproductive behaviour are different. (Pinel, 1991).

There has been a lot of debate on the issue whether the differences are due to biological/environmental factors. Extreme groups have taken rigid points of view stating that these are totally determined either by biology (socio-biologists) are moulded by environmental pressures (feminists). In the present day research the debate of nature vs nurture is considered redundant especially with reference to human development. Humans are not as simple as an earthworm, they have a complex series of interactions taking place at molar and molecular levels continuously. This affects their behaviour and the factors in the environment and vice versa. Therefore a more acceptable, rational and empirical approach would be that such developments are resultant of a dynamic and intricate interaction of biology and environment, of nature and nurture. The question is how much of variation can be attributed to biological factors and to environmental factors i.e. what and how much, is the critical question.

The questions to be asked in this chapter are what are the biological influences, how can we identify these influences, how do they interact with social and behavioural factors to influence behaviour and development. For example, the rate of biological maturation of males and females is different and this rate of maturation can elicit different socialization responses in their environment. Biologically males are born larger and remain larger, as compared to females. Therefore the concept of females fragility appears frequent in common man/women’s use.

Biological processes are complex and may affect gender behaviour directly as well as indirectly. Since females can reproduce
while males cannot. Therefore, their roles and behaviours are affected by their responsibilities. Since maturational rates and body size are different for males and females, this may affect behaviours indirectly.

However, to oversimplify matters for understanding of biological factors and their role in modulation of sexual dimorphism, we can begin at the basics i.e. Genetic Determinants.

1. **GENETIC DETERMINANTS**

   The basic biological factors can be classified into two categories:

   a) Chromosomes

   b) Hormones

1.1. **Chromosomes, Sex Linkage and Sex Linked Traits**

   The impact of biology on gender dimorphism is fairly clear i.e. the sex of an individual is determined at fertilization (though this is only the beginning and may involve other hormonal influences during later developmental periods as well). The genetic sex of an embryo determines whether its gonadal cells become ovaries or testes.

![Diagram of fetal development](image)

*Figure 2.1*
All cells of the human body contain 23 pairs of chromosomes (which include a pair of sex chromosomes). The basic information programmes regarding the individual characteristics are contained in the D.N.A. (Deoxyribonucleic Acid, which remains in the cell nucleus). These DNA are supplied materials for replication etc. by R.N.A. (Ribonucleic Acid) which are found all over the cell body.

The sex chromosomes, classified as \(X\) & \(Y\). The female human embryo carries a pair of \(X\) chromosomes whereas the male embryo has one \(X\) and one \(Y\) (which is smaller than \(X\) chromosomes). Fertilization of the egg (ovum) by the sperm, yields a zygote, a miniature of an adult in the beginning. The females receive one \(X\) from the father and one from the mother whereas the males receive the \(X\) from the mother and \(Y\) from the father.

The distribution of \(X\) and \(Y\) chromosomes determine the distribution of characteristics (genes) tied to the sex chromosomes. Some of these are linked to the \(X\) chromosome and some to the \(Y\) chromosome.

![Diagram of sex chromosomes]

The sex chromosome of every ovum is an \(X\) whereas half the sperm cells have \(X\) and \(Y\) chromosomes each. If a human embryo carries a \(Y\) chromosome, testes are formed about 6 weeks post fertilization. The embryonic testes start producing male hormones (androgens). If however, the embryo carries two \(X\) chromosomes, the differentiation appears later and ovaries form around six months in gestation. It is only for a short period of six weeks (gestation) that the embryo remains undifferentiated. The presence/absence of androgens determine the fate of the embryo in terms of its sexual differentiation.
Thus right amount of hormones are important in developmental fate of a female or a male fetus.

What proportion of potential males and females are fertilized? Boys tend to outnumber girls by 106:100 at birth and by 120:100 at conception. More male fetuses than females are aborted (40-45%). Infant mortality is also higher in males than females - by middle childhood there is no difference in numbers. Males are also more susceptible to cancer etc. Whereas women have more arthritis. This is directly related to the fact that women have two X chromosomes and this provides immune defence against major diseases (biologically beneficial for a mother carrying a baby).

1.2. **Hormones**

Hormones direct the development of an individual from conception to sexual maturity in terms of anatomical, physiological and behavioural characteristics which differentiate males from females. Any aberration (increase or decrease/presence or absence) in the normal levels of hormones at critical periods in the development can lead to abnormal development. Furthermore, hormones also influence the reproduction related behaviour of mature individuals.

(a) **The Gonads**

Gonads not only produce the required sperm/eggs but also produce and release hormones i.e. Androgens and Estrogens. Among the androgens testosterone is most common male and estrogen is the most common female hormones. The ovaries and testes also release a class of hormones called progestins. Progesterone is the most common progestin which prepares the female uterus and breasts for pregnancy.

The pituitary releases tropic hormones such as gonadotropins which control the release of Gonadal Hormones. The hypothalamus controls the hormonal secretions of the pituitary gland. Evidence from animal studies indicate prenatal hormonal levels during critical periods have some influence on the development (wiring of the brain) and thus subsequent behaviours.
(b) Hormonal Influence on Behaviour

Prenatal hormones have important influence on differentiation of reproductive system and some areas of the brain (i.e. hypothalamus and pituitary). They also may have a modulating influence on psychological and behavioural variable. Though it is a complex phenomenon but findings in animals indicate that levels of hormones especially androgens have an effect on behaviour patterns of young animals if these are administered during critical periods of development. Increased activity, rough and tumble play is seen in young males and females prenatally exposed to androgens. Furthermore the mating and non-mating behaviours of these animals were characteristic of the normal male.

Early hormones also mediate the sensitivity of the mature animal to gonadal hormones. Sexual behaviour of lower order animals depend on the level of hormones in the system (Mogensen, 1977).

Evidence does clearly demonstrate role of hormones in modulating behaviour in sub-human species. In humans, however, it is difficult to clearly state the implication of these findings in sexual bifurcation of roles of behaviour. The higher the animal on evolutionary scale the more the involvement of learning and experience and thus the cortex.

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<th>SELF ASSESSMENT QUESTIONS</th>
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<td>1. What are the basic biological factors in sexual demarcation?</td>
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<td>2. What is the chromosomal distribution for male and females?</td>
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<td>3. How important are hormones in development of sexual bifurcation?</td>
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<td>4. Prepare a family tree on back sides of your family. List characteristics found in females and males on the paternal and maternal sides.</td>
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2. Normal Prenatal Development

The prenatal (gestational) period is 266 days in humans. During this period the zygote multiplies into 200 billion cells, till such time that the young organism is ready for the outside world. There are 3 main stages of prenatal development (a) Ovum stage, (b) Embryo stage, (c) Fetal stage.

(a) Ovum Stage: Lasts about the first 10-14 days. All new cells are replicas of the zygote. This is because of very rapid cell division which starts taking place immediately after fertilization. The cells cluster travels through the fallopian tube to the uterus where embedding takes place. Differentiation begins about this time. The blastocyst is a hollow ball of cells and half of this ball eventually becomes the fetus-conditional to the implantation in the uterus.

(b) Embryonic stage: In the beginning of this stage the embryo is only 1 inch in size. It is during this period that bodily system develop and become operational. The embryo has a full metabolic cycle by way of which it takes in nutrition and releases waste products.

Three layers of cells are differentiated in this state. The outer Ectoderm develops into sensory cells, skin and the nervous system. The middle or Mesodermal layer becomes the excretory systems, skeletal muscles and blood, the third (inner) or endodermal layer forms the digestive system, lungs and the thyroid gland.

By the end of the third week the heart starts beating and the nervous system developing rapidly. During this eight week period, the human embryo is the most vulnerable period of human growth. The embryo is susceptible to outside influence (hormones, diseases, chemicals etc.).

(c) Fetal Stage: The fetal stage begins in the 9th week of gestation and continues till the birth of the baby. All major structure are recognizable and functional except (for the lungs). The life of the fetus is fairly regular sleeping/awaking, moving around in the womb. Hair, nails, sweat glands are apparent. The eyes open and shut and respond to light and dark outside. The brain is becoming more of a master control for the body system.
2.1 Brain Development

Development in the brain takes place according to a predetermined duration and direction. This is affected, however, by a multitude of influences (discussed in length in earlier sections).

There are three initial germ cell layers from which all the parts of the body are formed. These are as follows:

a) Endodermal Internal organs

b) Ectodermal Skin and nervous system

c) Mesodermal Skeletal muscle

These tissues are undifferentiated. Differentiation (into different cell layers) takes place only when a rod shaped tissue from the mesodermal layer attaches itself beneath the ectodermal layer. It stretches from head to toe in the cell layer. This is known as the NOTOCHORD. The Notochord is the signal which induces the cell differentiation.

These stages of development from this point on are as follows:

a) Neural Plate is formed and the head end forms the fore brain area/frontal eye field areas, etc. The rod like structure grows longer and broader.

b) Neural Groove is formed when the edges of the plate are elevated. The groove deepens as edges rise further.

c) Neural Tube is formed when the edges of the plate meet and join together to form the Brain and the spinal cord. A small group of cells breaks away and forms little bunches on both sides. These are called neural crests and somites. They form the peripheral nervous system.

d) The tube is now the active part of the nervous system. The cells divide rapidly and migrate outwards from the inner core. The head end forms into 3 bulbous shapes. These anterior most becomes the forebrain, the posterior most the hind brain, the middle part obviously becomes the mid brain. Eyes are formed from a part of the ectodermal
tissue. Eye stalks are formed from the future diencephalon. At about 100 days the forebrain area mushrooms and covers the rest of the lower brain areas.

The early development rate is estimated at 250,000 new neurons per minute.

There is exception of the forebrain areas which eventually form the central hemispheres.

![Brain Development Timeline](image)

**Figure 2.3**

The human brain is susceptible to multiple internal and external influences during development. Appropriate hormonal levels are important in sensitizing the brain circuits to respond to various hormones (including the sex hormones).

It is important to remember that human brain development is a complex interaction of genetic pre-programming and environmental influences. Recent research contribution in this area have indicated that the brain plasticity may be more extensive than previously believed.

**Deficits in Brain Development**

The time course of the brain growth spurt is clearly one that begins somewhere around midpregnancy and continues until at least the third or fourth year of postnatal life.

What are the effects of restriction or interference with such processes on growth and development of the brain? The deficits or
distortions in brain growth that occur after restriction during this vulnerable period of development include:

1. A permanent reduction in brain size (or true microcephaly); this reduction in brain size, however, is not uniform across all parts of the brain, for the cerebellum (an important sensory-motor integration mechanism) is more affected than other parts of the brain;

2. A reduction in total number of brain cells; again some types of brain cells are more affected than others; for example, glial cells are more reduced in number than neurons; and special neurons in the cerebellum and those in the deep layers of the cerebral cortex are more affected than neurons making up the medulla or midbrain;

3. Deficits in quantity of myelin present in the brain; the amount of myelin in the system is reduced, and thus the myelination process and ultimately the functional capacity of the brain is greatly affected (William: p. 43-50).

2.2 Prenatal Influences

It was erroneously believed till the 60s that the fetus was well protected in the mother's uterus. The placental barrier was assumed to insulate the embryo/fetus from harmful influences. This is not true - influences from the outside environment can affect normal development.

The environmental influences range from Radioactivity, stress, drugs, hormones, chemicals, viruses, lack of nutrients etc.

Attention to this vulnerability of the fetus was drawn by the famous Thalidomide cases. In the sixties, this drug was prescribed to mothers suffering from morning sickness during pregnancy. Infants born to these mothers were severally deformed physically e.g., arms or legs.

Research has identified critical periods of development in the prenatal stage. These critical periods are determined by the stage of growth. In the early phase of development, a defective zygote is spontaneously aborted. However, at a later stage this does not happen. The fetus continues to develop even after the influences have affected the development of fetus. It can be seen from our earlier discussion,
the cells multiply rapidly and then differentiate into various organs. Eventually the cell division slows down, but cell size continues to increase. Critical periods are those periods in which influences are maximal on the growth and development. Each body part or organ system has its own phase of growth - and it is during this phase that it is most susceptible to external influences. Eventually the body part or organs will be marred permanently if exposed to negative external influences such as radioactivity etc. The organs will not have another chance to grow and develop as the genetic timer has passed on to the next phase. The external influences have a wide range of effects depending on the stage of prenatal development in which the external factors occur (Eisenberg, 1987; Salkind & Ambrose, 1987).

First Three months: Tissues and body systems develop. Adverse drugs affect this basic structure and form of the body. This has serious effects on the nervous system as well as the physical development - as exhibited by the Thalidomide babies.

A new field of research has developed which investigates the effects of the external influences on the development of the fetus. This is known as Developmental Teratology and the effects on behaviour are studied through Behavioural Teratology.

Drugs: A whole range of good drugs (antibiotics) as well as bad drugs (heroin and opium) affect the development both physical and psychological of the young fetus. This is applicable to any substance taken in large quantities such as coffee, cigarettes, aspirins etc. Alcohol produces the well known and documented Fetal Alcohol Syndrome.

Diseases: Rubella or German measles of the mother results in severe defects such as blindness, deafness and heart, nerve and brain defects in the fetus.

Hormones: DES was given between 1946 to 1970 to women who were threatened with miscarriage. The females born to these expecting mothers reported cancer of the uterus when adults.

Radiation and Environmental Hazards: Repeated exposure to X-rays can endanger the growth of the fetus. The survivors of atomic bombs in Hiroshima and Nagasaki are evidence to this exposure

Thus, the fetus needs to be protected from external and external hazards to avoid deficits in normal brain and body development.

### SELF ASSESSMENT QUESTIONS

1. The important stages of embryonic development are ______

2. The brain develops from mesodermal cell layer T.F.  

3. Describe the important layers of the brain and process by which they become the forebrain, mid brain and hind brain.

4. What are the important prenatal influences on fetal development?

5. What are the effect of good medicine on the development of Fetus?

### 3. SEX DIFFERENCES IN INFANCY AND EARLY CHILDHOOD

Does gender dimorphism exhibit itself in infancy, if yes, then this would indicate that it could be biological, (as younger the infant, the lesser the effects of culture and greater the expression of biological influences). However, the study of infants proposes 4 major problems:

a) Control of the variables related to the infant. These may be known or unknown, a hungry or wet child would respond differently as compared to a satiated or a clean one.

b) Characteristics and attributes may not be as stable as we want, the infant is undergoing a rapid period of development.

c) Characteristics of young infants may or may not relate to adults or older children.

d) Differences in rate of maturation and development of various milestones of males and females may not be a clear depiction of sex difference.
There may be some differences in developmental/behavioural variables. One gender is not necessarily "superior" whereas the other "inferior" constantly. Caution is in order in interpreting results of gender differences even though it is commonly observed that females generally mature earlier as compared to males. It is well documented that more male fetuses abort as compared to females. There are also more male still births and birth defects (Parsons, 1980; Musson et al., 1975).

Activity

Activity may reflect later aggressive behaviour and this is said to be linked to prenatal androgens. Greater activity in male as compared to female infants has been reported by Moss, 1967 and Maccoby Jacklin, 1974.

Irritability

Male infants are more irritable as compared to females. Perhaps this irritability could set off a chain of reactions towards boys, thus seeing boys as more aggressive than girls.

Nurturance and Social Orientation

Results of studies in this area are inconsistent with the stereotype that females are more nurturant than males. Infant girls vocalize more in response to faces as compared to boys, however, both smile equally in response to faces.

As regards attachment behaviours (separation anxiety and fear of strangers, distress vocalization, attachment to caretaker), though boys apparently respond differently, this difference has not been reported consistently. Girls cry more when separated from mother, while boys try to remove the barrier. Further, when with the mother, girls stay closer while boys 'wander' away from the mother. (Goldberg & Lewis 1969; Maccoby & Jacklin, 1974).

Thus boys appear to be more exploratory as compared to girls at 11 months of age. However, Maccoby and Jacklin (1974) do not find consistent support for this after review of literature.
Intellectual and Perceptual Development

Gohen & Gilbert (1975) and Brodzinsky, Gromly & Ambron (1985) state that 'no topic is more confusing, no evidence more contradictory than on sex difference in infant attention and memory'.

Researchers are able to assess the degree to which young infants can perceive smell, touch etc. However, there does not appear to be any sex differences on auditory discrimination.

Janet Shibley Hyde, professor of human sexuality, analyzed studies of verbal and mathematical ability in both sexes and reported no difference. In mathematics, boys do have an edge and this disparity is greater in precocial math students. Interestingly, Hyde reports greater differences reported in studies conducted in 60s and 70s as compared to more recent research on sex differences.

In intellectual achievement there tends to be an overwhelming number of males at both the dull and brilliant ends of the scale. Males tend to be statistically extreme as compared to females. In childhood, girls tend to develop intellectually earlier than boys, but this evenirs out in the teens. Girls, particularly tend to be higher in verbal abilities, whereas, boys excel more in spatial motor abilities.

Play and Toys Choices

i) 4 Toy preferences and female role in play

Studies in normal samples show that girls and boys have differential toy preferences from an early age. Girls prefer toys such as dolls, doll houses, cooking ranges, dishes/pots and pans etc. whereas more boys prefer trucks. Fetally androgenized females on the other hand respond like males. They show less interest in dolls and more in boy toys. They show less interest in playing house or games such as marriages. However, play is an extremely complex social and biological expression of human development.

Boys are more active - and the activity differences may start as early as prenatally. However, around age 4 or 5 boys and girls embrace the male and female role stereotype - no matter what their parents do or do not do. The children follow traditional male/female distinctions which are presented everywhere. The author's own
daughter's comments are "mothers are supposed to cool and fathers are to go to offices" - she has accepted the job as a part of female 'duties'.

Girls play dolls and boys play with guns, girls play skipping role or hop scotch and boys play cricket, hockey etc. Girls like to help mothers around the house whereas boys like to go out with fathers to help them with their chores. Female children use words to express their aggressions while males use pistols and guns (Shapird, 1990).

Box 2.1: Author's note: I would like to cite here an example of my young daughter when she was about a year old. Her elder sibling is a boy who adores cars. So my daughter had an exposure to cars, vehicles of all sorts and sizes during the 1st year. We did not bring in any dolls for her. In fact, she was not exposed to any female toys.

One day she was in a shop with my husband, she saw a baby doll in the display window. She pointed out to the doll and said 'Kaka' (meaning baby) and acted as if she wanted it. I was astonished to see her choose a baby doll for a toy even though she had not been exposed to the socially approved 'female' toys earlier. Perhaps role orientation takes place without us being aware of it.

ii) **Play (Biological Differences)**

Boys and girls are physically different and metabolize differently - play differences may not just be due to cultural indoctrination but also may be due to differences in bodily functions.

At about the seventh week the male hormone begins to be manufactured and its action generates the development of male characteristics. Female developments occur in the absence of the male hormone. Boys tend to be stronger muscles, have a higher vital capacity and metabolic rate than girls. They thus tend to be more physically aggressive (in the sense of simply using their muscles trustfully). Girls on the other hand have more body fat, this together with lower metabolic rate tends to make them less muscually aggressive. Females with fetal androgen exposure showed significantly (a) higher level of intense physical energy as compared to unexposed controls, (b) more rough and tumble play and (c) more initiation of
fighting behaviour. These females preferred boys over girls for playmates, if given the choice.

Sex differences in Auditory Cortical Development

Studies on brain myelination of 4 to 5 year old children suggest some sex differences in comparison of 5 girls and 5 boys brains. In 4/5 female brains greater myelination was found on the left hand area of the motor cortex than in the right. In 3 male brains, the reverse was reported. These and such other differences may be reflected in tactual, speech and other functions. When spoken digits are presented simultaneously to the two ears (in adults), the dominant left hemispheric pathways respond quicker and more efficiently. In children, this effect is well established (i.e., right ear dominance). Difference in boys and girls at ages 4, 5, and 6 on how efficiently sounds were recognized has been reported. Sex differences have also found in left handed children. In a students, out of 11 girls 10 were more right ear efficient while the remaining one showed no difference. Whereas in boys, 5 out of 14 had speech location in the right hemisphere.

Sex Differences in Perception

Female neonates are reported to be more sensitive to tactile stimuli as compared to males. Females have more verbal fluency as compared to males, however, male-gifted children are reported to be higher cognitive thinking and expressiveness. Sex differences in Perceptions of Embedded and complex figures (E.F.T.) are reported in adults. Similarly females are reported to be more field dependent (rod and frame test), and their judgments are affected by the perceptual context (this has been substantiated over various cultures). Significant sex differences are also found in perception of upright figures. Furthermore, sex differences are also extensively reported for space perception. However, this may be due practice of spatial skills in boys as compared to girls (more outside games etc.).

Sex Differences in Reaction to Environmental Stimuli

Boys and girls respond differently to the same environmental stimuli. Fixation patterns of infants to human faces were studied. Differences were found as early as 24 weeks of age. Girls had more interest fixations to pictures of human faces and different patterns of
fixation to designs. This greater interest in faces may be a developmental precursor of greater interest in persons shown by girls at a later age (Nash, 1972).

Sex Differences in Developmental Milestone

Drawing of young girls show maturity at an earlier age in terms of completion of figures and details. In an extensive study of correlations of parents and children, it was found that statistically significant correlations are found for girls at age three, but did not appear for boys until age 5. Sex differences in mental growth rates are suggested by these findings.

Sex differences are also reported in learning and behaviour disorders. A large majority of male children attend educational clinics dealing with above mentioned problems (reading, learning, curriculum etc.). Speech and Learning disorders are also commonly reported among males (e.g., Dyslexia and Stuttering).

Sex Differences in Creativity

It is generally believed males to be more creative than females (artists, sculptors, inventors etc.). It is interesting to note that these differences emerge as early as elementary school. Boys are consistently superior to girls in ability to create or invent new ideas. Furthermore adolescent boys score higher on divergent thinking on intelligence tests as compared to girls.

Gall and Mendelson (1967) and Brodzinsky et al. (1986) also report sex differences on creative problem solving specially in a social interaction situation. Females were affected more by social factors as compared to males. Thus, it does appear that male and female children have differences in pace of development, difference in milestones and even differences in abilities.

4. CRITICAL PERIODS IN HUMAN DEVELOPMENT

Bowlby was the pioneer in the development of the idea of critical periods in human development. There is a maturational stratum along with which the child proceeds during the period of growth.
Experiment have shown that sometimes development of motor skill takes place even in the absence of practice. In some cases practice may actually have a negative effect whereas on other occasions similar practice leads to rapid acquisition of skills. There is therefore a period of optimum acquisition of skills.

Speech development, similarly has a period of readiness to speak at about 12-18 months of age. Defective speech occurs, if speech acquisition is delayed beyond this period. Related to this is the 'readiness to listen' period (1-3 years) when recognition of sounds take place. This is a well documented fact that if children do not hear sounds they do not learn to speak especially after 5 years of age.

One of the most famous critical period was illustrated by Konrad Lovenz. This is the period of attachment/social bonding. Social bonding cannot occur before and after this period. Once formed these bonds cannot be altered (at least in lower animals).

Critical Periods in Human Social Development

Just as imprinting takes place in animals and there after it is difficult to make or break bonds, humans also appear to have a critical period of primary socialization. John Bowlby's pioneering studies on deprived children reared in institutions indicate the period to be between six months to 3 years of life. This can be broken into 2 periods. The 1st lasting from 3 weeks to 6 months and the 2nd from 3 months to 3 years onwards. There is a slight overlap in the periods. It is interesting that children develop sexual identity also during this period. Money et al. (1957) studies of hermaphroditic children reared as one sex and changed into another later indicate that 2 1/2 years of age is the critical period for development of sexual identity. Any change before it would be viable, whereas, changes after it would be disastrous.

Some critical periods may be more critical for males as compared to females. Bronson (1962) has hypothesized that there are two such periods; (a) first occurs in 1st 12 months and is reflected in orientation towards others; (b) second occurs in 2nd or 3rd year of life, and reflects sense of independence without need for approval from others. These traits are more predictable in boys as compared to girls (Nash, 1972).
Physical Development

Normal physical growth occurs in spurts in human. These spurts occur twice - first before 6 months of age and second during adolescence.

During middle (6-12) childhood growth in both males and females follows a uniform pattern. As children grow the trunk becomes slim, the chest broadens and the arms and legs become thin and long. At the onset of puberty (end of middle childhood) females show signs of pubertal growth such as breasts enlargement, pubic hair growth and rapid spurts in height and weight. Females are ahead by males in this pubertal spurt by two years. Females are taller as compared to their male classmates of 11 and 12 years. They appear awkward because of this sudden change which has not appeared in some of their female classmates and almost all of their male age mates. This early growth amongst girls causes lot of emotional stress to boys in co-education institutions as boys feel they are being left behind by girls. At this point in time counseling by parents or older relatives is important to help the male/female child understand what is happening to their bodies. Accelerated growth curves are seen during the period of adolescence apparently called the adolescent growth spurt (Martin, 1989; Matlin, 1987).
Changes in heights and weights take place along with changes in body proportions and development of secondary sexual characteristic. These are obviously modulated by the central nervous system and its control over hormones. It is important to note here that the hormonal level during puberty is determined by exposure of the brain to hormones in early prenatal development. The triggering/timing mechanism is also predetermined.

In females the adolescent spurt initiates during late middle childhood (for some it is as early as 9 years) reaching a peak at an average of 12 1/2 years. Growth slows down and usually stops in between the ages of 15 to 18.

In contrast, the male growth spurt begins about two years after the female but lasts longer. The spurt initiates around 11 years (some bloom late at 14) reaching a peak at 15 years and gradually declining until the age of 20-21 years.

Changes take place in body proportion along with changes in height and weight. The trunk which had elongated in the middle childhood now broadens at the hips and shoulders whereas the waistline narrows. The difference between the males and the females is that males broaden at the shoulders whereas the females broaden at the hips. Legs and hips in both sexes develop a subcutaneous layer of fat. This remains as such in females (evolutionary process for procreative purposes) and diminishes in males (they need muscles to hunt and run).

It has been reported that males have significantly more lean body mass as compared to females. Increases in muscle mass leads to increases in muscular and physical strength. The period of strength increase in female rises up to the age of 16-60 years whereas it levels off after 60 years. In males the pattern of rise is the same as in females till around 13 years of age. After this there is a sudden rise in muscular strength leading to stronger males than females (Kastenbaum, 1979).

Puberty: It is a period known for its physical and psychological upheavals. In males the onset of puberty is thought to occur at the appearance of facial hair and in females it is the onset of menstruation. However, the male and female body has to go through a lot of changes before either growth of facial hair or menstruation can take place. This takes 1-2½ years. This preparatory stage is known as prepubescent
stage in which the secondary sex organs begin to develop but they are incapable of reproducing. The pubescent stage takes place when secondary sex characteristics are still developing but the capability of reproduction i.e. the ova and the sperm has also developed. In the post pubescent period, the secondary characteristics are well developed and adult level functioning is possible. Menstruation takes place at this level (Matlin, 1989).

The females are at an apparent disadvantage in the sense that they are physically prepared for adulthood but psychologically they are not yet ready. It has been stated that maturing earlier may be placing females at a disadvantage - specially those who develop earlier as compared to their friends and peers. These young females need an understanding of their changes, they apparently feel left out of the general group of females who are their friends. Every child is unique in his or her growth rate although the growth follows the same general pattern. Some children are early growers and others are late growers. However, girls as a group are two years ahead of boys in physical growth.

5. SEX LINKAGE AND SEX LINKED TRAITS

As has been said earlier in 22 out of 23 chromosomal pairs, the autosomes - one chromosome is inherited from each parent. The 23rd pair is the sex chromosomal pair which contributes to sex linked differences.

The Y chromosome which the son inherits from his father is smaller and fairly empty of genes as compared to the X chromosome which he inherits from his mother. Logically and empirically, therefore the boy inherits more genes from his mother than his father. The genes on the X chromosomes of the female offspring are corresponding and competing for expression whereas in the male the Y chromosome does not have genes to compete with the X chromosome - therefore these are expressed phenotypically. Hemophilia (in the Royal European families) and color blindness are typical examples.

There are very few traits which have been traced to the Y chromosome whereas a majority of traits have been shown to be carried on the X chromosome and the distribution of the X chromosome. Two behavioural traits have been shown to have an X linkage. Spatial
visualization and quantitative reasoning ability where males have a definite advantage over females. There is a large body of evidence suggesting X chromosome as the carrier for these abilities.

6. ARE MALE AND FEMALE BRAINS DIFFERENT

Research on animals by Erkhart, Beach, Young and others has shown that exposure to appropriate hormones may modulate sexual type behaviour i.e. male hormones during prenatal period predispose an animal to male behaviours. Women researchers have identified the biological substrates of behaviour - especially at the level of the brain - which modulate sex differences. Women's brains are organized differently from men for certain functions - as evaluated from test performances. Women's brains respond differently in response to stimuli (visual, sound and touch) as compared to men in terms of electrical activity. This is further substantiated by earlier work quoted by Maccoby and Jacklin (1974) that females are better in verbal ability and males on spatial ability.

Though females are verbally precocious, the actual spurt takes place around 11 years of age. On all tasks requiring hearing, speaking, fluency, comprehension etc. they are better than males. Males on the other hand show spurt in spatial skills around adolescence tasks involving perception of depth, mazes, picture completion ability to rotate images in space.

This can be related to neurological evidence that right handed individuals suffer language deficits after receiving left hemisphere damage and deficits in non-verbal space orientation etc. after damage to right hemisphere of the brain.

Females being more verbal may have a left hemisphere advantage whereas males being more 'space oriented' may have right hemisphere advantage. Studies as early as the 60s on epileptics who had partial temporal lobectomy indicate differences on neuropsychological tests such as Graves Design Judgment test. Male patients with right temporal surgery did poorly as compared to females on the design test. Further evidence was provided by Jeanette McGlone at University Hospital Ontario - She examined 85 Right handed adult with unilateral hemispheric damage (with hemisphere) on verbal and spatial ability tasks - men showed verbal deficits after left hemisphere
damage or spatial deficits after right hemisphere damage. The losses seen in women in both verbal/spatial abilities were less severe. Witelson (McMaster University, Ontario) used unfamiliar object as tactural test terms for both boys and girls. The children could handle them, but not see them. Boys did better on form perception with their left hands as compared with the right hands. Females had equal performance on both hands.

According to Witelson (1990) and Pinel (1991), therefore the evidence indicates that females have less brain hemispheric specialization on spatial and linguistic functions as compared to males. This may be why females can work easier on tasks which combine two different activities as one i.e. reading or understanding a person's behaviour from his or her facial expressions, body language & words (female intuition). Men keep the different cognitive activities separate when they are done simultaneously such as running a machine while talking. Do boys and girls develop these hemispheric differences as a result of differential treatment? The results of neurological studies by Jerry Levy and Martha Reid indicate that boys and girls mature differently in terms of brain hemispheric functions. Right handed boys (age 5-8) develop their right hemisphere skills (spatial etc.) more rapidly than the left hemispheric skills, whereas, on the other hand, right handed females (age 5-8) develop their left hemisphere quicker - therefore are more verbal earlier. The same was true in left handed children. According to Levy the socialization factor is ruled out for differential brain organization.

Brains also respond differentially in terms of electrical activity thereby indicating hemispheric arousal. Studies electrical activity of brains of males and females doing mental tasks were conducted at Harvard by Davidson and Colleagues. The female brains were selectively more activated as compared to male brain, the left hemispheric with verbal task and the right hemispheric with spatial tasks. Levy believes that the site is determined from birth but learning determines how much of that skill is developed. It has also been put forward that hormones act upon particular brain structure - i.e. hormones, wires the brain or sensitizes it to stimuli. For example, the males are brain wired for hard rough and tumble games gross movement sensory spatial skills and the female brains for speaking and fine movements, touch etc. (McGinners & Pribram, 1979; Kimura, 1992). However, we still have a long way to understand the role of brain or its differentiation clearly. As a final note it can be said that we
no longer can blame the either social set up or the brain and biology for
all the differences seen in males and females. These differences are due
to complex interaction of multiple variable.

SELF ASSESSMENT QUESTIONS

1. Is there clear cut evidence to support differences in male/female
brain? What is your view after having read all the unit?
BIBLIOGRAPHY


UNIT - III

Adolescence
Objectives

After reading this unit the students will be able to:

- Understand the concept of adolescence as complex phenomenon of rapid physical growth and pressing social demands.

- Learn about the specific biological and chemical changes taking place in the growing person.

- Appreciate the gender differences in growth processes of girls and boys.

- Understand the stages through which an adolescent passes to attain personal identity.

- The specific cultural constraints which an adolescent girl has to face in Pakistani society.

- The gender differences in developmental tasks of boys and girls in Pakistani society.
ADOLESCENCE: PHYSICAL GROWTH, SEX AND SOCIAL DEVELOPMENT

1. Introduction

Adolescence has been historically considered a period of rapid growth, changing moods and rebelliousness. The founder of American Psychology G. Stanley Hall described adolescence as a period of “Storm and Stress” implying the role of the parents to be that of restraining and control. The more recent psychologists like Erikson state that the extent of adolescents disturbed state of mind and body and parental conflict has been exaggerated. Nevertheless there is general agreement that adolescence is likely to be a challenging and some times difficult period in the young persons struggle towards maturity.

Adolescence is a period of accelerated growth after the first year of one’s life which is also a period of rapid growth. The physical growth is fastest in the first year of one’s life when child is likely to triple his birth weight, grow several inches in height and gain control of his body to great extent. In addition the child’s brain and head size increases upto three fourth of adult size which is a record. She/he will never match this growth rate in later life. The growth at adolescence is again multi-dimensional and is distinguished from earlier growth period by the sexual growth dimension which starts at puberty and gets to its mature stage during the adolescent years.

The earlier psychologists viewed this period as being much shorter and more dramatic than what researchers have discovered in more recent past. The earlier psychologists identified onset of adolescence from accelerated physical growth whereas physical growth is preceded by increase in hormonal secretion resulting in many invisible chemical changes as well development of internal sex organs of both female and male which continue to develop without being noticeable. The general belief about adolescents being very temperamental, moody and hard to understand is also being substituted by a more understandable period of youth getting adjusted to emerging drives and urges due to change in their body
chemistry and the new social demands placed on them by the family and society. However, the adolescents do not undergo any radical change in their personality as was believed earlier. The shy children grow up to be shy adults and more confident children grow to be relatively more confident adult provided other factors in their immediate family and environment do not change drastically.

The girls physical growth starts approximately two years ahead of boys within the wide range of growth pattern both of girls and boys. The attitude towards its young people approaching puberty determines to a great extent whether or not their daughters coming of age will view it with apprehension or pleasure. In each case the feelings are communicated to the girls through verbal and nonverbal languages. These feelings of approval or disapproval result in developing confidence in the growing person or feel guilty about it. The parents generally are unaware of the damage they are, likely to cause by not providing necessary support and reassurance to the growing person who is in great inner turmoil due to emergence of new feelings and emotions caused by new hormones in their blood stream.

There are wide differences in the different cultures and in various socio-economic classes within the same culture about the age at which a youth becomes an adult. Similarly the age of adulthood differs for boys and girls. The problem confronting a poor tenants daughter in a remote village are very different than the daughter of an affluent loving family of suburb of a big city.

2. Physical Development in Adolescence

Adolescence begins in biology and ends in culture. On the one hand, maturational processes lead to the rapid acceleration of physical growth changing hormonal balance, bodily dimensions, increased sex drive and further growth and differentiation of cognitive ability. These biological developments including the development of primary and secondary sex characteristics are a challenge to the growing person. She/he needs all the help and understanding of the persons around her to cope with these new needs and social demands. Ironically however majority of the parents are unable to adjust to this rapid change in their off springs and most of them view it with fear and apprehension. It is only well adjusted and mature
parents who accept the growing up of the young adults with feeling of pride and pleasure specially if it happens to be a girl. Generally it is this apprehensive attitude towards the growing person which forces them to turn to their peer group who are going through the same experiences and face similar lack of understanding from their family members.

3. Puberty

The culture may facilitate or hinder the young persons adjustment to the physical and physiological changes of puberty. It may influence whether these changes become a source of pride or of anxiety and confusion. It is generally observed that the same culture has different norms for boys and girls as is evident from different ritual's and customs. There are some tribes which celebrate coming of age of their daughters like some tribes in North Western Frontier Province and Northern areas but there are invariably some celebration of a boy coming of age associated with appearance of beard etc.

Scientifically speaking puberty begins with the gradual enlargement of ovaries in females and such related organs as the uterus in females. However, as these changes are not readily observable, in clinical practice puberty is often dated from the elevation of the breasts in the girls and the emergence of pigmented pubic hair in boys. The onset of sexual maturation is accompanied by a "growth spurt" in height and weight which usually lasts about two years.

4. Harmonal Factors in Development

The physical and physiological changes of puberty, including sexual maturation and the adolescent growth spurt are initiated by an increased output of activating hormones by the exterior pituitary gland, which is immediately below the base of the brain. The signal of this increased harmonal production, in turn comes from the hypothalamus - an important and complex part of the brain.

Hormones released by the pituitary have a stimulating effect on most other endocrine glands, including the thyroid and adrenal glands and the ovaries and testes, activating their own growth related and sex related
hormones. These and other hormones interact with each other in complex ways to stimulate the orderly progression of the many physical and physiological developments of puberty and adolescence.

5. Adolescent Growth

![Diagram showing height gain in cm/year vs age in years for boys and girls. The graph shows a significant growth spurt around age 12-15 for both genders, with girls slightly ahead.]

Figure 3.1: Adolescence Growth Spurt

The term growth spurt refers to the accelerated rate of increase in height and weight that occurs with the onset of adolescence. The age of onset and duration of the spurt varies from one child to the other and amongst girls and boys. This physiological feature which is perfectly normal causes undue anxiety amongst adolescence due to ignorance about the growth principles. The girls who start growing tall earlier feel conscious in comparison too the small size class fellows who also feel worried about their height.
Skeletal Growth

Practically all skeletal and muscular dimensions take part in the adolescence growth spurt, though not to an equal degree. Most of the spurt in height is due to acceleration of trunk length rather than legs which grow mostly in later childhood and puberty. There is a fairly regular order in which the body dimensions accelerate; leg length as a rule reaches its peak first, followed by the body breadths with shoulder width last. The earliest structure to reach their adult size are head, hands and feet. At adolescence children particularly girls complain of having big feet and hands. They can be assured that by the time they are fully growth their hands and feet will be proportionate to their body.

6. Sexual Development

As in the case of the growth spurt in height and weight there are marked differences in the age of onset of puberty. While there is some variation within developmental sequences for example breast development may appear before or after the development of pubic hair physical development during puberty and adolescence follows an orderly pattern. Thus the girl who shows an early breast development is likely to have early menarche (onset of menstruation). Pre adolescents with advanced skeletal development will probably have an early growth spurt and early sexual maturation.

![Figure 3.2: Adolescence: Physical Change, Sex, and Social Development](image)

Figure 3.2: Adolescence: Physical Change, Sex, and Social Development

In girls, the beginning of elevation of breasts is usually the first sign of sexual maturity although in about one third of girls, the initial
appearance of pubic hair may precede it. Growth of the uterus and vagina occur simultaneously with breast development and the labia and clitoris also enlarge. As can be seen in figure three the menarche occurs relatively late in the developmental sequence and almost invariably after the growth spurt has begun to slow down. There is frequently a period that may last from a year to a year and a half during which the adolescent girl is not yet physiologically capable of conception. It should be pointed out here that although developmental sequence and pattern are universal for mankind, there is variation in onset of puberty and duration of growth spurt which can be influenced by such factors like nutrition, social climate and heredity of a child. Unfortunately, there is no national data available about growth patterns of Pakistani children and adolescents at present.

7. Psychological Aspects of Adolescent Growth and Development

Many adults have only a vague realization of their adolescent years fears, anxieties and apprehension which are experienced by every teenager. The growing individual has to cope with not only her growing body but also her emerging emotions and concerns. As a child one is never worried about his or her physical appearance or height and weight unless one is in special circumstances but onset of puberty brings an increased awareness of the self both physical and psychological. The adolescents not only need getting used to her new body dimensions but also a constant worry of not being different than their age mates, that is why the early growing girls or late growing boys generally develop anxiety about their physical growth. In addition to physical growth and sex related hormonal changes, the cognitive abilities also undergo a qualitative change. The formal logical stage or abstract thinking and reasoning becomes an effective tool to judge one's environmental opportunities and self. These new cognitive abilities are instrumental in developing a self concept and an identity separate than one's family and friends. There are many factors which play a role at this stage in forming the personality of adolescent.

8. Parental Support

The adolescent needs close friendship and understanding of her immediate family (mother, father, brother, sister) to get answer to new
questions e.g. am I growing normally? Am I too short or too tall? Am I ugly? Are my feet too big etc. etc. Well adjusted parents who themselves have had a secure childhood generally provide positive support to their children at adolescent stage and answer their question without guilt or shame. The expression of apprehension shame or anxiety about the growing adult results in transfer of guilt or anxiety towards growing up in the developing person which makes the task of growing up into a healthy confident person all the more difficult.

Marked deviation from idealized norms of physical appearance skills and interests, norms that conform largely to the culture's stereotypes of femininity or masculinity (colour of the skill, eyes, height) may adversely influence how adolescents are treated by others. It is pointed out that an adolescents perception of oneself is not always based on objective realities. They may be influenced by prior experiences that have lead the young person to view herself or himself as attractive, intelligent, strong or otherwise by important others regardless of her actual characteristics. Thus it is evident why majority of women in Pakistan suffer from deep sense of insecurity and lack of self worth.

9. Growing Person

Amongst the most dramatic developmental events taking place during adolescence and more challenging to the growing person than the harmonally induced increase that take place is the sexual drive and the frequently unpredictable fantasies and impulses that accompany it. For the first time in her life she awakens to the fact that she is going to grow into a young woman. Her growing awareness about her body coupled with increasing mental abilities equips her to form a concept of her own self. She is a person with her own opinion and freedom to act. This change which is inevitable is generally not a pleasant experience in Pakistani culture where women's sexuality is always suspected. The gender discrimination become intensified and general observation is that instead being happy about adolescent girls the parents become worried. The security measures are tightened around the girls whereas it is reverse in case of boys. No wonder girls don't learn to trust in their own abilities and break easily in the face of stress.
10. Cultural Influence on Sexual Attitudes and Behavior

Learning appears to play a critical role in determining the sexual response pattern that are adopted to satisfy sexual drives. There are wide variations in sexual attitudes and behaviours in different cultures yet there are widely accepted normative values which are common to all cultures for example some form of taboo on incest. Some cultures are restrictive with regard to sexual activity throughout childhood, adolescence and even to some extent in adulthood. Others are thoroughly permissive at all ages. Still others are highly restrictive during childhood and adolescence and then suddenly become much more permissive about and even demanding of sexual activity in adulthood.

Among the Pakistani Muslim culture the girl children remain ignorant of sexual matters (as far as adult information is concerned) until the last stages of the marriage ceremony. The girls are specially protected from getting any information about sex to the extent that majority is not allowed to the movies which may have some sexual information. There is a strong stress on chastity and condemnation of sex and sex related thoughts and action. This heritage of very rigid code regarding sexual behaviour which is carefully cultivated in girls causes problem in their married life. It is not easy to accept sex in marriage as normal when one grows up with the concept that everything related to sex is bad and dirty. The common law prevalent in the country condemns all type of sexual relationship and the violators are given exemplary punishment. The enactment of hadood ordinance is a form of regularizing the cultural values. However, the social values and the law both are discriminatory towards women as it is women who can get pregnant and men can go free.

There are other cultures including the prevalent culture of developed countries where the sex taboos have relaxed a great deal in last thirty years and family as a primary social institution is under considerable stress. There are many varieties of permissiveness and Puritanism being embibed by people belonging to different socio-cultural groups.

Media has emerged as a powerful factor especially since the invention of dish antenna to break the cultural boundaries and bring the world together in values if not physically. However, this invasion of
foreign ideas is not without peril as media generally highlights the bright side only. The growing sexual promiscuity has given rise to an epidemic scale rise of sex related diseases including AIDS which to-date has no cure. Similarly sexual exploitation of rich of the poor in the economically less developed countries is another invasion of the private space of the women by powerful others.

In our society, despite the advent of the recent "sexual revolution" many parents still spend a great many years teaching children and adolescents especially girls to inhibit and control sexual behaviour presumably to prepare them for a time when they will be expected to make these responses. Most of our mothers teach the girls consciously or unconsciously, to be ashamed of menarche or of their sexuality. Feeling attracted to any male member is considered a sin and one is not supposed to even think about the members of opposite sex before marriage.

11. Developmental Tasks of Adolescents

In every culture an adolescent has to accomplish certain tasks before she/he can be accepted as an adult in the society. In old times these tasks used to be in the form of certain physical skills like ability to hunt or kill in the case of a boy or be able to gave birth to a child in case of a girl etc. There used to be certain rituals or initiation ceremonies specific with each tribe to announce the coming of age of their adolescent. (Incidentally most of these rituals are for the initiation of boys as narrated in the anthropological studies of African tribes.) With societies becoming more urbanized. The rituals have disappeared but the attitudes persist.

The developmental task are sort of invisible norms which are evolved over the years by every society to ensure propagation of its social and cultural value system. If one looks at Pakistani culture the expectation from an adolescent girl differ from an adolescent boy. The girl of eighteen years is shouldering adult responsibilities and should know how to behave inside the family or with the outsider. A boy of eighteen years on the other hand is considered just a boy. He may be a student or an apprentice but he is not supposed to be economically independent. Even in agriculture household he works on the land but all the decisions are taken by the
patriarch may be father or grand father. Thus the adolescent boys in our culture have easier life than the girls in our culture. In urban society of Pakistan a boy becomes adult when he has completed his education and has a job or an independent source of income to support his wife. The girl on the other hand is considered fit for marriage when she starts menstruating. There are no other conditions on her for considering her an adult like education level or learning of income generating skill etc. This is one of the main reasons that wife is always several years younger than her husband in Pakistan. In fact it is a social norm that wife should be younger than her husband.

12. Developmental Social Stereotypes

The present writer carried out a study of two thousand rural families of four provinces of Pakistan and one of the dimensions was to identify the developmental social stereotypes of Pakistani girls at various ages. A brief survey of the research indicates that the developmental social stereotypes of five year old girls in Pakistan have some important features. First, the girls are encouraged to behave like girls both through praise and punishment. Second, they are trained to develop self-control and an attitude of nurturance towards male members of the family. They are also discouraged from spending time in outdoor activities.

These stereotypes are true of all the four provinces and the different strata of village community. The slight difference was noted amongst the service and overseas workers subgroups which appear to be more lenient towards five year old girls.

The stereotypes of 10 year old girls become more precise in the society’s expectation of specific behaviour from the girls of this age. In addition to expecting them to behave speak and dress like girls the sex segregation is introduced. The girls are encouraged to identify with their mothers and adopt the secondary role as compared to their male siblings.

Similar to the findings of the data of five year olds there appears to be quite a bit of concern about the social attributes of ten year old girls in the subjects belonging to all the four provinces. The same is true of the five
subgroups of the rural community. The interesting finding is that the three subgroups which form the main population of the village, i.e., land lords, farmers and the poor have identical views on these behaviour norms. There are some minor differences in the views of service and overseas workers subgroups.

The stereotypes of 15 year old girls have emerged as a subgroup under maximum social control. They have to be hard working and prudent. They should not take any initiative on their own. They are required to seek permission even for such minor things like meeting their girl friends. They are indoctrinated to be somehow inferior to men and are trained to accept this secondary position. There is more stress on religious education which is another form of enforcing discipline. This is especially true for placing restriction on the movements outside the home and discouraging them to continue their education.

The subjects from all the four provinces appear to be unanimous on these social stereotypes. They expect fifteen year old girls to be totally dependent on others for making a decision for them or telling them what to do. Punjab and Sindh subjects appear to be soft on such questions like choice of educational goals. When different subgroups were compared on these behaviour norms, there was again a great uniformity. The group which appears to be most positive towards girls is service group followed by the overseas workers group. The rest of the three groups are very rigid on their social norms.

The stereotypes of twenty year old women reveal that socially acceptable twenty year old women are the ones who have internalized all the social taboos. They restrict their movements within the home, are very hard working, obedient and self serving. They are not only secondary to men and should serve the male members of the family but are also made to feel themselves as economic burden. They are aware of their rights to property but along with this they also know that they should give it up in favour of their brothers. They are trained to be ready to obey their husbands blindly and in case of any mishap in married life take the entire blame on themselves. They have the desire to take up a job or get education, but along with that they have a feeling of helplessness that they
really cannot do it. The important thing is that others would not allow them to do what they would like to do.

The provincial data on twenty year old women shows uniformity on various personality ratios. When different provinces were compared on some social values it was noted that NWFP differed from other provinces on five statements by marking them randomly. These questions deal with women taking up a job, seeking a divorce or second marriage and awareness of their rights to property and vote. The Punjab on the other hand supports the women seeking a divorce in case of an unhappy marriage.

The same stereotypes were supported by all the subgroups of rural community. There is more uniformity amongst land lords, farmers and the poor subgroups on all the norms. The overseas workers group has not supported the values dealing with financial aspect like women being an economic burden, etc. Both these subgroups, i.e., service and overseas workers groups are more positive towards women as compared to the rest of the three groups.

This social picture is not very bright for the young girls growing up in rural Pakistan. However, their urban sisters are not much liberated either. The developmental social stereotypes indicate that Pakistani society trains its girls much differently than its boys and their role is not given any importance. The undervaluing of women’s role is evident from the fact that no education is considered necessary for a girl to become a mother and house wife. This amounts to the same situation as one would say that there is no need for farmer to get an education and learn about improved seeds and insecticides etc. as he can do what his forefathers used to do. Of course, a girl can become a home maker without an education like a traditional farmers who learns from his forefathers but the cost society has to pay in terms of mother and child mortality is much higher.

Sex Differences in Vocational Goals

Significant differences are found in our culture regarding the vocational goals among the high school and college population. Although there is increasing awareness in the country regarding benefits of economic
sector. The women are entering many fields besides the traditional fields of education and health sector. However, due to lack of information about job markets and job requirements most of them end up either staying unemployed are under employed. Although there is no vocational guidance programmes for boys also but girls need it more than boys because both boys and their parents are more familiar with the type of employment opportunities available for men.

Besides not being very educated or skillful many parents are reluctant to encourage their daughters to prepare for a job or profession as our culture does not like women to enter into employment and entering into a job can effect the marriage prospects of a girl. This negative attitude of the society causes confusion of values. On the one hand girls are encouraged to work and they do start working on the farm and in the family enterprize as unpaid member of the family team very early in life they are not encouraged to work for a wage. This is a very effective method of keeping women economically dependent on male members. The Agriculture Survey of Pakistan 1990 admits that women do more than 50% of farming work yet the credit goes to the male farmers for the work along with the money from the produce.
<table>
<thead>
<tr>
<th><strong>SELF ASSESSMENT QUESTIONS-1</strong></th>
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<tbody>
<tr>
<td>The growth spurt begins with onset of increased activity of pituitary gland.</td>
<td>T./F.</td>
</tr>
<tr>
<td>In physical growth all body parts grow at the same speed.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The onset of puberty is generally counted from onset of menstruation cycle.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The girls generally get disturbed due to their big feet and hands.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The chemical changes in blood stream of adolescence are responsible for swing of moods in teen-agers.</td>
<td>T./F.</td>
</tr>
<tr>
<td>If parents have themselves felt very disturbed and guilty during their childhood they are likely to be more understanding of their children.</td>
<td>T./F.</td>
</tr>
<tr>
<td>Any kind of interest shown by the young girls towards the opposite sex is considered bad in our culture. This is likely to create lack of adjustment in their married life.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The boys generally grow to be taller than girls because their accelerated hormonal activity starts two years later the girls.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The media is transporting lot of foreign cultural values which are creating a rift between the youth of Pakistan and their parents.</td>
<td>T./F.</td>
</tr>
<tr>
<td>The only way to counter foreign media is that parents should help their adolescent children more than before in passing through their period of attaining adulthood.</td>
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**Activity-1**

Interview two boys and two girls between the ages of 12 to 14 years and ask them how they feel about growing up.
<table>
<thead>
<tr>
<th>SELF ASSESSMENT QUESTIONS - II</th>
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<tbody>
<tr>
<td><strong>Parents do not discriminate between sons and daughters in Pakistan.</strong></td>
</tr>
<tr>
<td>By inner control it is meant that children start following the social norms without being told.</td>
</tr>
<tr>
<td>The encouragement of the parents to make a girl behave like a girl is called sex identification.</td>
</tr>
<tr>
<td>There was no difference in attitude of different subgroups regarding education of girls.</td>
</tr>
<tr>
<td>The twenty year old rural women wanted to get their share from the land but are afraid of social censor.</td>
</tr>
</tbody>
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**Activity - II**

Interview 5 mothers of young children and ask them what in their view is a good girl of 10 years old and a good boy of than years. Write a comparative analysis of the information collected.
BIBLIOGRAPHY


UNIT - IV

Menstruation
OBJECTIVES

(a) With the attitudes related to menstruation, menarche, and the taboos associated with it.

(b) The biological and psychological correlates of menstruation.

(c) The various views of menstrual and premenstrual distress.

(d) Review exercises will be given at the end of each section to clarify issues.
INTRODUCTION

It has been said "A woman's biology is her destiny", (Martin, 1987). A woman's role as a child bearer and makes up for a major part of her life. Her capability as a reproductive organism is initiated by a significant change brought about by menstruation. Menstruation thus, is a very important part of a woman and remains so throughout her life.

1. Menstruation as an Occurrence

This is a very hush-hush topic. Even among very literate educated women the terms used to describe their menstruation are touched very delicately and very politely. In Pakistan there is only one advertisement on the T.V. for sanitary napkins - and that too indicates very delicately (lest the taboo be broken). The males in Pakistani families are not even aware of the 'conspiracy' of females. It is treated as a special secret between females. In our culture menstruation is binding as it restricts the young females movement. Menstruation means that a female body is now more vulnerable. Menstruating young girls in Pakistan immediately come under strict vigilance (in some castes/sects purdah is initiated at this stage). It is because of their status as a reproductively capable body.

The menstrual cycle though experienced by women every month or so throughout their lives has not been well understood in terms of its physiological, psychological and social impact. Additionally, there have been many misconceptions attached to this phenomenon (perhaps for not being so widely discussed and researched).

"This has been variously described by females and experts alike as an inherent disability, a curse, a rage of hormonal influences and so on. Menstruation has been viewed negatively even in the emancipated West. It is said that a woman executive, going through the 'raging hormones' may make mistakes which may cost the company millions" (Saunders, 1987).

As reported Martin (1989) 'nineteenth century medicine failed extremely prone to stress the debilitating and deleterious quality of adverse impact on the lives of women. Medical researchers in menstruation as pathological were remarkably vivid by the end of the century' (p. 194). She further quotes Havelock Ellis as saying 'even in the healthiest
woman a worm however harmless and unperceived gnaws periodically at the roots of life.

Menstruation is also seen as a reproductive failure. The common man/woman knows that a pregnant woman will not menstruate whereas in the non pregnant state the female will menstruate. This is further strengthened by the fact that miscarriage also entails hemorrhaging. So, there is a lot at stake for the female throughout her life. The outset of menstruation, regular menstruation even cessation of menstruation (menopause) all involve emotional/physical changes which are still not completely understood by the layman, the scientist or by the women who experience it all first hand. The average age of onset of menarche is 12-14 years, but there is a general prejudice among the lower/uneducated classes that girls menstruate earlier if, given foods which are classified as 'hot' (in indigenous medicine, foods are classified as 'hot' or 'cold' in terms of their effects on the metabolism in the body). Primarily most of the 'hot' foods fall in the high protein category (eggs, fish, meat, etc.). The mothers and elder females believe that if the young girls are not fed these 'hot' foods, the menstruation can be delayed. By the same logic eating a lot of 'hot' foods will bring on menstruation.

There is also a strong belief that females are not supposed to be physically active during this period (considered to be days off). This belief is held not just in Pakistan but is stated as recently as 1983, by a group of Midwest American females, that active sports should be avoided during menstruation.

2. Attitudes Towards Menstruation And Menarche

The phenomenon of menstruation and its essential corollaries is the most misunderstood of the experiences the woman kind goes through. Perhaps the main reason is that even though it rules almost two third of women's lives, men have no experience of it. If anything it is most secretive of the experiences of women (whether in New Guinea or the U.S.).

It has been said that Menarche is a traumatic experience, though it may be a positive transition for some young girls. When young girls were asked to give details of their experiences (in relation to menarche) negative as well as positive reactions were reported (upset, unhappy,
excited). The better prepared a female was, the more positive was her response as compared to an unprepared female.

Age, prior beliefs, beliefs of the family regarding menarche personality characteristics and to the level of menarche among her peer also affect a young female's attitude towards menarche (Ruble & Brooks Gunn 1982; Brodzinsky 1991).

The menarche can be greeted with joy or depression, joy because the young girl has entered the cloisters of womanhood which can lead to procreation, depression because now a girl will be tied to a cycle of responsibility (and the societal taboos) till menopause.

In our culture specifically young girls are not prepared for their menarche. Suddenly one fine day a young adolescent discovers what she's going through - it is so traumatic that the ill informed child will not discuss her 'shameful act' with anyone. She is ill prepared for the most critical change in her life.

The first menstruation is significant as it indicates a new phase in development of the female. The egg has gone through the whole cycle by which it terminates its life cycle (to be discharged. The body is physically preparing itself for fertility and ultimately pregnancy.

Though no systematic study conducted on this issue, having talked to young females, it has been found that generally young females are not prepared for their first period (even though they may have heard it happening to their classmates and friends). Usually, it is the older sibling or other older females in the family who explain the mechanics of dealing with the monthly cycle to the young girls.

Young females feel it to be a hindrance or a hassle - apart from the fact that menstruation is seen as a messy, grossly disgusting and defiling occurrence. It is also seen a hindrance as the female is not as free physically to do everything. In our culture specially where occurrence of menstruation imposes certain restriction on the movement of the females.

In some sense this happens even in the U.S., as Matlin (1987) puts it menarche may serve as a "dividing line" for females. A young girl is permitted to play football and to spend an afternoon playing at home of the boy next door. Dad invites her to sit on his lap now and
then. After menarche, the parent cautions you are too big for that now with a tone of voice that indicates that their daughter should not ask 'why not?' (p. 51).

Menstruation may be seen as a hindrance by the young Pakistani female as her freedom is restricted (purdah is imposed, usually after Menarche). The restriction and vigilance is initiated as the girl's body is seen as vulnerable. She is now capable of reproducing. Even though she may resent the restriction, these are a part of the social changes which are initiated at menarche.

All developmental transitions are periods of emotional and physical changes. However, the most significant period of emotional, physiological and psychological turmoil is the onset of menstruation. Interestingly, this is also an event of social significance since the female is now capable of reproduction. This event has been reported to be celebrated in a wide range of cultures all over the world. There are rituals, customs and ceremonies which let the members know of the arrival of menarche. In one muslim sect, sweetmeats are distributed among friends and family to let the girl's reproductive readiness be known. In some cultures the transition for womanhood is welcomed through rituals whereas in other cultures the young females are separated from the normal population.

In Pakistan the young female learns soon enough through a network of elder females that she will be treated as unclean during her menstrual periods. She has to undergo a thorough cleansing ritual of all body parts, hair, nails and clothing before she can be considered clean and Pak (to be able to say her prayers again). She cannot offer her prayers or enter holy areas till the cleansing has taken place.

Box 4.1: The Pakistani female students living in dorms in the American universities had a difficult time explaining the thorough cleansing rituals every month. The concept of becoming pure all over was unusual (Don't you take a bath every day, don't you change clothes and underclothes - so what's un clean)? This was contrary to the empathy and understanding of these rituals by Muslim females from other parts of the world.
Guinea man who divorced his wife because she had slept on his blanket during menstruation. Divorcing her was not good enough so to get rid of her 'curse' for good, he murdered her. (The pollution could only be washed away by murder of the crying woman).

In the Northern Areas of Pakistan, the Kalash tribe separates the menstruating female from the rest of the tribe. The menstruating female is moved to a hut separated from the rest of the habitation. Her food/water etc. is kept outside the door of the hut by another female (usually a non-menstruating sister). This female cannot enter the hut of the menstruating female. There may be several menstruating females in one hut. This separation keeps the curses and pollutants away from the tribe. Uncleanliness is thus associating with the female cycle. In various parts of Europe it is still believed that if a woman in her courses enters a brewery, the beer will turn sour, if she touches beer or milk, it will go bad; if she makes jam, it will not keep (Frazer, 1951; Martin, 1989). This sounds very familiar even in the Pakistani context where when pickling mangoes, it is ensured by elder women that the woman who is doing the pickling is not menstruating, otherwise, the pickles will not keep.

Onset of menarche is welcomed with celebrations among the Kurtachie living on an Island near New Guinea. The mother announces the event to friends and relatives. Shouting and jumping with joy, they rush to prepare a feast, men prepare platforms for an elaborate ceremony. The girl and her attendant (friends, relatives) stay in complete seclusion at the mother's house. During this period these females fast, observe certain rituals and taboos - their heads are painted red and white. The wealthier the girl's family, the more the number of people in the village who must fast. After 4 or 5 days, presumably end of the period, the females blow on cockle shells, perform a dance and announce the feast for next day. Not just the whole village, but neighbouring villages are also invited for the feast. The young girl is paraded on the platforms and given a special brew to drink (Paige & Paige, 1981; Matlin 1987).

In the U.S. the onset is not celebrated nor the neighbours invited to a feast. As pointed out by researchers on this issue, cards for all occasions can be bought in the card shops (birth, death, friendship, retirement, divorce, etc.) but not for becoming a woman, of coming of age. Instead we greet this coming of age with some embarrassment in the same way we deodorize, sanitize and remove the evidence of
menstruation itself - menarche is carefully hidden as well (Matlin, 1987, p. 47).

Some families do prepare their young females well for menstruation. These prepared females respond to the event positively. 'I could not wait for it to happen'. 'I thought it was the greatest day in my life'. 'My whole family congratulated me and made me feel really good about it and myself'. (Maddux 1975, p33, cf Matlin 1987).

Interestingly, through most menstruating women are secretive about when they do begin to menstruate - many eventually talk about the mishap.

Going through literature, a case of extreme secretiveness (even from the eastern point of view) was reported of a girl who used to throw soiled sheets away in the garbage - and she did it for two years before her mother finally found out the real reason for her diminishing linen supply. Upon inquiring the girl told her mother that the thought she had cut herself while sleeping (Matlin, 1987).

Similar myths and taboos about menstruation have a long history. The Roman, naturalist Elder Pline (1st century A.D) wrote, 'But nothing could easily be found that is more remarkable than the monthly flux of women. Contact with it turns new wine sour, crops touched with it become barren, grafts die, seeds in the garden are dried up, the fruit of trees fall off, the bright surface of mirrors in which it is merely reflected is diminished, the edge of steel and the gleam of pottery are dulled, hives of bees die, even bronze and iron are at once seized by rust and a horrible smell fills the air. To taste it drives dogs mad and infects their bites with an incurable poison (cited in Novel 1965, p. 222; Martin, 1987).

These taboos have found their modern counterparts in the West, Milow (1983) and Martin (1984) reported that questions were asked by girls regarding the bad menstrual blood, whether hair permanents and dental filling would take during menstrual periods. Girls were also not sure whether flowers would wilt when worn during menstrual periods.

The social cultural and religious taboos eventually affect the perception of menstruation by women. Jewish women (who followed strict cleansing rituals) and Catholic women report more menstrual distress as compared to non-practicing women. This was reported by
Paige (1973) and Parson (1980), menstrual distress and discomfort is greater in females with greater religiosity and more traditional view on femininity and feminine roles/functions.

**Box 4.2.** The same kind of secretiveness exists in Pakistan, even in liberated educated families. The onset of menarche is kept secret from men in the family. The author being born and bred in the liberal 50's & 60's in a doctor's family was not aware of what was happening to her. The first time she talked to her father was when she needed medicine for her debilitating cramps (10 years after menarche). Even in the open and progressive 19990's friends talk secretively of their daughters menarche and how difficult it was to explain menstruation to them. The girls generally talk to their peers about it and it is never openly discussed even amongst mother and daughter.

Some families have reported a positive feeling towards menarche first transition from girlhood to womanhood.

'I remember wanting it so much you feel like you are not a woman but you know you are starting to be a woman and its something that sets you apart from being a little girl. My mother said that I was becoming a woman, and that really got to me, so I said, 'Am I a woman now?' Mothers and sisters often greet the event with you are a woman now' (Martin 1987). It sets women apart as a breed — their menstruation a secret — a secret from men.

The secretiveness about menstruation is also evident from young women's hesitation in talking to researchers. Brooks-Gunn & Ruble (1980) report that women are reluctant to talk about menarche and menstruation. Menarche appears to be the event which separates sexually mature females from little girls. Menarche makes them realize their sexuality. Menarche changes the young girl's concept of herself and of others around her. Post menarcheal girls are more in conflict with their parents especially fathers. Menarche represents a transition in which young women come to see themselves as mature and independent people (Matlin, 1987).

**SELF ASSESSMENT QUESTIONS**

1. List the experiences of menarche of 5 of your friends. Count the similarities and differences in your experiences, perceptions, expectations.

2. List the cultural/social/religious taboos and myths associated with menstruation.
3. Menstruation: Biological and Physiological Correlates

Menstruation is a complex biological phenomenon. It involves an intricate and cyclic relationship of various hormones in the reproductively receptive female body. The word menstruation comes from the Latin word for moon, since a menstrual cycle is approximately 28 days, the length of a lunar cycle. These hormones prepare the body for reproduction and later remove the unutilized nutrients and blood from the system. The menstrual cycle in simple biological terms is the preparation of the female uterus cycle. The female uterus undergoes changes every month. The normal cycle consists of maturation of the ovarian follicle, ovulation and preparation of the uterus for a fertilized ovum. The estrogen levels rise in the first 14 days following menstruation and causes the endometrium to become thickened with blood vessels. After the progesterone surge at ovulation, the endometrium becomes even more thick (upto 5 millimeters thick), soft secretory, spongy and covered with mucus, in total readiness for the ovum to arrive and attach itself. Menstruation consists of the sloughing off of the outermost layer of the endometrium (the lining of the uterus) along with the discharge of blood. Almost 20-200 milliliters of blood is lost with each menstrual cycle and the total loss of blood during lifetime may come upto 40 liters. (Stewert, 1976, Parsons, 1980; Bredgeman, 1991).

The sloughing off of the nutrients and blood from the wall of the uterus is cyclic in nature and this cycle can be divided into four phases:

1. Follicular Phase (10-14 days)
2. Luteal Phase (8-10 days)
3. Premenstrual Phase (4-6 days)
4. Menstrual Phase (3-7 days)

In the pre-ovulatory or follicular stage the pituitary gland secretes estrogen. The end of the follicular phase is ovulation, the release of the egg from the follicle into the fallopian tubes, where it journeys down to the uterus. The collapsed follicle - the corpus luteum, begins to produce progesterone beginning the post-ovulatory or luteal phase:

If the ovum is not fertilized it starts degenerating within 8-10 days after ovulation (pre-menstrual phase). Menstrual flow is initiated
by the withdrawal of progesterone (and also by lower amounts of estrogen) produced by the corpus luteum.

![Graph showing hormone levels]

**Figure 4.1**

*Estrogen peaks twice at the ovulation and middle of the luteal phase*

Progestrone peaks once at end of 2nd phase (luteal). Both hormones are low at premenstrual and menstrual stages. This is a very intricate relationship of ovarian and pituitary hormones.

![Diagram of the neurohormonal cycle of menstruation]

**Figure 4.2**

*Neurohormonal cycle of menstruation*
4. Menstruation: Psychological and Secondary Physiological Correlates

Ask any woman if she can tell when her periods are due, each one will give a specific list of symptoms which occur consistently to signal the onset of her periods. The signaling period varies from 2 days prior to the onset of periods. The correlates/signals range from headaches, backaches, muscular tension, irritability, water retention to an increased need for sweets. Some of these correlates are so severe and debilitating that medication has to be taken to ensure normal functioning. Interestingly many researchers do not identify the hormonal changes to be the 'cause' of the above mentioned variety of symptoms. Detailed study of physiological and psychological correlates have been controversial. Some groups have reported evidence of correlation between moods, weights and sodium potassium ratios, whereas others have not (Parson 1980).

An important feature identified by most females (severe in some cases) to be associated with menstruation is the menstrual cramps or dysmenorrhea. Dysmenorrhea constitutes pain in the abdominal region, lower back and also headache, this pain is as intense as labour pain and also occurs in spasms. This symptom is very common especially among younger women. Studies by American researchers have reported that 2/3 of adolescent females in high school and college who were included in the sample reported cramps (Ruble & Brooks-Gunn, 1980; Matlin, 1987). Pre-menstrual females expected to go through similar pain as they saw/heard their friends/siblings/peers go through. It has been said that females feel pain because they expect to feel pain.

I remember the days when the cramps used to be unbearable - sharing notes we found that one of our friends mother was told by the doctor that her cramps will go away when she gets married!

That these cramps are real and different in nature has been realized by some pharmaceutical companies. These compares have marketed drugs which are aimed specially at relieving cramps and discomfort associated with menstruation. Therefore the pain is not all in the head. The contractions of the uterus may be contributed to by prostaglandin. These are found in large amounts in the female body close to onset the menstrual periods. Research has indicated in that prostaglandin cause cramps.
Box 4.3. The author knows personally of at least 3 cases where the female has to take to bed for the 1st 3 days of her periods because of the pain. Two of the females are young and unmarried whereas the third is well into her late thirties. These are normal healthy active females who just collapse with the onset of their periods.

There have been many remedies suggested by folk medicine as well as scientists. Exercise, greater physical activity (some even say exercise increases pain), psycho-therapy and in extreme cases even surgery, has been used to alleviate pain.

5. The Structures And Hormones Involved In Menstruation

It is important to understand that the uterus cycle and menstruation is an intricate interplay of various elements, i.e. brain structures, hormones and ovaries.

5.1 - Brain Structures

The two important structures bringing in commands from the brain are the hypothalamus and the pituitary (which is the master gland). The pituitary releases gonadotropic hormones, the Follicle Stimulating Hormone (FSH) and the Leutinizing Hormone (LH) which in turn release certain hormonal activities in the body.

a) The hypothalamus is an important brain structure especially for motivational states. It controls all the survival functions of the body. It is not directly involved in any part of the menstrual cycle but it controls the master gland, the pituitary, by a direct vasculatory system. This vasculatory system carries hypothalamic hormones to the pituitary, thereby stimulating the pituitary to secrete certain hormones, important in the estrus cycle. Therefore the hypothalamus directs the regular production of the estrus cycle.

b) The pituitary is the master gland located at the base of the brain. The hypothalamus has direct connections with the pituitary through the hypothalamic-hypo-physical connection. Two important hormones of the menstrual/estrus cycle are produced by the anterior pituitary. These hormones in turn signal the production of female sex hormones by stimulating the gonads (ovaries in the case of female).
The pituitary also secretes a large number of other hormones which are involved in various other body functions.

5.2 Hormones

There are 4 important hormones involved in menstrual cycle. Two of them LH & FSH are gonadotropic hormones (stimulate activity of the gonads, the ovaries). The other two estrogen and progesterone are the steroid hormones secreted by the ovaries.

5.3. Gonadotropic Hormones

a) **FSH.** The follicle - stimulating hormones does just that i.e. controls the production of Estrogen and progesterone by stimulating follicles. These follicles are small lumps of epithelial cells which surround the ovum. In response to FSH signal the follicles swell in size. They grow and by growing release estrogens which in turn influence the hypothalamus.

b) **LH.** The Leutinizing hormone is another hormone produced by the pituitary. LH is produced by the anterior pituitary in response to a signal from the hypothalamus. The hypothalamus gives this signal in response to the estrogens produced by follicles. The cycle thus is as follows:
Hyp → Anterior pituitary → FSH → Follicles → Estrogen → LH

The Leutenizing hormone influences the hormonal secretions in male and female gonads. This leads to a release of the egg from one of the follicles. The remaining follicles form the corpus luteum (yellow body) which produces progesterone (another hormone) for about 14 days. The corpus Luteum regresses and decays. This is an important component of the menstrual cycle (Carlson, 1991).

5.4. Steroid Hormones

a) Estrogen. Estrogen is an important female hormone. It is produced by the ovarian follicles as has been mentioned before. However, this hormone is important not just in menstruation but in the development of female sex organs and secondary female characteristics i.e., the development of breast tissue, the widening of hips, the female shape and form.

Estrogens are important as they modulate the preparation of the uterus for implantation of the ovum every month.

b) Progesterone. It is produced by the Corpus Luteum. This important female hormone involved in changes which take place in female organs during menstruation and pregnancy (as well as development of sex organs).

Progesterone levels rise and fall at the beginning and end of the menstrual cycle. This hormone has mainly has two kinds of effects during the menstrual cycle, firstly, it prepares the uterus lining for implantation of the egg in case fertilization takes place. Secondly, it inhibits the hypothalamus from triggering the next FSH surge. It is important in gestation as well as lactation. Progestercane is therefore an important constituent of all birth control pills. (See figure 4.2 & 4.3 for details).

5.5. Structures (Gonads: Ovaries)

Ovaries: These are the female gonads important in the regulation of the female estrus cycle and reproduction. The two ovaries perform two roles i.e. production of hormones (estrogen and progesterone) and the production of gametes (egg cells). These are
produced as germ cells while the human female is still a fetus in the womb. An Ovary of the female human embryo contains about 7 million primitive germ cells at about 5 months of pregnancy. At about 7 months this number increases to 300,000. These eggs mature at a rate by which one is released from one ovary every 28 days. On the average a woman releases about 400 eggs during her reproductive life span (lesser number of eggs will be released with greater number of pregnancies). The egg released from the ovary has to travel through the Fallopian tube to the UTERUS. This takes about 7-8 days for the minuscule egg to make this journey. If the egg is not fertilized it will be disintegrated and discharged.

<table>
<thead>
<tr>
<th>SELF ASSESSMENT QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the different brain structures which play an important role in menstruation?</td>
</tr>
<tr>
<td>2. Differentiate the role of FSH, LH from Progesterone and estrogen.</td>
</tr>
<tr>
<td>3. By introspection and self observation try to identify the physiological and psychological experiences of your menstrual cycle. It would be interesting to ask a couple of friends what they 'feel' and go through during their periods.</td>
</tr>
</tbody>
</table>

6. **Pre-Menstrual Tension**

Though it has been generally accepted that muscular cramps do cause distress and pain during menstruation. It has taken scientific community in general and women in particular a long time to realize that the monthly cyclic changes in the body can demand a major readjustment from the body. This is now known as the premenstrual syndrome or the PMS. In fact, PMS has received much publicity because of newspapers articles and judgments related to female murderers who killed while under the influence. As Sherif (1980) states 'Legend gave us the tale of LIZZIE BORDEN of Fall River who, it is chanted 'gave her father forty whacks' or was it twenty? In fact Lizzie Borden's father and step-mother died by Axen. But did you know that Lizzie was menstruating at the time?" The biological basis of the criminal act came to the forefront. Lizzie was imbalanced due to
hormonal changes so Lizzie was acquitted of murder - her menstrual periods were blamed for the act! Three women who were charged with man-slaughter in 1981 were given reduced sentences on grounds of diminished responsibility due to PMS.

There are two extremes to the views regarding PMS. One views it as a definite physiological, physical phenomenon which some proportion of women go through. Whereas the other views it as anti women propaganda because it intends to confine women to functions of home & family as relegated by their bodies. An extreme case is cited from Ruble, Brooks-Gunn & Clarke (1980), 'As recently as 1970, a New York times article quoted a physician and member of the Democratic party committee on National Priorities as saying, with reference to menstruation "if you had an investment in a bank you wouldn't want the president of your bank making a loan under these raging hormonal influences at that particular period" (p. 227).

The pre-menstrual syndrome (PMS) is a variety of symptoms which may occur a few days prior to the onset of the periods. The symptom includes depression, anxiety, tiredness, irritability, swollen or bloated feelings, swelling and tenderness of breasts, acne etc. There is a list of 150 symptoms - out of which 3 major psychological symptoms are: Depression, Irritability and Lethargy (see Table 4.1).

PMS is controversial because of its wide variety of symptoms and because not all women experience it in the same intensity. Some experts go to the extent of saying that its all in their heads, whereas feminists believe that other experts who overemphasize the premenstrual syndrome may be using this to undermine women's activities.

The PMS cannot be declared completely in the head and baseless or even that it is incapacitating and even experienced by all women.

Studies by Parlee (1973, 1974, 1982; Matlin, 1987) show that there may be some cyclic responsiveness in terms of mood swings. However studies by later researchers indicate that severe premenstrual symptoms are more likely to occur in older women (30-40 years age range). More married women with children than non-married single women experience severe PMS symptoms. Research has indicated that gross changes in performance do not occur in most women (Parlee, 1982; MecPherson, 1987).
Table 4.1: Features Of Menstrual Tension

<table>
<thead>
<tr>
<th>I</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Symptoms occur 1-14 days before menstruation</td>
</tr>
<tr>
<td></td>
<td>Symptoms disappear at or shortly after initiation of menstruation</td>
</tr>
<tr>
<td></td>
<td>The female feels well during the actual menstruation</td>
</tr>
<tr>
<td></td>
<td>The combination of symptoms occur regularly</td>
</tr>
<tr>
<td></td>
<td>PMS causes distress and may cause other problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II</th>
<th>Symptoms: Psychological Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Depression and feeling low</td>
</tr>
<tr>
<td></td>
<td>Tiredness, fatigue or lethargy, tension or uneasiness and Irritability</td>
</tr>
<tr>
<td></td>
<td>Clumsiness or poor co-ordination</td>
</tr>
<tr>
<td></td>
<td>Difficulty in concentrating</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III</th>
<th>Symptoms Physical Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Breast tenderness</td>
</tr>
<tr>
<td></td>
<td>Swelling or bloated feeling</td>
</tr>
<tr>
<td></td>
<td>Puffy face, abdomen &amp; fingers</td>
</tr>
<tr>
<td></td>
<td>Weight gain, Headaches</td>
</tr>
<tr>
<td></td>
<td>Carbohydrate craving</td>
</tr>
<tr>
<td></td>
<td>Acne or skin rashes</td>
</tr>
<tr>
<td></td>
<td>Constipation or Diarhoea,</td>
</tr>
<tr>
<td></td>
<td>Needing more or less sleep</td>
</tr>
<tr>
<td></td>
<td>Stiffness in muscles or joints</td>
</tr>
<tr>
<td></td>
<td>General aches and pains</td>
</tr>
<tr>
<td></td>
<td>Abdominal pains &amp; cramps</td>
</tr>
<tr>
<td></td>
<td>Backache</td>
</tr>
<tr>
<td></td>
<td>Exacerbation of epilepsy migraine, asthma, rhinitis and urticaria</td>
</tr>
</tbody>
</table>

7. Dealing With P.M.S.

The first step in dealing with PMS is to recognize that this happens to you and to recognize that you can work with the PMS without loosing your 'potential' or 'sanity'.

Each PMS female has to develop her coping strategies - most of it has to be done with support of people around her. She has to understand that there are other women around who face the same problem.
A menstrual diary can help keeping a record of the days and what happens each day.

*Instructions:* Use the appropriate letters from the key to indicate how you feel each day:

### Table 4.2: Menstrual Diary:

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Depression</td>
</tr>
<tr>
<td>A</td>
<td>Change in appetite</td>
</tr>
<tr>
<td>T</td>
<td>Tiredness</td>
</tr>
<tr>
<td>SL</td>
<td>Change in Sleep</td>
</tr>
<tr>
<td>I</td>
<td>Irritation</td>
</tr>
<tr>
<td>B</td>
<td>Bloating feeling</td>
</tr>
<tr>
<td>Br</td>
<td>Breast Tenderness</td>
</tr>
<tr>
<td>S</td>
<td>Changes in Libido</td>
</tr>
<tr>
<td>H</td>
<td>Headache</td>
</tr>
<tr>
<td>N</td>
<td>Nausea</td>
</tr>
<tr>
<td>PP</td>
<td>Pain (period)</td>
</tr>
<tr>
<td>X</td>
<td>Days of period</td>
</tr>
</tbody>
</table>

### Table 4.3: Menstrual Diary

<table>
<thead>
<tr>
<th>Month</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24</td>
</tr>
<tr>
<td>Mar.</td>
<td>(7 Diff from Day 12-18)</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24</td>
</tr>
<tr>
<td></td>
<td>T---------T</td>
</tr>
<tr>
<td></td>
<td>B----------B</td>
</tr>
<tr>
<td></td>
<td>P---P</td>
</tr>
<tr>
<td></td>
<td>X--------X</td>
</tr>
<tr>
<td>Apr.</td>
<td>T-----------T</td>
</tr>
<tr>
<td></td>
<td>N--------N</td>
</tr>
<tr>
<td></td>
<td>P----------P</td>
</tr>
<tr>
<td></td>
<td>Br------Br</td>
</tr>
</tbody>
</table>

*Source: McPherson (1987)*
Furthermore, some women use exercise, others just watch a good movie or cook up a meal (anything which works).

Nutrition and balanced food intake should be monitored. Coffins, colas, should be reduced and more of lentils & proteins (white meat preferably) should be used. Cutting down on fluids and salts help reduce fluid retention.

If you are like most women in Pakistan who go through the cycle without really understanding what's happening to them perhaps a close look at your cycles may be revelation.

**REVIEW EXERCISE**

List group of symptoms that you and your friends go through regularly during menstruation.
BIBLIOGRAPHY


UNIT - V

Pregnancy and Psycho-Social Reactions
OBJECTIVES AND INTRODUCTION

In this Unit you will get to:

- Study the beginning of human life.

- Acquire knowledge of the growth and sustenance of the new life in the womb.

- Learn the importance of the prenatal environment for the developing fetus.

- Make a study of the effects of the developing fetus on the woman's body.

- Examine carefully the impact of the psychosocial environment on the expecting woman.

- Investigate into planned motherhood, infertility and related issues.
1. The Biology of Pregnancy

1.1. Early View of Conception

The beginning of human life has inspired wonder and curiosity in scientists and lay persons alike. There is evidence that in prehistoric and early historic times, people did not associate sexual intercourse with the birth of a baby. As a result, many theories of a mystical sort grew up to explain birth. The Greek Philosophers and Physicians, on the other hand, were aware that sexual intercourse always preceded pregnancy though they did not know exactly how this led to the production of a new life. On the basis of their knowledge they evolved the theory that the woman was the receptive soil in which the seed from the male was planted. It was not until the seventeenth century that the woman's contribution to fertilization was recognized. During that period de Graaf, a Dutch physician, suggested that the woman supplied an egg. A few years later, a Dutch spectacle maker, Van Leerwenhock, reported that 'Little animals', or what are known as sperm cells, were found in the male semen. These he contended, were the male contribution to the new human being.

1.2. How Human Life Begins

We now know that each microscopic sperm is composed of a pointed head and a tail. The head contains the genetic material necessary for reproduction. The tail moves like a whip and enable the sperm cell to swim towards the ovum (egg cell). Like the sperm, the ovum is a single cell that contains genetic material. In comparison with body cells, the ovum is quite large (0.12 milli meters) about the size of the period at the end of this sentence. The first step in the development of a single human being is the moment of conception or fertilization when the sperm cell from the father unites with the ovum from the mother to form a single cell. This single cell is called a zygote. Conception marks the beginning of pregnancy. The process of conception may sound simple when it is put into one sentence, but since the sperm and the ovum both have to be in the right place at the same time, it is more complicated than it sounds.
mother to form a single cell. This single cell is called a zygote. Conception marks the beginning of pregnancy. The process of conception may sound simple when it is put into one sentence; but since the sperm and the ovum both have to be in the right place at the same time, it is more complicated than it sounds.

1.3 Process of Fertilization

About the tenth day after the beginning of the average woman’s regular menstrual period, an ovum, that has developed in one of her two ovaries is stimulated by hormones and enters a sudden period of growth that continues for three or four days. By the end of the thirteenth or fourteenth day of growth ovum is mature. It is encased in a sac of fluid and floats to the surface of the ovary. The sac ruptures and releases the ovum into the fallopian tube. Millions of feathery hair in the fallopian tube sweep around the ovum and gently move it towards the uterus. This release of the ovum from the ovary is called ovulation.

In contrast to the male, who produces billions of sperms in a lifetime, the female ordinarily releases just one ovum each month. In a lifetime of approximately 40 fertile years, the average woman releases about 450 eggs. Each baby girl is born with her complete supply of egg cells or ova.

In many women, then ovulation occurs about the fourteenth day after the onset of menstruation. The mature ovum survives only for 24 hours because after that it begins to deteriorate (Hughes & Noppe, 1985). Sperms deposited in a woman’s vagina generally survive for three days. There are exceptions, however, some sperm cells have been known to have remarkably long lives. A viable sperm, moving from the vagina through the uterus and up the fallopian tube and reaching the ovum during the critical 48 to 72 hour period for maturity, will fertilize the ovum. Otherwise, the ovum continues down the fallopian tube to
the uterus, where it dis-integrates and sheds alongwith the lining of the uterus at the next menstrual period.

The sperm and ovum are single cells, each containing half the heredity potential of the individual. (Box 5.1: shows major differences between ovum and sperm-at-ozone). From the moment of conception, the development of the individual is a product of both heredity and environment.

### MAJOR DIFFERENCES BETWEEN OVUM AND SPERMATOZOOAN

**Ovum**
- Developed in the female gonads - the ovaries.
- One of the largest cells of the body - approximately 0.1 millimeter in diameter.
- Round.
- Contains yolk to nourish new individual after fertilization.
- No means of locomotion within itself, locomotion depends on contraction of surrounding tissues.
- While hundreds of thousands of ova are stored in the ovaries, normally only one ripens and is released every menstrual cycle of approximately 28 days.
- Every mature ovum contains 23 matched chromosomes.

**Spermatozoon**
- Developed in the male gonads - the testes.
- One of the smallest cells of the body - approximately 0.05 millimeter in diameter.
- Elongated, with a fine, hairlike tail.
- Contains no yolk, thus accounting for its small size.
- Moves by lashing tail.
- Several hundred million spermatozoa develop every 4 or 5 days.
- One half of all mature spermatozoa contain 23 matched chromosomes; the other half contain 22 matched and 1 unmatched.
Some 200 million to 500 million sperm cells are released during intercourse, yet only one of these may fertilize an ovum. The sex and inherited traits of the child depend upon which of these millions of sperm cells survive to penetrate the ovum. For the sperm, the trip to the ovum is long and difficult. The microscopic sperm cell must work its way upward through the cervix and uterus and into the fallopian tubes. Swimming at a rate of an inch in eight minutes, sperm cells may reach the ovum in as little as half an hour. The journey usually takes about six hours.

During most of the menstrual cycle, the plug of mucus in the cervix is thick and difficult to traverse. At the middle of the cycle when the ovum is about ready to be released, the mucus thins out, allowing more sperm to pass through the cervix and travel further into the uterus in search of an ovum. The change in the mucus also lessens the vagina's natural acidity, making it more hospitable environment for sperm cells. The ovum can be fertilized at any point as it moves through the fallopian tube. Usually a sperm joins the ovum in the outer third of the tube, close to the uterus. Only one sperm can enter the cell. As the first sperm passes through the cell membrane, a rapid change in the membrane's chemistry effectively locks out other sperm.

Inside the egg cell the spermatozoon loses its tail and the head becomes a normal cell nucleus. The egg cell goes through a final change in preparation for fertilization. The two nuclei meet in the egg cytoplasm, lose their nuclear membranes and integrate their separate chromosomal material into a single set of 23 pairs of chromosomes. At this moment, all the information necessary to activate growth and produce a new unique individual is contained in a single cell zygote.

1.4 Sustenance of the Fetus

In order to appreciate the major changes that occur within the body of the woman during pregnancy we need to examine the process through which the growing fetus is sustained within the mother's body.

After fertilization, the zygote continues its journey down the oviduct to the uterus. It reaches the uterus in four to five days and then floats freely in the uterine cavity. On approximately eighth day after fertilization the zygote adheres to the uterine wall and begins to implant
itself by digesting the surface cells of the uterine lining. Sometimes the zygote may not reach the uterus but attaches itself to the fallopian tube or even some area of the intestines. The embryo may grow in these locations until the organ ruptures or the embryo is removed surgically. In such cases if medical aid is not provided to the women on time, she may permanently damage her reproductive organs and may even die.

In the three weeks following implantation, the development of the supportive elements that will house the growing embryo occurs. An 'amniotic sac' grows around the embryo and fills with watery fluid. The fluid in the amniotic sac acts as a cushion that buffers the embryo and permits it to move about and change position.

The embryo is nourished through an organ called the placenta. The Placenta is a disk-shaped mass of tissue on the wall of the uterus, formed partly from the tissue of the uterine wall and partly by the chorion, a layer of tissue that originates with the embryo. Special cells in the placenta produce a hormone that maintains the uterine lining. This hormone is excreted through the kidneys, so a urine sample can be evaluated to determine its presence. Thus when the woman's menstrual period is about two weeks overdue the first reliable tests can determine that a woman is pregnant.

The placenta begins to develop at the moment of implantation and continues to grow until about the seventh month of pregnancy. It is connected to the embryo by the 'umbilical cord, which is a rope of tissue containing two fetal arteries and one fetal vein. Many of the miscarriages or spontaneous abortions that occur take place during the embryonic period. They are usually caused by inadequate development of the placenta or of the umbilical cord, or both. The placenta provides for an exchange of materials between mother and embryo, keeping out large particles of foreign matter but passing on nutrients. Thus, enzymes, vitamins, and even immunities to disease pass from the mother to the embryo through this organ. Sugars, fats and proteins pass through to the embryo, some bacteria and salts do not. It is important to note that the mother's blood system and the child's blood system do not mix. All of this exchange of nutrients occurs across cell membrane in the placentas.

Since the embryo receives its nutrients from the mother through the placenta, it is obvious that an inadequate diet or poor health of the mother will adversely effect the developing child. Unfortunately, this is
the period when woman is often not aware that she is pregnant. She is not worried about nutrition nor is she particularly concerned about the potential harmful effects of any drugs she is taking. In short, the damage is often done before the woman knows that there is an unborn child to worry about. Agents that can produce malformation while the tissues and organs are forming are referred to as teratogens. Teratogens take a wide variety of forms - Viruses, medicines that a pregnant woman takes, other drugs, environmental toxins and hormones present in her blood. The first trimester -especially weeks 3 through 9 - the embryo is particularly sensitive to the disruptive influences of teratogens.

1.5 Time Table of Prenatal Development

As soon as an ovum is fertilized by a spermatozoon, development begins. Development follows a pattern, not only in the formation of the different parts of the body but also in their functioning. Within a short time the developing organism becomes similar to miniature human proportions. Because the development pattern is orderly and predictable, it is possible to give a 'time table' of the development of structure and functions. The three stages of prenatal growth are the following.

1. **Germinal stage**: This is the period of development from fertilization until approximately the end of the second week after conception. This period ends with the fertilized egg (Zygote), or blasto cyst, is implanted in the wall of the uterus.

2. **The embryonic stage**: This stage covers the six week period from about the end of the second week until about the conclusion of the second month after conception. At the end of this period, the first bone cell is developed and the embryo appears to be a miniature human being. In other words, the embryo has all of its essential parts.

3. **The fetal stage**: This period lasts from about the end of the second month until birth.

The highlights of these three stages of prenatal growth are given in Box: 5:2.
HIGHLIGHTS OF TIMETABLE FOR PRENATAL DEVELOPMENT

Periods of the Ovum
(Conception to End of the Second Week)

- Practically unchanged in size because of lack of outside source of nourishment.
- Rapid internal development.
- Implantation in uterine wall about 10 days after fertilization.
- With implantation, the ovum becomes a parasite.

Period of the Embryo
(End of the Second Week to End of the Second Lunar Month)

- All important external and internal features start to develop and function.
- Sex organs well enough developed to distinguish sex of embryo.
- By end of period, embryo measures 1-1/2 to 2 inches in length and weighs about 1 ounce.
- Growth in the head region is proportionally much greater than in the rest of the body.
- Accessory apparatus - placenta, umbilical cord, and amniotic sac develops.

Period of the Fetus
(End of Second Lunar Month to Birth)

- External and internal features continue growth and development.
- Growth follows the laws of developmental direction according to figure.
- Internal organs assumed nearly exact positions by 3rd lunar month.
- Nerve cells, present since the third week, increase rapidly in number during the second, third, and fourth months.
- Age of viability reached by sixth or seventh month.
- Fetal activity (e.g., kicking, squirming) begins between second and third months.
2. The Impact Of The Pregnant Mother On The Prenatal Development

The environment in which the child lives before birth - the mother’s uterus - determines whether the fetus (unborn child) will follow nature’s timetable. Normally conditions within the uterus are ideal for the development of a healthy fetus and ordinarily we think of the prenatal environment as fairly constant. The fact is that there are number of serious and debilitating external influences that can harm the fetus. Since many of these dangers to the fetus can be prevented by changing maternal behaviour, or by altering the environment, it is essential that prospective parents be made aware of them. Often, though not always, the greatest burden lies with the mother since she has the greatest control over the prenatal environment. Research on prenatal development indicates that both the mother’s physical status, her behaviour and her emotional status may have an impact on the development of the fetus, as well as being an important influence on the future general health and adjustment of the child.

Any injurious agent introduced through the placental bloodstream can disturb the uterine environment. If introduced at a critical time in the prenatal developmental time table (see Fig. 5:3) it can temporarily or permanently change the developmental pattern of the growing child. (The following section identifies some of the more important prenatal environmental factors that may affect development.)

![Embryonic Period Graph](image)

2.1 Mother's Age

The average female reproductive life span begins about a year to one and a half year after the beginning of menarche and ends with menopause. Childbirth may occur at any point or at many points
during this period. However, the ideal age for a woman to conceive and give birth is between the ages of twenty and approximately thirty five during which period the highest proportion of healthy children are born. Women between the ages of twenty to thirty five tend to provide a better uterine environment. They have fewer pregnancy complications, including spontaneous abortions, stillbirths, maternal deaths and prematurity (Menken, Trussell & Larsen, 1986).

Women aged twenty to twenty four are the most fertile. Fertility is reduced by approximately 6 percent amongst women of age twenty five to twenty nine, 14 percent of women aged thirty to thirty four, 31 percent for women aged thirty five to thirty nine, and declines much more rapidly thereafter. Fertility rates also decline with marriage duration, possibly because of decreased sexual activity and reproductive impairment connected with frequency of pregnancies (Menken, Trussell, and Larsen, 1986).

More children with developmental problems tend to be born to mothers who are under twenty years of age. Presumably the reason is that mothers under twenty have inadequately developed reproductive systems. Their reproductive apparatus may not be fully developed, and some of the hormones needed for reproduction have not reached optimum levels. Moreover, they are less likely to have reached psychological maturity and readiness to deal with the responsibilities of child rearing. Premature children of teenage mothers are more likely than those of older mothers to have neurological defects that will influence their coping capacities. Also, mothers under 20 tend to receive inadequate prenatal care. Consequently, they are more likely to experience complications during pregnancy that may endanger their infants and themselves. For this reason the custom of early marriages need to be discouraged.

Women over thirty five may have aging and declining reproductive systems. The occurrence of such problems as miscarriages, hydrocephalus (water on the brain) and Down syndrome are associated with the advancing age of the mother (Moore, 1988; also see Box 5:3)). A woman's ova are present in a premature form from birth; the longer she lives, the older those cells become. It is hypothesized that some part of the high incidence of Down's syndrome among older women is the result of deteriorating ova. In approximately 80 percent of Down's syndrome cases, the mother contributes the extra chromosome, the father does so in the remaining 20 percent (Hughes & Noppe, 1985).
Box 5:3

Multiple sources of data throughout the developing world on safe motherhood indicate that there is increased risk to maternal health from pregnancies before age twenty and after age thirty five. Thus, women need to be increasingly sensitive to the risks of having children before the age of twenty and after the age of thirty five.

2.2 Mother’s Diet

The view that no matter what the pregnant women eats the fetus will get what it needs for growth is simply not true. Providing adequate nutrition for fetal development requires both a balanced diet and the capacity to transform nutrients into a form that the fetus can ingest. Poor or inadequate nutrition is probably the greatest potential threat to the normal development of the unborn child. Mal-nutrition during pregnancy has been associated with still birth, prematurity, low birth weight and neonatal deaths.

Experimental research examining the effects of maternal malnutrition on the development of the fetus has been conducted primarily with rats. Fetal rats exposed to a low-protein diet when observed at birth had less cerebral protein, fewer cerebral cells and lower body and brain weights than rats whose mothers received a normal diet. In most of these studies, few of the offspring survived.
The reproductive behaviour of those that did survive was greatly reduced. Thus, the experimental evidence also suggest that severe malnutrition interferes with normal fetal and postnatal development (Coursin, 1974).

Most of the evidence about the effects of malnutrition on human fetal development have been derived from the impact of disasters and crises, such as famines, wars and extreme poverty, that prevent access to adequate diets. Malnutrition is inferred from the baby's low birth weight in comparison with his or her gestational age. Babies who are small for their gestational age have a higher risk of mental or motor impairment than do babies who are of average weight for their gestational age (Cassady and Strange, 1987). The relative contribution of malnutrition to the retarded development of the fetus is difficult to assess. Women who experience these conditions encounter other stresses - anxiety, exposure to environmental, toxins, increased exposure to disease - that could also affect normal fetal development.

There is evidence that long term cognitive deficits occur to children of mothers who were malnourished during pregnancy (Barrett, Radkeyaroow, and Klein, 1982; Joos et al, 1983). In addition, improper maternal nutrition is also associated with a variety of problems after birth, including rickets, epilepsy, mental deficiency, general weakness, and susceptibility to disease (Annis, 1978).

Some experts suggest that birth weight is affected only when the mother experiences starvation or dramatically inadequate nutrition during the last trimester of pregnancy. Others agree that malnutrition during the phase of cell division, i.e. first trimester, will result in smaller organ size that cannot be reversed by later dietary supplements. Because of the importance of nutrient, it is desirable for the women to begin pregnancy with a history of good eating habits and in a healthy well nourished state. Even though expectant mother ordinarily eat carefully during pregnancy, it is difficult to quickly reverse the effects of a previously inadequate diet because of the increased nutritional demands made on the expectant mother by the unborn child. Pregnant women need additional proteins, calcium, iron, folic acid and vitamin B in her diet. Protein deficiency results in smaller babies, increased infant mortality and mental deficiencies (Winick, 1981).

Iron deficiencies in pregnant women's diet may result in their becoming anemic. Calcium deficiency can affect the development of bones and teeth in the fetus, but it is more likely that the fetal need of
calcium will be met at the expense of the mother. Thus, it is she who will be deprived of the calcium necessary for the maintenance of healthy bones and teeth, accounting perhaps for the old superstition that a woman loses a tooth for every child she delivers.

A well balanced diet for pregnant women should include foods from each of the seven basic groups: meat and meat alternatives, pulses rich in protein, eggs, dairy products, bread cereals, fruits and vegetables, fats and oils.

Women need to take 300 to 500 more calories a day including an additional 30 grams of protein (Winick, 1981) Teenagers, women who are ill, undernourished, under considerable stress and those who have taken birth control pills until shortly before pregnancy need extra nutrients (Brown, 1983).

About one third of the weight a pregnant woman gains goes to the fetus; the rest is distributed among parts of the mother's body that sustain and nourish the new life (including breast, blood uterus, placenta and amniotic fluid. Some pregnant women do not gain enough weight. The latest obstetric guidelines for pregnant women is to gain 26 to 35 pounds, and a smaller gain apparently is risker than a bigger one.

A baby can be malnourished during pregnancy, after birth, or both. Although some degree of growth retardation occurs if a fetus is malnourished, the most severe impact on growth occurs when resources are inadequate both before and after the child is born. This is a special concern for low-income families in under developed countries. A National Nutrition Survey 1988, shows that a large proportion of pregnant and lactating women in Pakistan did not consume the required amount of calories (see Box. 5: 4).

<table>
<thead>
<tr>
<th>Average Calorie Consumption by Biological Groups</th>
</tr>
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<tbody>
<tr>
<td><strong>Average Intake</strong></td>
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<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Adult males</td>
</tr>
<tr>
<td>Adult females</td>
</tr>
<tr>
<td>Pregnant</td>
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<tr>
<td>Lactating</td>
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Malnourished mothers can benefit from caloric supplements during and after pregnancy. Diet supplements for the mother and child are positively related to child development and behaviour (e.g. improved social responsiveness). Since mother's nutrition during pregnancy affects both the women and her child's long term physical and long term intellectual development, proper care of pregnant women is important, both to individual parents and to society as a whole.

2.3 Mother's Drug Intake

At one time it was believed that the placenta protected the developing fetus from injurious elements in the mother's body. We now know that virtually every thing the mother takes in makes its way to the new life in her uterus. Drugs taken by the mother may cross the placenta, just as oxygen, carbon dioxide, and water do. It is now recognized that although the placenta membrane prevents the passage of some harmful large molecule substances, it does act as a passage way for small molecule substances. In the case of drugs, the stage of development is more important than the strength of the drug in determining the extent or the type of damage that will occur (Moore, 1983). Much of the damage from drugs occur during the first trimester of pregnancy. Sometimes damage occurs even before the doctor and the women are certain about pregnancy.

2.3.1 Medical Drugs

Mothers of today are likely to use drugs more frequently than in the past. Iron, diuretics, antibiotics, hormones, tranquilizers, appetite suppressants and other drugs are being either prescribed or taken voluntarily by expecting mothers. Drugs known to be harmful include the antibiotics streptomycin and tetracycline; the sulfanomides; excessive amount of vitamins A, B, D, D and K; certain barbiturates, opiates, other central nervous system depressants, hormones, including progestin, diethylstilbestrol (DES), androgen and synthetic estrogen. In recent years, acutance, a drug which has frequently been prescribed for severe acne, has been associated with a variety of birth defects.

Thalidomide a drug prescribed in early 1960s for 'morning sickness' to mothers provides a tragic example of the effect of drugs on unborn children. 'Morning Sickness' occurs during the critical first trimester of pregnancy and some ten thousand children whose mothers in U.S.A. were prescribed thalidomide were effected. Thalidomide
when taken from thirty four to fifty days after conception, interfered with the formation of arms, legs, and ears of the fetus. When the drug was taken after this critical period, the arms, legs and ears were already formed and there was no interference in the development of the fetus. The use of thalidomide has been prohibited since 1960s.

It has been found that even ordinary aspirin can cause trouble. When a woman takes aspirin 15 days preceding delivery, there is a tendency towards bleeding in both mother and infant. (Stuart, Gross, Elrad, & Graccev, 1982). Although this bleeding is not serious for normal full term babies, it could be harmful for low birth weight infants. For safety sake, aspirin should be added to the list of drugs to be avoided by pregnant women. In fact, the Committee on Drugs of the American Academy of pediatrics (1982) recommended that no medication be prescribed for the pregnant or breast-feeding woman unless it is absolutely essential for her health or for that of her child (Box. 5:5).

"NO-NO" LIST
OF MEDICINES AND DRUGS
to be avoided by the Pregnant Woman.
UNLESS RECOMMENDED BY HER PHYSICIAN.

All liquid Medicines
Pills
Capsules
Laxatives
Aspirin
Reducing Pills
Vitamin Pils
Alcohol
Tobacco
"Pep" Pills
Sedatives
Tranquilizers
Antacids

Cough or Cold Remedies
Nose Drops or Sprays
External Salves or Ointments
Douches
Marijuanen or "Psychedelic" Drugs
Narcotics
Drugs administered to help sustain pregnancy can also be harmful. It has been reported that women treated with prednisone, to alleviate infertility and then to maintain their pregnancies, the birth weight of their babies was significantly lower than that of the babies of a control group (Reinisch & Karron, 1977). In another case, a group of boys showed lower ratings on aggressiveness and athletic ability than a matched sample of boys whose mothers had not been treated with female hormones (Yalom, Green & Fisk, 1973). Some studies indicate that children of those women who had taken oral contraceptives early in pregnancy may suffer birth defects. The most likely potential problem is a slightly elevated incidence of certain cardio-vascular defects. Women who smoke more than a pack of cigarettes a day and also take 'the pill' are more apt to have babies with defects (Bracken, Hoffsord, White and Kelsey, 1978).

The effects of taking a drug during pregnancy do not always show up immediately. In the late 1940s and early 1950s, the synthetic hormone diethylstilbestrol (DES) was widely used to prevent miscarriage, years later, when the daughters of women who had taken DES during pregnancy reached puberty, some of them developed a rare form of vaginal or cervical cancer. It is now estimated that about 1 out of every 1000 DES daughters will contract genital cancer by their mid thirties. A number of other problems linked to DES have emerged. DES daughters have more trouble bearing their own children, and have higher risks of miscarriage or premature delivery. DES sons seem to show a higher rate of infertility and reproductive abnormalities (Melnick, Cole, Anderson & Herbst, 1987).

Opiates

Women's use of such drugs as morphine heroine and codeine as well as methadone (a drug used in the treatment of heroine addiction) has resulted in an increasing number of infants who are born with addiction. These children are likely to be born premature and the chances of their survival are bleak. Even if they do survive the effects of the drugs may linger until at least the age of 6.

At birth, addicted infants are restless, they cry shrilly, are irritable and often suffer tremors, convulsions, fever, vomiting and breathing difficulties; they are twice as likely to die soon after birth as
non-addicted babies (Zuckermann et al., 1989). These babies are at a high risk for sudden infant death syndrome. As older babies, they cry often and are less alert and less responsive to stimuli. In addition, infant withdrawal symptoms may result in negative maternal reactions which, in turn, negatively influence mother-infant interactional patterns. For example, addicted babies may not respond positively to care giving cuddling or mother stimulation (as normal babies do) and would thus upset the mother. Furthermore, these mothers may have even more difficulty dealing with their infants because of the weight of their own problems. The result may be parent infant interactional system that is adversely affected. The problem of infants born to female addicts may be further complicated by other factors associated with addiction including poor social and educational environment, exposure to infections, malnutrition and threat of Acquired human Immunodeficiency virus (HIV) and Immune Deficiency Syndrome (AIDS).

A relatively recent concern associated with intravenous drug use is the spread of HIV and AIDS from pregnant women to their unborn children. About 70% of women with HIV infection have been infected through their own drug use or that of sex partner. The relationship of cocaine use, prostitution, and sexually transmitted diseases, including AIDS, is posing a growing health risk to unborn children in societies where intravenous drug use is Children born to mothers who have HIV virus have about a 50% chance of developing the disease and 95% of those infected die within the first three years of life. At present there is no way to treat babies infected with AIDS because their immune system is deficient or inoperative, they cannot fight off the many infections that babies typically encounter (Newman & Newman, 1991).

2.4. Use of Alcohol

The impact of maternal alcohol consumption appears to be substantial. This is the case for both the babies of mothers who are chronic alcoholics and for the babies of mothers who are moderate social drinkers (Streissguth, Barr, and Martin, 1983). A malformation syndrome called the fetal alcohol syndrome (FAS) has been found in the babies of mothers who are chronic alcoholics. FAS is associated with slowed prenatal and postnatal growth, disorders of the central nervous system, low birth weight, malformations of the face, eyes, ears
and mouth, abnormal development of heart, defects of the joints and mental retardation. Generally the damage to the fetus caused by alcohol appears to be the greatest during the last trimester of pregnancy.

Alcohol consumed during pregnancy affects the developing brain of the fetus adversely. The brain weight of the affected fetus is generally lower, and specific areas in the brain, such as the cerebellum, which is responsible for coordination of muscle movement and balance, may be adversely affected (Diaz and Samson, 1980). The hippocampus, another area of the brain that plays an important role in learning and memory, has also been found to be site of likely damage in a fetus who is exposed to alcohol (West, Hodges and Black, 1981). Experimental studies conducted with monkeys have shown that alcohol can cause the umbilical cord to constrict off needed oxygen to the fetus. The same may be occurring in humans. Mental retardation may also be caused by the cessation of fetal breathing movements due to the intake of alcohol, FAS is one of the three leading causes of defects (alongwith Down Syndrome and Neural Tube Defects), and the only one of the three that is preventable.

In addition to these physical problems, babies of mothers who drink also suffer from behavioural irregularities such as hyper-activity, irritability, poor sucking responses and sleep disturbances during infancy; throughout childhood they suffer from short attention span, restlessness, learning disabilities and motor impairments.

In a longitudinal study of the effects of prenatal exposure to alcohol, children born to mothers who consumed one average-strength drink daily during pregnancy showed significantly lower IQ scores at age 4 than did children whose mothers used little or no alcohol (Streissguth et al. 1989). Alcohol used was a significant predictor of reduced IQ scores, even when many other factors - mother's educational level, child's birth order, family socio-economic level, child's involvement in pre-school, and the quality of mother-child interaction - were taken into account.

As there are many risks involved and no clear safe level of drinking, women are advised to avoid alcoholic drinks completely during pregnancy - better yet, from the time they begin thinking about becoming pregnant until they stop breast feeding.
2.4.1 Mother's Exposure to Smoke

By smoking, the mother can create a dangerous environment for her unborn child. When a mother smokes, carbon monoxide levels in her blood (produced by the burning cigarette) increase rapidly. The carrier molecule that normally takes oxygen across the placental barrier to the embryo or fetus will choose carbon monoxide over oxygen whenever possible, and the unborn child will begin to suffocate. This lack of vital oxygen may result in cell damage.

In addition to this danger from smoking, there is also the threat of the several chemicals contained in the smoke that enter the mother's body. One of the most serious of these is nicotine (an extremely powerful stimulant). Because nicotine is a stimulant it causes constriction of the capillaries in the mother's body. This, in turn, will further deprive the fetus of oxygen.

![Perinatal mortality rate per 1,000 total births by cigarette smoking category.]

There is clear evidence that babies born to mothers who smoke weigh less than babies born to non-smokers. A review of 45 studies on this relationship reported that smokers babies weighed 200 grams less that babies born to non-smokers (U.S. Department of Health, Education and Welfare, 1979). Smoking during pregnancy increases the chance of the placenta's separating from the womb too soon and causing miscarriage. It may also contribute to the malformation of the heart or other organs in the fetus, again possibly leading to miscarriage. Overall research indicates that women who smoke are at greater risk for miscarriage and still births (Streissguth et. al., 1989). Low birth
weight, in turn, has been associated with many negative outcomes, including higher infant mortality and lower IQ. Neurological examinations of babies exposed to nicotine during the prenatal period showed decreased level of arousal and responsiveness at 9 and thirty days after birth (Himmelberger, Brown, and Cohen, 1978).

Perhaps the most surprising research findings are that the women who smoked, but who gave it up during pregnancy, still ran a greater risk of placenta previa. In this condition, the placenta is attached low in the womb and covers the cervical opening leading to the birth canal, causing severe hemorrhaging as the pregnancy develops (Himmelberger et al., 1978).

Pregnant women who live or work in crowded rooms with smoking inmates become passive smokers. Similarly, if the father smokes he may cause the mother to become passive smoker, that is, she will be living in smoky environment that he has created. This may create hazard for the fetus.

In a Danish study, smoking by the father had two thirds as much effect in reducing birth weight as did maternal smoking (Rubin, Krasilnikoff, Leventhal, Weile, and Berget, 1986). A survey of cancer patients at the hospital of University of North Carolina found a two-fold increased risk of developing cancer in adulthood among off spring of men who smoked. However, it was difficult to distinguish between pre-birth and childhood exposure to smoke. More serious, effects of father's smoking is the fact that father's smoking can effect sperm production. Research indicates that greater amount of abnormal
sperm were found among men who smoke than among non-smokers (Evans, Fletcher, Torrance and Hargeave, 1981). Abnormal sperms are less likely to be able to reach the ovum and fertilize it. This may help to explain why men who smoke generally have higher rates of infertility than those who don’t.

Mothers who both smoke and drink during pregnancy have an increased chance of bearing low birth weight babies who will show early learning deficits. It is observed that smoking in pregnancy appears to have some long term effects on school age children similar to those of drinking in pregnancy; poor attention span, hyperactivity, learning problems, perceptual-motor and linguistic losses, social maladjustment, poor performance on IQ Tests, low grade placement and minimal brain dysfunction (Stroissguth et al, 1984). Of course, since mothers who smoke during pregnancy also tend to smoke after the birth, it is hard to separate the effects of fetal and postnatal exposure.

2.5 Mothers’ Diseases and Disorders

A wide range of maternal diseases and disorders can influence prenatal development in accordance with the principles of teratogenic influence discussed earlier.

Rubella, or German measles, for example, is a mild childhood disease, but if contracted by the mother during the first three or four months of pregnancy, it can be harmful for the unborn child. The results of rubella can include congenital cataracts, deafness, anomalies in the structure of the heart, defective teeth, microcephaly, stunted growth, mental retardation, or even death. If contracted after the fifth month of pregnancy, it has little or no effect on the fetus because the parts of the body affected by this disease are already formed.

2.5.1 Venereal Diseases

Other diseases that may have a disastrous effects on the fetus are maternal syphilis (CHV) gonorrhea and herpes simplex. If the mother suffers from syphilis, the chances of a spontaneous abortion or stillbirth increase drastically. In addition the newborn may be deaf, blind, deformed, or mentally retarded. Fetuses under eighteen weeks of age are not susceptible to the disease. The disease can be cured by penicillin and if the mother is treated before the fetus is eighteen weeks old, the unborn child is unlikely to be affected.
In the case of both herpes simplex and gonorrhea, babies can become infected during the course of delivery. It becomes important that expecting women have regular antenatal examination so that if an active infection of gonorrhea or herpes simplex is detected in pregnant women, a caesarean delivery may be used to prevent the newborn from contracting an infection in the birth canal. In infants under five weeks of age with an immature immune system, a herpes infection can cause blindness, motor problems, neurological disorders, or in some cases death.

Diabetes

Chronic non-infections diseases in the mother also may affect the developing fetus, for example, diabetes. Diabetic mothers have an increased risk of toxemia. In addition, they are more likely to have abnormally large babies (weighing more than nine pounds) with resulting delivery complications and higher than average infant mortality rate. Diabetic women are more likely than normal woman to have spontaneous abortion and children with malformations.

2.5.2 Other Diseases

Malaria in pregnant woman is associated with low birth weight. Similar infectious diseases like typhoid, cholera, dysentery and tuberculosis are known to affect the developing fetus adversely.

2.5.3 RH Factor Incompatibility

RH factor is a genetically determined feature of the blood. Its presence indicates a positive factor, its absence a negative factor. The RH factor can become a problem in the marriage of an RH negative woman and a RH positive man.

RH disease manifests itself in a predictable manner. The RH positive fetus produces substances, called antigens, that pass through the semipermeable membrane of the placenta and enter the RH negative mother's blood stream. The mother's blood stream, in turn, produces RH antibodies in response to the RH positive antigens of the fetus. These antibodies pass through the placenta from the mother to the unborn child and attack and destroy fetal red blood cells. This results in severe fetal anemia and this condition is known as erythroblastosis fetalis. First born children are usually not affected by erythroblastosis
because the antibodies in the mother's blood do not usually build up rapidly enough to affect the first child; however, in subsequent pregnancies the mother may develop a high level of antibodies. There is no threat to the mother only to the unborn child.

It is now possible to treat the RH negative mother after the first RH positive pregnancy to prevent the build up of antibodies and hence prevent blood incompatibility effects in later pregnancies.

2.6 Mother's Exposure to Environmental Hazards

Radiation

Excessive doses of radiation in early pregnancy either through the use of repeated X-rays, radium treatment during cancer, or radiation accidents produce marked effects on prenatal development. With the availability of ultrasound medical X-rays are best avoided by pregnant women.

Researchers observed 9 months after the spill out of nuclear radiation at the power plant at Chernobyl in the Soviet Union, that there was a fivefold increase in the average number of West German babies born with Down syndrome.

Environmental Pollution

Anything that affects a pregnant woman can affect the fetus. The environmental pollution of air, soil, water and food can all be hazards for fetal development, for example infants whose mothers ate regularly polluted Lake Michigan fish, contaminated with chemicals widely used in industry, weighed less at birth, had smaller heads and showed weaker responses than infants whose mothers did not eat the fish (J.L. Jacobson, Jacobson, Fein, Schwartz & Dowlev, 1984). It has been observed that infants exposed to high levels of lead prenatally scored lower on intelligence tests than infants exposed prenatally to low or moderate levels (Bellinger, Leviten, Watermaux, Needlesman, & Rabinowitz 1987). The potential of herbicides and pesticides used in forests and farm lands to harm developing fetuses is arousing concern Many of these products are discovered to be teratogens only after abnormal reproductive outcomes have been systematically documented.
2.7 Mother's Emotional State

A mother's emotional state during pregnancy is an important variable in determining the mother's and the fetus well being. Pregnancy is listed as the 12th most stressful life change in a list of 43 life events in the social Readjustment Rating Scale (Holmes & Rahe, 1967). The emotional state of the expecting mother is mostly determined by her attitude towards her pregnancy.

The woman's attitude towards her pregnancy depends on several social and personal factors. The social factors include the attitude of the society and the significant others of the mother, her life style and the behaviour demanded by her by the family culture. These factors play an important role in determining the personal choices.

The personal factors that may contribute to maternal emotional state may be due to planned or unplanned pregnancy feelings of inadequacy about performing the mother's role successfully; dreams and fantasies about having a defective child; worry over the sex of the child - to be; concern about the family finances; loss of job or set back in career due to pregnancy; overwork in home and concern for the care and welfare of the older children; strained relationship with husband and in-laws; anxiety due to previous experience of child bearing i.e. miscarriage, still birth, difficult delivery etc. In a recent study of Pakistani women conducted by Khalid and Waheed (1993) depression was observed in mothers with unplanned pregnancies.

Thus, the woman's attitude towards her pregnancy may be one of pride, shame, fear, acceptance, rejection or ambivalence. Most normal pregnancies are associated with experiences of anxiety and depression. As a normal part of the physical changes during the gestational period, women, experience symptoms that are often associated with depression, such as fatigue, sleeplessness, slowed physical movement, preoccupation with one's physical state, and moodiness (Kaplan, 1986).

However, some women respond to pregnancy with exhilaration and joy. Usually these women desire a child and have adequate social and material support.

Prolonged and intensive emotional stress in the mother may cause muscular tension and changes in the endocrine system to such an extent, that it could effect the environment of the developing child. Although the blood system of the mother and the unborn child are
separate, it is possible for the nervous system of the mother to affect the nervous system of the fetus. When the mother experiences such emotions as anxiety, anger and rage her autonomic nervous system sends chemicals known as acetylcholin and epinephrine, into the bloodstream. In addition to these chemicals, the mother's endocrine glands secrete hormones that combine to modify cell metabolism. As a result, the composition of mother's blood changes. The changed blood of the mother passes through the placenta, in turn, producing changes in the composition of the fetal blood system and in fetal activity level. Furthermore, the production of epinephrine in the mother as a function of stress may cause the blood flow in her body to be diverted from the uterus to other organs in her body. Decreased flow of blood to the uterus and placenta may result in deficient supply of oxygen for the fetus (Beck et al, 1986). It is usually, when the woman is emotionally distressed for extensive periods of time that the developing fetus can be adversely affected.

Generally speaking, the impact of emotional stress on the unborn child depends on the stage of pregnancy. Severe and prolonged emotional stress early in pregnancy may result in physical abnormalities, whereas such stress later in pregnancy is more likely to result in fetal behavioral changes (rather than physical deformities). There have been reports of severe emotional stress early in pregnancy by women who have had children with cleft lip and palate. Down syndrome and infant stomach disorder (Revil and Dodge, 1978). On the other hand, mothers who have undergone stress during the latter phase of pregnancy have reported increased levels of general movement or hiccuping by the fetus (Revil and Dodge, 1978). Increased prenatal activity may also result in lower birth weight infants, simply because the mother's food consumption may not have kept pace with fetal movement and energy expenditure. So there is some truth in the old wives believe that for the safety of the growing fetus the pregnant women must be kept away from stress, well humoured and happy.

It is quite likely that the expectant mother will experience some stress during the course of the pregnancy. It is only when stressful and emotional situations are prolonged that more serious consequences for the child may result. There is no link at all between minor every day stress levels and the condition of the fetus. Regardless of what old wive's tales may say, the more thoughts; her baby will not be born with some sort of psychic burden. If a pregnant mother is frightened by a
snake, a spider, a bat or some creature, her child will not begin life with a personality defect or a birthmark. Short term worries or fears are of no marked consequences for the pregnant woman and her unborn child.

Short term worry, or work's strain experienced by the mother will not have an effect on the unborn child unless the stress on the mother leads to poor nutrition, illness, hormonal imbalance, disregard for medical care, or ingestion of harmful drugs for them to have an impact upon the unborn child. The mother's experiences must involve actions that will affect either the condition of the uterus and placenta or the substances that pass through the placenta to the child.

The mother's emotional state during pregnancy is also related to the experiences during pregnancy, labour and to her subsequent parenting behaviours. Evidence in this regard clearly shows that depressed, anxious and irritable women are more likely to suffer from nausea during pregnancy, have longer labours and experience more delivery room complications. They tend to request and receive more medication during delivery, which may influence the responsiveness of their newborn infants (Hughes & Noppe, 1985).

It has also been observed that women who experience notable depression during pregnancy are more likely to experience depressed mood states in the months after giving birth. (Khalid and Sarwar 1991).

The conditions that give rise to maternal stress are more likely to persist than to change, stress that develops during the prenatal period tends to persist after childbirth. The infant who was made hyperactive by maternal stress during the prenatal period or who suffers from some developmental irregularity must make adjustment to postnatal life, his/her adjustments to postnatal life are intensified by the effects of maternal stress which is communicated to the baby by the way the mother handles the infant.

3. WOMEN AND PREGNANCY

Thus far pregnancy, has been discussed solely from the point of view of the fetus. Needless to say, pregnancy has a dramatic effect, both physically and emotionally on the expectant women.
The nine month period of pregnancy is often conceptualized in three months period called trimesters (see Figure 5.4). Each trimester brings physical changes in the status of the developing fetus and its supporting environment i.e., the pregnant woman. In the first trimester, many women are not certain that they are pregnant by the last trimester, not only the women is certain, but so is every one else.

![Figure 5.4](image)

During the first trimester of pregnancy, a major adjustment for the woman is the acceptance of pregnancy as a reality. In many instances the mother may have to undergo medical examination to confirm her pregnancy. In the second trimester the fetus becomes more of a reality to the parents. The change in the mothers profile becomes prominent and she can feel early fetal movements known as 'quickening'. These movements are first experienced as light bubbles or twitches. The experience of quickening is thought to provide a basic foundation for the relationship with a newborn who is beginning to be recognized as physically separate from the mother. This recognition is generally called 'differentiation'. Parents at this stage may indicate further evidence of differentiation by fantasizing about what the child-to-be will be like. Behavioral signs such as considering children's names or shopping for the babies clothes, toys etc. may also be observed.

During the second trimester the fetus is well developed to allow prenatal testing (Figure 5.4). Usually the results of such tests will indicate all is well. However, if the tests indicate a serious problem with the fetus, the parents may be faced with several choices; abortion, having the baby, or (when possible) fetal therapy or surgery.
Preparation for child birth continues in the third trimester as both the parents become involved in the practical aspects of parenthood. This includes deciding where to have the baby, who is going to look after the mother after delivery, planning the baby's living space as well as working through psychological and emotional preparation for the arrival of the new child. The emotional reactions of pregnant women have been discussed in detail in Unit 6 of this book.

Figure 5.5

3.1 Responses of the Women's Body to Pregnancy

3.1.2 Size: Most apparent among the many reactions of the mother to the fetus and to the excessive hormones of pregnancy is the increased size of different organs. For instance, the uterus increases in size in order to accommodate the growing fetus and placenta, as well as to prepare itself for the process of expulsion of the fetus. The breasts approximately double in size and changes occur in other sexual organs to facilitate birth.

Various hormones can cause marked changes in the appearance of the woman, sometimes resulting in the development of edema, acne, and masculine or acromegalic features e.g. facial hair. Irregular patches of dark brown pigmentation sometimes occur and are more marked on the forehead, sides of nose and upper lip, known as 'chlosma'. Excessive pigmentation occurs on the face and body in irregular patches. Stretching of the skin over the abdomen, breasts and thighs may produce marks known as 'striae'.
3.1.3 Weight: The average weight gain during pregnancy is about 24 pounds, most of this gain occurring during the last two trimesters. Of this approximately 7 pounds is fetus, and 4 pounds is amniotic fluid, placenta, and fetal membranes. The uterus increases approximately 2 pound and the breasts another 2 pounds, still leaving an average increase in weight of woman's body of 9 pounds. About 6 pounds of this is fluid in the blood and extracellular fluid that is excreted in the urine during the first few days after birth, that is after loss of the fluid - retaining harnones of the placenta.

Often during pregnancy a woman has a greatly increased desire for food, partly as result of fetal removal of food nutrients from the mother's blood and partly because of hormonal factors. Without appropriate prenatal care the weight gain may be as great as 75 pounds or more.

3.1.4 Gastrointestinal Responses: Nausea or morning sickness occurs in nearly 50% of pregnant women beginning at the 6th week and ending round about the 12th week. It is generally in the early morning when the expecting mother feels sick or vomits after getting up from bed and no further sickness is felt during rest of the day. Cause is not known, but most acceptable theory is excessive chronic gonadotrophins in blood in early weeks. Vomiting improves after the 12th week when the concentration of gonadotrophins fall.

Some gastric and intestinal distension occurs especially in the first trimester making the abdomen look enlarged. Heartburn is common and is due to relaxation of the cardiac sphincter of the stomach. Gastric acidity is reduced during pregnancy. Constipation is increased and hemorrhoids may develop.

3.2. Mother's Metabolism During Pregnancy

By far the greatest growth of fetus occurs during the last trimester of pregnancy; its weight almost doubles during the last two months of pregnancy. High protein diet is required by the mother to meet the demands of the growing fetus. The diet of the pregnant woman should supply carbohydrates, proteins, calcium iodine and iron.

If appropriate nutritional elements are not present in the pregnant woman's diet, a number of maternal deficiencies can occur. Especially, deficiencies often occur for calcium, phosphates, iron and vitamins.
For example, approximately 375 mg of iron is needed by the mother to form her own extra blood. Therefore, without sufficient iron in her food, a pregnant woman usually develops anemia. Even though the total quantity of calcium utilized by the fetus is small, it is important for the development of the bones of the fetus. It is also important that she receives vitamin D, as it is essential for the absorption of calcium. Calcium normally is poorly absorbed by the gastro-intestinal tract, therefore, it is essential to include a reasonable amount of calcium rich diet.

3.2.1 Respiration: The increased basal metabolic rate of the pregnant woman and her increased size require much more oxygen than she normally requires. Consequently, the respiratory rate is increased to maintain adequate ventilation.

3.3. Changes in the Maternal Circulatory System During Pregnancy

The general increase in metabolism of the pregnant woman and the increased blood flow through the placenta during the latter phases of pregnancy, increases the cardiac output above normal.

The hormonal changes in the pregnant mother increases the maternal blood volume. This increase occurs mainly during the latter half of pregnancy. There is increased fluid retention by the kidneys and the bone marrow becomes increasingly active and produces an excess of red blood cells to go with the excess fluid volume. Therefore, at the time of birth of the baby, the mother has approximately 2 litres of extra blood in her circulatory system. Only about one fourth of this amount is normally lost during delivery of the baby, thereby allowing a considerable safety factor for the mother.

3.3.1 Urinary System

The rate of urine formation by the pregnant woman is usually slightly increased because of an increased load of excretory products. In addition, several special alternations of urinary function occur.
First, reabsorption of sodium, chloride and water by the renal tubules is increased as much as 50 percent as a consequence of increased production of steroid hormones by the placenta and adrenal context.

Second, the filtration rate of the kidneys also increases as much as 50 percent during pregnancy, which tends to increase the rate of water and electrolyte loss in the urine. This factor normally almost balances the first, so that the mother ordinarily accumulates only about 6 pounds of extra water and salt except when she develops preeclampsia.

Preeclampsia or toxemia is a condition in which pregnant woman experiences a rapid rise in arterial blood pressure associated with loss of large amounts of protein in the urine. This condition may occur some time during the last four months of pregnancy. Approximately 4 percent of all pregnant women experience preeclampsia. It is often also characterized by salt and water retention by the kidneys, weight gain, and development of edema. In addition, arterial spasm occurs in many parts of the body, most significantly in the kidneys, brain and liver. Both the renal blood flow and the filtration rate are decreased, which is exactly opposite to the changes that occur in the normal pregnant woman.

One plausible explanation for the cause of preeclampsia is that it is the result of some type of auto-immunity or allergy resulting from the presence of the fetus. Indeed, the acute symptoms disappear within a few days after birth of the baby.

The severity of preeclampsia symptoms is closely associated with the increase in arterial pressure. In fact, an increasing pressure seems to set off a vicious circle that intensifies the arterial spasm and other pathological effects of preeclampsia.

Eclampsia is an extreme degree of the same effects as those observed in preeclampsia, characterized by extreme vascular spasticity throughout the body. Clonic convulsions followed by coma, greatly decreased kidney output, malfunction of the liver, often extreme hypertension, and a general toxic condition of the body. Usually, it occurs shortly before parturition of the water bag of the birth process. Without medical treatment a very high percentage of eclamptic
4. THE MOTHER AND THE PSYCHO-SOCIAL ENVIRONMENT

The physical and emotional state of the pregnant women is directly influenced by the psycho-social environment in which she is embedded. A woman's attitude towards pregnancy and child birth, her emotional state during pregnancy, her life style, the resources available to her during pregnancy and the behavior demanded of her by her society are all influenced by the culture in which she is living. The cultural attitudes of the family towards child-bearing are important in determining the psycho-social environment of the expecting woman.

4.1 Attitudes towards Pregnancy

The view taken towards pregnancy, in the culture as a whole will determine the kinds of symptoms associated with pregnancy, the types of treatment or medical assistance sought during pregnancy and the degree to which pregnancy itself will respond to as life stress.

Attitudes towards pregnant women can be characterized along two dimensions; solicitude versus shame and adequacy versus vulnerability.

Societies that demonstrate solicitude, increase the care given to the pregnant woman and fetus. These attitudes emphasize the importance of birth as a mechanism for replenishing the group. Societies that instill a sense of shame in the woman do not promote the health of the mother or fetus and do not encourage a desire to have children.

Embedded in attitudes of adequacy versus vulnerability are ideas about whether children bring resources on drain the family of resources, whether children are an extension of the family power or a new source of vulnerability and risk.

Pakistani society demonstrates solicitude and adequacy in its attitude towards pregnant woman. In our society child-bearing is considered to be the most important function of married women. Children are valued as financial assets and providers for the parents in their old age. Children represent some-one to maintain the family traditions, or symbolize the fulfillment of the parents' personal needs. Women accept children as a duty and a necessary burden, they are seen
as inevitable and natural part of life about which one does not make conscious decisions. Children are seen as God's blessing specially sons, who are needed to carry on the family name, to assist the father and follow in his footsteps, to protect the honour of the family and finally to care for the aged and the ill parents.

4.2 Changes in Roles and Social Status

The attitude of the society towards pregnant women will determine their social status and role within the family and within the society.

Women who become pregnant for the first time, may be treated in new ways by their husbands and other family members. In Pakistani society, like most other societies in the world, when a married woman becomes pregnant, her pregnancy is regarded as an accomplishment, a sign of maturity. The proof of her fertility is usually celebrated by rituals. She is entitled to special treatment. Women who become pregnant, are likely to be treated with new levels of concern and care. Within the family, a pregnant woman is assigned fewer responsibilities, given special diet and is usually well looked after.

By giving birth to the first child, a woman will transform her husband into a father, his parents into grandparents, his brothers and sisters into uncles and aunts. Similarly her pregnancy will affect her parents and siblings. Thus, pregnancy confers special status on a woman. According to the traditional values, only after giving birth to a child does a woman become a fully tenured member of her in-laws family.

Being pregnant confirms the gender identity of the expecting mother and father; becoming pregnant is confirmation of a woman's femininity and getting a woman pregnant represents confirmation of man's virility.

Pregnancy confers special status on a woman as traditional society like ours place motherhood above all other roles a woman can play. When they become mothers especially of a son a Pakistani woman begins to have an impact on the family and community as people who are specially responsible for molding and shaping the next generation. Thus pregnancy in traditional Pakistani culture is not only
considered normal but is revered and accorded a special status as signifying the highest state of feminine fulfillment.

In Western societies today, there is a shift towards a more casual acceptance of pregnant women. Pregnancy is no longer considered an abnormal condition or an illness, something neither to be looked at nor discussed. There have been times in history - when pregnant women were confined and protected, she was certainly not out in public, or in an office carrying on a career. Today often pregnant women are encouraged to continue to work and to perform all normal tasks up until the time of delivery.

Many cultures share strong beliefs that the behavior of expecting parents, especially the mother, will influence the developing fetus and the ease and difficulty of childbirth. Most of the traditional assumptions are about the mother's behavior in view of these assumptions restrictions are generally imposed on the expecting mother's diet and movement. The cultural assumptions about maternal influences may result in psychological problems as they may affect the attitudes and treatment children receive during the early, formative years of their lives from the mother as well as other significant people.

5. PREGNANCY AND RELATED ISSUES

5.1 Planned Motherhood

The advances in medical science and related technologies have given human beings the knowledge and the freedom to plan their families. In developed countries the women have the will, knowledge, facilities and freedom of choice to space and plan their families as they wish. In under developed countries due to number of reasons the women do not have the will, nor facilities and the freedom to plan their families as their counterparts in developed countries do. The traditional views of the status and role of women, the birth of knowledge, lack of facilities and freedom of choice prevents the women from exercising control over the size of her family.

In Pakistan because of the traditional view that a woman's chief function is to be a wife and mother, and because family honour might be endangered by delaying marriage, girls are married early, frequently on attaining puberty. Although the legal minimum age for marriage is
sixteen, judicial rulings have allowed even earlier marriages. The law, in any case, is ignored in practice in many rural areas. Percentage of women who postpone marriage while they pursue further education or career is small but increasing. This is so because of increasing importance of education in determining the economic status of family and females.

Generally girls married young are unlikely to have the will, the knowledge on the decision - making power to postpone first pregnancy. Not only the husband but also the in-laws will exert pressure on the young bride to bear children. She is likely to be made conscious of the fact that her status vis-a-vis other women in the household will only be improved by becoming a mother.

A recent study conducted in rural and urban Punjab shows that 44 percent of women became pregnant within five months of marriage, and 69 percent within fifteen months, (Anwar, 1990). The result is a long child-bearing career for the average woman, usually starting from the age of 15 to that of 49. The known birth rate is average of over six children per woman (UNICEF, 1992). This figure has not changed for several years and is even higher in rural areas. The fertility rate for Pakistan is highest among the fertility rate quoted for women in under developed countries (Graph 5:3)

The high birth rate i.e. 6.7 of Pakistani mothers is a clear indication that the use of contraceptives by married couples is not very common. Anthropological studies confirm the known picture of a desire for large families, and a particular desire for more sons (UNICEF, 1992). The use of contraceptives by Pakistani women is the lowest among the under developed countries. (See Graph 5.4)
However, women with many children and women who want to space their child-bearing without necessarily limiting family size are the main users. Current use of contraceptives is closely correlated with, employment, education, literacy and socio-economic status. (See Graph 5:5).

5.2 Infertility: Social and Psychological Consequences for the Women

For approximately 15 to 20 percentage of married couples of child bearing age in Pakistan the normal process of fertilization does not occur (Latif, 1991). Infertility or the inability to conceive, can result from problems in the reproduction system of either the husband or the wife, or in the system of both. However, in our society due to various cultural believes and also due to lack of awareness, women are held responsible for childless marriages. In most cases husbands
assume infertility in wives, without any medical investigations (Latif, 1991).

Thus, if a couple is issueless it is the wife who is expected to seek medical treatment or spiritual blessings for infertility. She may be compelled by circumstances to resort to non medical means and in her desperation may expose herself to all kinds of risks.

There are powerful societal norms against childless wives. If a woman is issueless the male is given full social support to divorce her and remarry. If he so desires he can remarry without divorcing her. This norm also operates if the wife has only daughters and has failed to bear a male issue. A childless wife is seen as an incomplete woman. She is assigned a low status within the family and the society. All the accomplishments of a childless wife may fade into the background in the face of this failure. Childlessness in woman forces her to reassess the meaning and purpose of marriage. It often isolates her and raises doubts about her self-worth. Childlessness can be a major source of stress for the married woman.

5.3 Alternative Means of Reproduction

Medical science has developed some remarkable alternatives for couples who are unable to conceive. With each of these alternatives come new challenges in ways we define families and in the meanings we give to woman's reproductive function. All of these alternatives have raised legal and ethical questions regarding the acceptability of these alternatives in our culture.

Fertilization in vitro, is a process in which an egg is removed from the ovary and placed in a petri dish inside an incubator. A few drops of sperm are added to the dish. If the egg is fertilized and the cell begins to divide, the fertilized egg is replanted in the uterus of the woman for subsequent development.

Another alternative to natural fertilization is gamete intrafallopian transfer (GIFT). Sperm and egg are transferred into a woman's fallopian tubes. Fertilization takes place within the woman's reproductive system. If the husband has a problem in producing sperms or the wife is unable to produce an egg, donars egg or sperms can be used. Thus the fetus could be genetically related to the wife or husband, to both, or to neither.
In a third procedure, artificial insemination of a woman with donors sperm can be done so that she conceives. This method is adopted if the husband is unable to produce healthy sperm. The child is genetically related to the wife only.

Vivo fertilization is a fourth alternative to natural fertilization. This procedure can be adopted if the wife is unable to produce an egg. A fertile woman, is artificially inseminated with the husband's sperm. Once the embryo has developed, it is transferred to the wife's uterus, which becomes the gestational environment. The child is genetically related to the husband only.
BIBLIOGRAPHY


UNIT - VI

Child Birth and Motherhood
Objectives

When you have studied this unit you should be able to:-

- Describe different stages of labour.
- Differentiate between true labour and false pains.
- Recognise the signs of going into labour.
- Enumerate physical & psychological benefits of breast feeding.
- Explain the role of hormones in lactation
- Explain the reason why new mothers feel depressed and disturbed.
- Analyse motherhood and recognise its positive and negative aspects.
INTRODUCTION

Birth of a baby is the most exciting though painful experience for a mother. Lack of knowledge and experience often spoils the joy and excitement of a new mother. This unit gives some basic information about the process of child birth e.g., what are the signs of true labour, how should a women know if she is going into labour? what are the different stages of delivery.

Considering the importance of breast feeding a section has been included to explain physiology of lactation and to highlight positive aspects of breast feeding.

Despite excitement and joy of a baby's arrival some mothers go through a period of post-natal depression, called post-partum depression. Third section of the unit analyses reasons of post-partum depression in mothers.

Motherhood is instinctive for all woman" fourth section of the unit look into this common myth and analyse the reality of the motherhood.

Fifth and the last section of the unit gives views of psychologists views and findings of research about the attachment of a mother to her child. What are the factors causing a strong bond between a mother and her body.

What is the nature of this attachment.

We hope that you will find this unit interesting and information.

1. CHILD BIRTH

1.1 The Biology of Child Birth

Both fetus and mother normally begin preparation for birth at about the beginning of the ninth month. The baby gains weight, the lungs, nerves and biochemical system matures. Meanwhile, the mother's cervix softens and thins in a process called effacement, which continues through labour itself. In labour, the uterine muscle contracts. The contractions squeeze the baby and the bag of waters downwards towards cervical opening. Normally, the opening is about the diameter
of a lead pencil. The previous of repeated contractions widens the opening to many times that size to allow the baby’s head to pass through. Dilation of ten centimetres or four inches, is considered the proper measure.

Labour is said to occur in three stages although they actually blend together, coming one after another in a continuous sequence of events:

![Figure 6.1](image1)

**The First Stage of Labour**: This stage is the longest, covering the period from the time the cervix begins to dilate until full dilatation has been reached. It is further subdivided into early and late labour.

![Figure 6.2](image2)

**This stage takes** the longest time (8-20 hours) for the first baby and (3-8 hours) for later deliveries.
Early labour: The muscle contracts at long intervals. The initial contractions during this stage may be weak and 20 or more minutes apart.

Late labour: During this stage, the muscle contraction becomes longer, stronger and more frequent, with each one inching the baby, slightly further along the road to birth.

The Second Stage: This is the stage of expulsion of the fetus, lasts from full dilatation of the cervix until the fetus is born. Contractions now are about two to three minutes apart and last 45-50 second each. The contractions are:

As you may remember from your study of earlier units, the events that occur in the course of menstrual cycle follow set pattern which is regulated by hormones these are generated by the pituitary gland and the ovary itself. However, if fertilization takes place and an egg is implanted in the uterine wall another set of hormones uterine secreted by the ovary and then by the placenta itself play their role. After ovulation ovary secretes hormones progesterone and estrogen. Progesterone inhibits contraction of uterine wall and thus inhibits menstruation. During the coverage of pregnancy level of progesterone falls while that of estrogen rises. Estrogen makes the muscles of uterine wall more sensitive to a hormone estrogen. Oxytocin is secreted by the posterior lobe of pituitary hormone. Oxytocin cause uterine muscular to contract. This starts labour miscarriages caused by premature birth are sometimes caused of insufficient progesterone production. Substances called the prostaglandine may be scopolamine, because they seem to trigger many bodily processes.

involuntary and the mother assists, almost by reflex, in pushing with her abdominal muscles. In a normal birth the baby’s head is forced out first, followed by one shoulder then the other, then the body and the legs. For first delivery, this stage may last an hour or more. In later deliveries, this labour may be with in a few minutes.

Third Stage: Lasts from the birth of the child until the placenta and the membranes are delivered and the uterus has retracted firmly to compress the uterine blood sinuses. There is little or no pain at this stage and it lasts only a few minutes.
Figure 6.3: Third Stage of Labour
After about 15 minutes of the delivery after birth is expelled 1.2

1.2 The Causes of the Onset of Labour

What signals the moment for labour to begin? This question is still a mystery. There are different suggestions about the onset of labour.

It has been suggested that the uterine muscle is inhibited during Pregnancy by Progesterone. It has also been suggested that the rising levels of oestrogen during pregnancy sensitise the uterine muscle so that it eventually responds more easily to stimuli or oxytocin. An endocrine secretion may start the process. Substances called the prostaglandin’s may be responsible, because they seem to trigger many bodily processes.

Another explanation indicates that the placenta can no longer function at its previous level. This theory is partly confirmed by the discovery of a sharp drop in hormonal secretions in the final weeks of pregnancy. In any case whatever the signal, mother and child receive it unmistakably.

1.3 When Will The Baby Be Born?

For all its precision in curing each step of pregnancy, nature is remarkably lenient about signalling the moments of birth itself. Technically, pregnancy encompasses 280 days or 40 weeks. But only 10 percent of births occur on the 280th day. Two methods can help you a rough guess of when your baby will arrive. The first is to count forward nine months from the first day of your last menstrual period, then add seven days. If your last period started on January 2, for
example, nine months would bring you to October 2; an additional seven days would make the presumed date of delivery October, 9

1.4 Premonitory Symptoms

**Lightening:** Probably the first sign your baby is really on the way is one you will greet with relief. If you observe yourself in the mirror, you will see your figure has changed the bulge is lower in the abdomen.

Lightening has occurred, to use the popular term. The baby has descended in the pelvic cavity. A first-time mother may experience lightening at any time during the last four weeks before birth. Women were previously borne children usually do not lighten until the last week.

**False Pains:** Women who have previously borne children not infrequently have uterine contractions which are strong enough to be painful for some days before real labour starts. Such “false pains” only differ from labour pains’ in that they are less regular and are ineffective in dilating the cervix. You may be able to distinguish them from true labour, because they occur is regularly not predictably and do not increase in intensity. You may even find them to disappear when you change position in bed or get up and walk around which does not happen during true labour.

1.5 How to Know you are Going into Labour

Three distinct signs indicate your labour is about to begin. They may occur in any order:

**Show:** A small amount of reddish or pink mucus tinged with blood is passed from the vagina. This material represents the plug of mucus that has closed off the uterus during pregnancy. Dilatation of the cervix dislodges the plug and pushes it out the birth canal. Show may precede or accompany the initial contractions of labour. Once it occurs, labour commonly begins within 72 hours.

**Contraction:** Everyone has these, the unmistakable signs of labour. Labour is recognised by the contractions, in that they become regular and painful enough to distract the patient from her usual activities. Contraction first make themselves felt as a mild backache,
accompanied by a weak cramp in the abdomen, somewhat like a menstrual cramp. The initial contractions may last for only 10 to 20 seconds and be spaced 20 to 30 minutes apart. The interval steadily shortens and the duration and severity increases.

The cause of labour pain is schema of uterine muscle from compression of the blood vessels in the wall of the uterus. The fact that the contractions are intermittent and not continuous is of great importance to both the fetus and the mother.

During a contraction the circulation through the uterine wall is stopped, and if the uterus contracted continuously the fetus would die from lack of oxygen. The intervals between the pains allow the placental circulation to be re-established and give the mother time to recover from the fatiguing effect of contraction.

Breaking of the bags of water: Pressure from the early contractions may rupture the amniotic sac of fluid surrounding the baby; or the rupture may actually precede contractions. Depending on the size and location of the tear, there may be a gush or a trickle of water from the vagina. Labour usually follows with in a few hour. If this happens, you should phone your doctor and proceed to the Hospital. The need for notification does not mean that ruptured membranes are dangerous; may normal labours begins this way. The reason to get you under observation because the baby is no longer protected against infection.

1.6 Emotional Reactions to Child Birth

Experience of child birth grows multiple reactions in the woman. These reactions vary with the specific personality by the women. Although common painful feelings related to child birth are usually same in every women; with a little variation in the intensity of pain. Whatever is the personality of a women and whatever is her thresh hold for pain and exhausting conditions, the process of child birth is certainly uncomfortable. Particularly with the first child it is usually very painful and exhausting.

The element of excitement is always there. Educational background of a women is a very important factor. Not only basic conventional education about child birth but also the specific knowledge of the process of child birth helps women modify her
emotional reactions towards the process. If a women lacks basic education and is totally ignorant of the process of child birth. She will take the process as a horrible experience and a nightmare.

It is seen that women who takes lessons or understands the process and stages of childbirth previously and is basically educated to some

<table>
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<td>2. It is suggested that a change in the level of hormones in the blood triggers onset of labour. What are these hormones what is their souce?</td>
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<td>3. If a women feels contraction of uterus during pregnancy can she tell if it is true labour or not?</td>
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extent, undergoes the process of childbirth differently. She thinks that it is exciting, result oriented procedure that will ultimately lead to a birth of her own child, who had been a part of herself. Sometimes the calculated process may go extended, delayed or even obstructed due to many reasons not already understood. So this could lead to a state of frustration even in a well educated women.

Threshold for pain is variable to every women perceptions of pain differ enormously. A particular sensation may be described by one woman as annoying, whereas another women describe the same sensation as intensely unpleasant.

2. BREAST FEEDING

Breast milk is the most appropriate nourishment for new-borns. Recently there is a remarkable increase in number of mothers who breast-feed their infants; during the first two or three days after delivery the breast secrete colostrum only, but it is important that the baby is put to the breast in order to promote ‘bording’ between the Mother and baby, to stimulate the secretion of milk and to teach the baby to suck.
Activity

Conduct an informal interview with mothers in your family and neighbourhood to find out how many mothers are aware of goodness hidden in colostrum.

Figure 6.4: Breast Milk is the Best Milk

2.1 Composition of Colostrum

For the first 2 days colostrum is secreted and on the 3rd and 4th days the secretion changes to normal breast milk. Colostrum is a yellow fluid containing large fat globules, the colostrum corpuscles and it has high mineral, moderate protein and low sugar content. Colostrum has a high content of anti-bodies, especially Secretary IGA, which play an important part in protection against infection.

2.2 Breast-Feeding and Health

According to the words of late nutrition’s Dr. Paul Gyorgy, ‘Human milk is for the human infant; cows milk is for the calf’. Even the commercial manufacturers of formula acknowledge that breast milk is the appropriate nourishment for new borns.

But are Breast-fed babies healthier? They certainly are in less developed countries, where hygiene, water purity and refrigeration are
not up to Western standards. Breast feeding for infants have got many advantages.

**Fewer Infections:** Breast-fed babies appear to have fewer intestinal infections and fewer respiratory infections, according to research conducted by several investigators.

**Involution of Uterus:** Nursing stimulates the secretion of oxytocin, which helps to contract the uterus forestall haemorrhage and promote the return of organ to its Normal size. There also said to be less diarrhoea, spitting up and constipation. Breast feeding, seems to protect against enterocolitis a condition that is common among bottle-fed babies. Natural immunity to polio, measles mumps and other vira infections appear to be prolonged among the bread-fed.

**Fewer Allergies:** Eczema and other common skin rashes of infancy are less frequent among breast-fed babies. The breast fed babies also have fewer allergic sensitivities in later childhood and adulthood. Of course, those babies who are breast fed exclusively also are free of infancy’s most common allergy, a sensitivity to cows milk.

**More Consistent Growth:** Human milk is utilized more quickly by the body, one reason breast-fed babies are fed more frequently than bottle-fed babies. Breast milk also provide the exact nutrients in the proper quantities that the baby needs for growth. Because breast milk is digested easily, it can be used immediately.

**Immunity:** Recent investigation shows that breast milk transfers disease fighting anti-bodies from mother to child including white blood cells that combat infection. The flow of antibodies begins even before the milk itself arrives. Colostrum, the yellowish fluid that comes from the breast before delivery and continues after the baby is born, is a chief source of immunizing substances. It also contains a substance that has a mild laxative effect on the baby, to clear the young digestive systems of meconium, the fetal waste. And it has the proper and operation of proportion and fats for the baby’s early feeding.

2.3 **Can Anyone Breast-Feed?**

The size of a woman’s breast has nothing to do with the ability to nourish her child milk product is not determined by amount of breast tissue, but by a network of vessels and canals within the breast. The
women who wears a small bru has just as extensive a network as does her more amply endowed neighbour.

2.4 Psychological Benefits

Nursing sometimes is called the very essence of mothering and the benefits to both mother and child may go well beyond merely providing nutrition.

At the mothers breast, a baby not only satisfies the need for food, but apparently the equally universal need for warmth, security and love. An in a subtle way, the rhythm of mothers movements introduces the baby to the rhythm of life. For the mother, breast-feeding fulfills her own need to nurture and love. The two way exchange of gratification helps to cement the bond between mother and child that continues for a life time. Breast-feeding for both mother and child seems to satisfy a universal emotional need. Of course, there are more prosaic advantages to breast-feeding; its in expensive, it is convenient and it is easy. You do not have to prepare formula, sterilize bottles or clean up afterward. The supply is always on hand in the right amounts and at the

2.5 Physiology of Lactation

The mammary glands consist of numbers lobules made up of cluster of rounded alveoli (see diagram). Internal surface of alveoli are bind with secretory cells. Secretions of these cells pass into milk ducts which unite to form tubules, the lactiferous tubules. These open on mammary papilla. In a non-pregnant women the alveoli are small but during pregnancy they enlarge and cells lining them increase in number. During pregnancy oestrogen and progesterone cause increase in the number of atucolor cells resulting in the growth of alveoli and thus enlargement of breast.

Although ovarian hormones prepare the mammary glands you lactation but, a free flow of milk does not until the second or third day after the birth of the child.

Secretion of the milk is caused by a hormone prolactin, secreted by anterior lobe of the pituitary gland after the birth of the child, level of the ovarian hormones in the blood fall allowing production to act directly on alveolar cells. High levels of oestrogens inhibit the response of alveolar cells to protection.
right temperatures. When you travel, you do not have to pack any thing the supply travels with you.

**Secretion of Milk:** It is the transformation of amino acids, glucose, lipids and minerals present in the blood plasma into caseinogen act albumin, lactose, and milk fats which are secreted into alveoli by the activity of the alveolar epithelial cells.

Prolactin the pituitary hormone is mainly responsible for the secretion by the alveolar cells. Oestrogens cause hyperplasia of the lactotrophs during lactotrophs pregnancy. Milk secretion does not occur at this time because high levels of oestrogen also inhibit the responsible of the alveolcer cells to prolactin.

After delivery oestrogen level falls so that the alveolar cells become responsive. The basal prolactin level is lower than that of late pregnancy but in response to stimulation of the nipple by suckling there is release of prolactin which lasts for about 30 minutes, presumably because discharge of prolactin inhibiting factor is inhibited.

**Excretion of Milk:** The baby is said to suck milk. During suckling, when baby takes the breast nipple in his mouth, there is stimulation of nerve endings in the nipple initiates impulses which reach the post lobe of the pituitary gland and provoke a release of oxytocin in to the blood stream. The oxytocin causes contraction of myo-epithelial cells and propulsion of milk along the ducts.
SELF ASSESSMENT QUESTIONS II

1. What is the role of hormones in secretion of milk?

2. How would you convince a woman that breast feeding is safe for the child and convenient benefits of breast feeding?

3. What are the psychological benefits of breast feeding?

3. POST-PARTUM DISTURBANCES

In the puerperium there is a sharper increase in psychiatric morbidity than at any time in pregnancy. Many women develop disturbances during the postpartum period, shortly after birth.

The most common of these disturbances is called the maternity blues, sometimes experienced by 50 to 80% of women during the first week after delivery.

During maternity blues, there is a short-lasting change in mood that usually lasts less than two days. Fortunately, the blues is a self-limiting disturbance.

At least 50 percent of women suffer from fleeting and mild degrees of depression in the sense that they are miserable and tearful.

Typical symptoms include episodes of crying, depression, irritability, tension, anxiety and anger. It is more common with the first birth than with later children. So it must be at least partly related to the adjustment problems of being a new parent.

During pregnancy, some women have idealized their baby and their relationship with it. They may be disappointed to find, after delivery, that they have lost the imagined baby and given birth to a stranger they must get to know. The reality of caring for another human being may strike them for the first time, and panic and feelings of inadequacy may follow this disillusion. Others may have enjoyed the responsibility of pregnancy. When they may have received extra care and attention from their husband and parents and resent the loss of childhood which on becoming a mother can no longer be denied. The
management of these minor disturbances is by the simple measures of sympathetic support and re-assurance outlined earlier.

There also may be a physiological explanation. After birth secretion of the estrogen and progestin drop. Female hormones dramatically. The amount of hormones circulating in the blood stream effects the emotions; not coincidentally, some women feel similarly depressed when the production of female hormones drop during menopause. There is an obvious link between hormonal secretions and emotions a link which isn’t fully understood.

3. Post-Partum Depression

This is a more serious disorder which has an incidence rate of about 20 percent. Post-partum depression typically involves feelings of extreme sadness, apathy, despair, and worthlessness; decreased ability to do ordinary work and physical side effect such as headaches and intestinal problems. A woman’s age and the number of previous children do not seem to be related to the incidence of postpartum depression; but two risk factors seems to be having had a previous psychiatric disturbance and being unmarried.

The list of stresses and sources of dissatisfaction during the postpartum period provides a compelling reason for depression. Depression may be due to marital tension drink pregnancy and doubts about going through with the pregnancy. There appears to be a small peak of psychiatric illness among the women who have three or more children aged under 14, an un-supportive husband and no job outside the home. Where sex of the child contributes a lot in the development of postnatal depression among Pakistani women. It is also interesting to note that most of the mothers who desired the male child developed symptoms of

<table>
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<tr>
<th>SELF-ASSESSMENT QUESTIONS III</th>
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1. What is meant by post-partum depression?

2. Analyse the situations of Pakistani mothers their social, economical and average physical health condition of women. In the light of your analyses describe the possible reasons of post partum depression in Pakistani women.
e) Women instinctively love their babies from the first moment they are born.

This emphasis on glorifying motherhood seems to pervade most groups in the United States. Miranda and Lrriquez describe how chicana mothers are expected to be warm, nurturing and totally devoted to their families. Similarly motherhood is highly valued in the black community, black mothers are romanticised as being so strong and self-sufficient that black fathers receive little credit for their role in the family. Pakistani women are the same traits and instinctive qualities as all women in the world. They are not at all different so the research made by the Western expert applies rightly on the Pakistani women as well.

The Reality of Motherhood: Many lofty phrases are written in tribute to motherhood but it is actually accorded very low prestige.

The Pakistani mother is considered to be the symbol of love and duty fullness. She makes long-life sacrifices for her children without expecting any remuneration or reward.

Let’s look in more detail at the reality of motherhood, paying particular attention to the pressures and sources of stress for the mother of a new-born infant.

1. Although father may help out somewhat in child rearing, but the major responsibility for child care falls on mothers, who must care for tiny infants who are incompletely incapable of doing anything for themselves.

2. Much of early motherhood is boring drudgery: diapering, washing, and feeding.

3. Child care is exhausting and constantly demanding; infant care is a 24-hour-a-day job, and new mothers often feel they can accomplish very little other than taking care of a new-born.

4. New mothers seldom have training for the tasks of motherhood; they often report that they feel incompetent.

5. New-born babies often give little positive response to their mothers. They may cry for no apparent reasons, typically about one and a half hours a day.
6. Mothering is done at home, so that women have little contact with other adults. Extended family and friends may not be available to provide support. This kind of isolation further encourages the invisibility of women.

7. Women who have previously been employed feel embarrassed to report that they are now "just housewives"; they are deprived of other sources of identity.

8. Women often report that they feel tied down because they can't leave the house for more than a few minutes without making elaborate arrangements.

9. For several days after childbirth, women say that they feel leaky and dirty with after-birth discharges and they were also likely to experience some pains and physical discomfort.

10. Since the woman's attention has shifted to the newborn, her husband may feel neglected and may make her qualities about not being on adequate wife.

   Motherhood also has its positive side, though these qualities may not be as evident early in motherhood.

   As Huffing writes, the role of mother brings with its benefits as well as limitations.

   Children affect parents in ways that lead to personal growth enable reworking of childhood conflicts, build flexibility and empathy and provide intimate, loving human connections. They expand their caretaker's world by their activity levels, their imaginations, and their inherently appealing natures.

   Although motherhood is not enough to fill an entire life for most mothers it is one of the most meaningful experiences in their lives. If you were to ask a mother of an infant to list the positive and negative qualities of motherhood, the negative list would probably be longer and it would contain many concrete details. Most mothers seem to find that the positive side of motherhood is more abstract, more difficult to describe and yet more intense. It is much easier to describe the drudgery of dirty diapers than the near ecstasy of realizing that this
complete human being was on part of your own boy, all how he breathes and gurgles an hiccups without your help. Shortly after birth, too, babies develop ways of communicating with other humans. The delights of a baby’s first tentative smile are undeniable, an older baby can interact quite impressively with adults by making appropriate eye contact, and conversational noises clearly, there are many joyous aspects to motherhood, but it’s unfortunate that our society cannot devise creative ways to diminish the negative aspects.

Activity

Analyze the positive and negative aspects of motherhood.

5. ATTACHMENT

Attachment is an affectional bond that one person forms towards another person.

Attachment of a mother to her baby is formed from the very first day of its development in the womb, with umbilical cord physically and emotional cord mentally. Most of the Pakistani mothers consider themselves to be luckiest women as they imagine themselves to be the would be mother of a son or daughter. This physical attachment of the umbilical cord is bercaved at the child birth but same is the day when the mother is bound through and through with an emotional cord, with the baby.

In recent years, researchers have begun to look at attachment from the mother’s point of view rather than assuming that mothers just “naturally” feel intense love for their babies as soon as they are born, we know that this love takes time to grow. The nature of that attachment also changes over time. A mother of a new born may feel affectionately protective of her helpless looking infant, a different kind of love than a mother feels when she watches an older infant cooing and smiling at her.

One particularly controversial issue is whether attachment is influenced by the amount of time that the mother and baby spend together shortly after birth. The standard hospital procedure for many decades had been to allow the mother and infant a few moments together before whisking the infant off to the nursery; the two would be
reunited during their hospital stay only every four hours for half-hour feeding sessions.

An influential study by Klan’s and his colleagues demonstrated that mothers showed more attachment-related behaviours when they were allowed to spend extra time with their babies. Mothers who spent a total of about 16 additional hours with their babies-spread over a three-day eye contact with their infants one month later. Later reports suggested that this brief period of extra contact at child birth could influence maternal behaviour years later. Largely as a consequence of this kind of research, hospitals have frequently modified their procedures so that mothers and fathers can spend more time with their newborns. Most hospitals now have some variant of “rooming-in” arrangement, whereby babies remain with their mothers for most of the hospital stay. When Thomson and Kramer looked at the fine studies that were more carefully controlled, they found that three reported a beneficial effect from extra-contact, and two did not find a significant effect. In general, it also seems that the short-term benefits are more substantial than the long-term benefits.
BIBLIOGRAPHY


ANSWERS TO SELF ASSESSMENT QUESTIONS I

1. 2nd January.

2. See section 1.1

3. See section 1.5

4. Ovarian hormones; progesterone inhibits the contraction of uterus. While oestrogen makes the uterine muscles more responsive to oxytocin, a hormone from anterior lobe of the pituitary gland.

5. By the later period of pregnancy, level of progesterone in the blood falls while that of oestrogen rises. This results in contraction of the uterus.

6. During the course of pregnancy, a woman may feel contraction of the uterus. However, such pains are not regular and disappear if the mother walks or changes position. True labour pains have a regular pattern and do not disappear with change in position.

ANSWERS TO SELF ASSESSMENT QUESTIONS II

1. Prolactin, a hormone of the anterior lobe of pituitary gland stimulates alveolar cells causing secretion of the milk.

2. Read section 2.2 for benefits of breast feeding.

3. Read section 2.2.5

ANSWERS TO SELF ASSESSMENT QUESTIONS III

1. Post-partum, i.e., after the birth of the baby, many mothers feel depressed and frustrated; there are many social, psychological, and physical reasons for this depression.

Read section 3 of the unit.
UNIT - VII

Later Adulthood and Old Age

Answers to such questions are finding wide scope basic facts in the major part of the chapter age changes in each domain of human functioning -

Physical, mental, emotional and personality are considered.

In the second part, the properties of the design, women are discussed.

Along with the progression of each question, some coping strategies and suggestions of some of those strategies at the presentation of individual levels are presented. Hence the role of the government is well as that of the non-government organizations.

In the final part, the concept of successful aging is discussed.

1.5 The Faces of Physical Aging

Some of the changes we see in middle age are related to our success.

For many older women, the most obvious changes with age are the ones that occur in their hair, skin, and body mass. However, these are not the most significant changes. The most significant changes are in the form of decline and loss of function. As we age, our bodies become less efficient. Our hearts have to work harder to pump the blood, our lungs have to work harder to bring oxygen to our bodies, and our brains have to work harder to process information. These changes often lead to a decrease in physical activity, which can further exacerbate these problems. Over time, this can result in a decline in overall health and well-being.
LATER ADULTHOOD AND OLD AGE

Life After Fifty

"At fifty four, when hoary age has shed. Its winter's show and whitened o'er my head, Love is a language foreign to my tongue. I could have learned it once, when I was young. But now quite other things my wish employs. Peace, liberty and sun, to gild my days. (Mary Chandler)

This is a chapter about women who have celebrated their fiftieth birthday and are starting the onward journey. It is about how they change and develop in systematic and individual ways over those years.

An attempt has been made to answer certain questions in the light of relevant research: What changes do we observe with age: How do those patterns of change or continuity differ for different groups of women: And how can we explain the age changes their impact on different individuals:

Answers to such questions are divided into three basic parts.. in the first part of the chapter age changes in each domain of adult functioning—physical, mental, emotional and personality are described.

In the second part, the problems of the ageing women are discussed. Along with the discussion of each problem some coping strategies are described. Some of these strategies are at the personal or individual levels, whereas others are at the organizational level. The latter include the role of the governmental as well as that of the non-governmental organizations.

In the final part the concept of successful ageing is presented.

1.2 The Facts of Physical Ageing

Some of the changes we see in adults are shared by all of us because we are all biological organisms, undergoing natural ageing processes. Our hair turn grey, our skins become drier, our faces wrinkle. However, it needs to be pointed out that the rate at which these and other changes occur varies from one individual to another, but the sequence is similar.

For many older women, the most obvious changes with age are the ones they see in their mirror and which are evident to others.
The changes in physical shape and contours, in skin and hair visibly chart the passage of years. The catalogue of such changes includes the following:

*Loss of Height:* Longitudinal research shows that beginning at about age 30, adults lose one or two inches in height (Rossman, 1980). Most of this loss occurs in the spine, where the discs between vertebrae first shrink, and then the vertebrae themselves eventually lose height.

*Body shape changes:* The fat deposits in the body shift locations, while it is added in the upper area, particularly among women, and in the belly and buttocks. Weight increases although the problem of obesity is more in women than in man. Both the nose and ears grow fairly steadily until about 70 (Smith, Bierman and Robinson, 1978).

*Changes in Skin and Hair:* Wrinkles which become particularly evident at 50, result from the loss of fat under the skin. They also occur because of a loss of elasticity in the skin. Two other important changes in the skin are the reduction in the efficiency of functioning of both the sweat glands and the oil secreting glands. Older adults sweat less which means that they cannot cool their bodies easily in high heat, and their skins become drier; subject to cracking.

Hair loss is common, in both men and women (postmenopausally for women). Greying of hair differs widely. But ageing is accompanied by greying.

*Changes in Muscles and Bones:* There is a significant loss of muscle tissue over the adult years, with the most rapid decline occurring after age 50. (Rossman, 1980). The major effect of this loss is a reduction in physical strength.

In the bones, there are several significant changes, associated with age. Calcium is lost from the bones, making bones more brittle and porous, a process called Osteoporosis. As a result, bone fractures increase markedly in frequency after age 45 in women (Lindsay 1985). It means that osteoporosis is far more likely to be severe in women, postmenopausally. Women who have had their ovaries removed are at higher risks.

Diet low in calcium and high in caffeine leads to higher risks, sedentary life style is another risk factor for osteoporosis.
Changes in the Cardiovascular and Respiratory System: There is a host of changes in the body system over the years. The ability to take in and transport oxygen to the various body organs decreases with age. Cardiac output (blood flow from the heart) also declines. Blood pressure goes up, at least until about age 70. Respiratory efficiency also decreases. Collectively, these changes mean that the cardiovascular system of the older adult is less able to support highly vigorous exercise or activity.

Changes in the Nervous System: Three broad changes in the nervous system that appear with ageing are: loss of nerve cells and weight; connections between nerve cells become less numerous, and there is slowing of speed of nerve response (Takeda and Matsuzawa, 1985).

Changes in the Reproductive System: Major changes in the reproductive system do not begin until age 40. For women, the climacteric is marked by the cessation of menses, called menopause, which occurs on average at round age 45. The term climacteric is used to describe the gradual loss of reproductive capacity. It involves changes in hormones, resultant changes in the body and its functioning and for some women appearance of psychological symptoms.

Changes in the Senses: Another series of body changes noted among adults as they age affects vision, hearing, tasting, and feeling.

Visual Changes: There is sufficient medical evidence to show that beginning in middle life the lens in the eye starts losing elasticity. As a result it becomes more difficult to focus both eyes on near objects. Total visual acuity also declines. Most older adults require more light to see well. They see less well in the dark. As such some task become difficult and even full of risks. Driving a car and finding one's way to the bathroom in the middle of the night. Reading and watching television may require wearing appropriate glasses and obtaining books, especially Quran, with larger print.

Changes in Hearing: A large number of older adults experience a disabling loss of hearing. From about age 50 onward, virtually all adults lose some auditory acuity (Corso, 1977).

The basic cause of this loss appears to be gradual degeneration of the auditory nerves and structure of the inner ear. Some of significant hearing loss can be compensated by wearing hearing aids. However, it is generally noticed that older women do not mind wearing glass, whereas
they feel embarrassed using hearing aids. They may look for aids which are not so prominent.

**Smell and Taste:** The number of taste buds on each bump on the tongue decreases. As such there is considerable loss in the sense of taste. There is also a loss of smell sensitivity. The practical consequences of the loss of taste and smell can be substantial. It becomes hard to work enthusiasm for eating when you can not taste much. That is why the mother-in-law tends to become very critical of the food and this results in considerable friction at home. Poor eating habits such as eating too little or skipping important nutrients may develop. There is marked tendency to add too much salt or spices.

**Pain and Touch:** There is some indication that many adults become less sensitive to pain as they age.

### 2. BODY CHANGES IN ADULTHOOD: AN OVERVIEW

No doubt the body mechanism suffers from wear and tear, just as any mechanism does. We do really lose taste buds, nerve speed, hair grey and wrinkles appear. As pointed out by Bee (1987) it is not ageism but realism to accept and recognize these changes. Grey hair may add grace, wearing glasses may give the looks of an intellectual. Moreover, these changes are small and gradual. So that effective loss of physical function may occur only at or after age 70 and even then there are many variations. Ageing is not merely a biological process, many environmental factors are involved. A study by Rahe, Mahen, and Arthur (1970) has shown that a series of life changes - death of a spouse, divorce, change of job or residence - may be so stressful as to result in rapid ageing or increased vulnerability to a variety of diseases.

It is realism to accept and recognize such changes. They do not mean disabilities. Physical stamina and exertion are no longer needed either at home or outside the home. Moreover, younger people should not look down upon these changes, they should modify their expectations of the older women among them.

It is safe to conclude that an absence of role conflict, the presence of social support systems e.g. friends and relatives and a more regular pattern of life are the factors that prolong ageing by reducing stress to which older people are vulnerable. Other risk factors include sleep pattern, diet, exercise
and weight. A good seven hours sleep is a must. Those who take a long nap during the day cannot expect to sleep for seven hours at night.

Eating at proper time, not missing the breakfast not eating between the meals are desirable eating habits. Calories intake is also to be watched. The typical Pakistani diet is too high on fats, sugar, salt and spices and too low on fibre. This type of diet has to be avoided.

Some form of light exercise is a must, it promotes good sleep, stimulates appetite and helps in controlling weight, and there are less complaints of stomach discomforts from the grandmother.

3. INTELLECTUAL CHANGES

Whole reviewing research on intellectual changes associated with ageing. Bee (1987) has drawn the following conclusions:

Table 1

**Summary of Age Changes in Intellectual Skills**

<table>
<thead>
<tr>
<th>Age 20-40</th>
<th>Age 40-55</th>
<th>Age 65 and older</th>
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<tbody>
<tr>
<td>Peak intellectual ability between about 20 and 35 in both crystallized and fluid intelligence.</td>
<td>Maintenance of skill on measures of verbal, unspeeded, or crystallized intelligence; some decline of skill on measures of performance, speeded, or fluid IQ; decline is usually not functionally significant till age 60 or later.</td>
<td>Some loss of verbal or crystallized IQ, but this is most noticeable in adults with poorer health, lower levels of activity, and less education. Continued loss of skill on fluid IQ measures.</td>
</tr>
<tr>
<td>Optimal performance on memory tasks.</td>
<td>Little change in performance on memory tasks except perhaps some slowing later in this period.</td>
<td>Slowing of retrieval processes and other memory processes; less skilful use of encoding strategies for new memories.</td>
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</table>
Summary

1. Cross-sectional comparisons of total IQ scores across the adult years show a decline beginning in the 30s or 40s; longitudinal studies show essential maintenance of IQ until approximately age 60 or 65, after which there is a decline.

2. Analysis of subscores of IQ tests suggested that performance on speeded, or non-verbal or "fluid" tests declines earlier, perhaps as early as age 45 or 50, while performance on non-speeded verbal "crystallized" tests show little decline until perhaps age 65 or 70.

3. Age changes in memory appear to occur primarily in long-term memory, in both the encoding and retrieval processes. Adults in their 60s and 70s use less effective information-processing strategies for learning and remembering new material, and they have somewhat greater difficulty recalling already known material.

4. Age differences in memory are generally smaller when recall of familiar material is tested, but even with familiar material older adults typically remember somewhat less, or somewhat less rapidly.

5. Problem-solving performance also shows changes in the 60s or 70s, with older adults using less effective strategies. The difference is smaller when familiar, real life problems are used instead of artificial laboratory tests.

6. Changes in intellectual structure with age are more difficult to determine. Older adults are often found to approach tasks using strategies that are similar to what we see in quite young children, but whether this represents a real "regression" or rather a more practical or even a dialectical approach is not clear.

7. The small amount of available research suggests that intellectual productivity remains essentially stable through at least the 50s, so whatever declines occur in performance on standardized tests are not necessarily reflected in poorer performance in job-related activities.

There is some evidence to suggest that intellectual skill is maintained, with little loss, until a period perhaps five years before death, at which point there is a fairly rapid drop.
8. In all the research, there are large individual differences in the timing and extent of intellectual maintenance or loss. Both physical health and mental "exercise" appear to shape those individual differences.

9. Two specific diseases are associated with earlier or more substantial decline in intellectual skill: senile dementia (e.g., Alzheimer's disease) and cardiovascular disease (CVD). In Alzheimer's disease, the brain atrophies, and tangles appear in those nerves that are key to the processes of memory. Patients with this disease have very substantial loss of memory. CVD is associated with a slightly faster rate of decline in IQ! and other measures of intellectual performance, perhaps because it is associated with a reduction in oxygen to the brain.

10. Those adults who maintain higher levels of physical and mental activity show slower rates of intellectual decline in old age. Since mentally active adults also tend to be better educated and higher in IQ in early adulthood, the causal links are not yet clear. Work complexity, however, appears to have a causal effect on intellectual flexibility.

11. Denney's theoretical model, contrasting the pattern of gain and loss in performance of "optimally exercised" and "unexercised" abilities appears to be useful description of our current knowledge about intellectual changes in adulthood.

3.1 Overview of Intellectual Changes

If one thinks about the various facts stated above, one will see that exercised abilities such as verbal skills show practically no significant decline until about age 60 or 70. Evidence from training studies show that it is possible to raise the level of intellectual performance of middle-aged and elderly adults by providing training.

It is clear that more mentally active adults will maintain higher level of skill later into old age. Reading the newspaper everyday exercises certain kinds of verbal skills. Memorizing phone number or verses from Qur'an may help maintain memory skills. Helping the grand children with their homework is another way of keeping oneself mentally active.
Learning a new language creates interest in life, refreshes one's outlook and stimulates mental activity. The Open University can help a great deal in this respect.

Intellectual decline is closely associated with physical health. Physically healthy older people are mentally active.

There is hardly any evidence to show gender difference in this respect.

4. MENTAL HEALTH AND AGEING

If you look around you will notice that, among other factors, a sense of loss is a predominant them in many older women. Some feel that they have suffered losses in almost every aspect of life. As a result they are compelled to expend enormous amount of physical energy in either grieving or resolving grief or adopting to changes that result from loss. Realistically speaking, older people can be confronted by multiple losses which may occur either simultaneously or in quick succession, death of the spouse, old friends or colleagues, or a relative; declining physical health; loss of status and prestige, loss of income resulting in economic dependence, and a sense of uselessness.

4.1 Common Emotional Reactions in Old Age Grief

Grief: A typical and normal grief reaction has a predictable pattern, regardless of age. Numbness and inability to accept the loss is followed by the shock of reality as it begins to penetrate. There are physical feelings of emptiness in the pit of the stomach; weak knees, shortness of breath, a tendency for deep sighing. Emotionally the person experiences distress and inability to concentrate on any task or take initiative. Anxiety and anorexia are common.

Morbid grief reactions are distortions or prolongation of typical grief pattern. Depression, anxiety and guilt accompany it.

According to Butler and Lewis (1983) the primary adaptive purpose of grief and mourning is to accept reality of the loss and to find ways of filling the emptiness through identifying with a new style of life and people.
4.2 Rage

Another emotional reaction is a sense of rage at the state of affairs that confronts the older people and the indignities meted out to them. The common stereotype of older women as cantankerous, nagging, irritable and hypersensitive contributes a lot to the rage felt by them much of the rage is a natural response to the inhumane treatment they come across.

4.3 Psychosomatic Disorders

The somatic form disorders are those which exhibit physical symptoms that suggest physical disorder, but on examination they appear to be psychological caused. The mechanism for causing them are mainly unconscious. In older people, symptoms or illness may be exaggerated and in this way a secondary gain is achieved in the form of extra attention or help.

4.4 Hypochondriases

Another somatic form reaction is an overconcern with physical and emotional health, accompanied by various bodily complaints for which there is no physical basis. It may be a means of communication and interaction with others family members and doctors. But all complaints of old grandmother are not emotionally caused or motivated by attention getting need. People with hypochondriases should be listened to and accepted.

4.5 Denial

Some women try to deny their age. They pretend to be young. They refuse to deal appropriately with the realities of ageing. Hence the over-made up, over-dressed, be-jewelled and be-decked old ladies around you. Some claim that they are still capable of everything. The results in such cases, are broken bones and slip discs. Living your age is a difficult task.

4.6 Projection

Some older persons attempt to allay anxieties by projecting feelings outward onto someone else. They may appear suspicious and fearful. They constantly complain of servants cheating them, doctors ignoring them, their children neglecting them and daughters-in-law using black magic. Some
complaints and fears may be real and legitimate but sometimes projections do occur. Persons with hearing losses are prime victims.

Fixation and Regression

Fixed ways of doing things and refusal to change often become source of frustration and irritation for others. When the mother refuses to see a doctor and prefers her own type of treatment or resorts to self-medication is a case in point. For them, their own way of doing things is the best. Regression implies a disruptive deteriorative nonadaptive retreat in which the personality is not up to facing the stress (Butler and Lewis 1983). That is why some old persons are described as 'childlike' or 'childish'. Regression tends to become intense when the external threat looms large and coping capacity is at the lowest level.

4.8 Idealization

It is very common among older persons to glorify the past. They are always talking about good old days. Their memory becomes selective. They tend to remember distant past event with greater clarity than the events of the recent past.

4.9 Exploitation of Age and Disability

It is generally noticed that some older women use changes occurring in their lives to get attention. A mother who just can not 'let it go' can use illness to manipulate her children.

4.10 Withdrawal

Some people become virtual recluse. They shun all sorts of social contacts.

5. ADAPTIVE TECHNIQUES

At the personal, individual and non-expert level what one can do is to promote insight and encourage the use of positive emotions such as humour and love. Insight requires an inner knowledge of the human cycle - a realization of life now it changes. According to Butler and Lewis (1983),
exercising rational control over life is a mature and effective expression of insight. They further add that insight includes the willingness and ability to substitute available satisfactions for losses incurred.

The conscious suppression of problems, mastery of feelings, diverting attention from painful situations, seeking pleasant and socially acceptable channels are some desirable and healthy modes of adjustment.

Deliberate altruism, the personal and social concern for others, enjoying the company of the grand children, listening to their small talk and jokes, paying attention to nature and seasonal changes go a long way in lightening the burden of daily living.

5.1 Personality Development and Ageing

The early dominance of psychoanalytic thought in the development of personality led to the notion that personality is established early in childhood and that adults personality does not change. However, Jung (1933), Buhler and Massarik (1968), and Erikson (1959) have proposed a life span models of personality change. According to Jung (1933) there are two important age-related trends in personality development. The first relates to the introversion-extroversion distinction. He describes an increase in introversion in middle and old age. He also suggests that old age is characterized by an urgency to integrate and revaluate life experiences. With increasing age, the need for balance creates a need to focus inward and explore personal feelings about ageing and mortality.

The second age related trend in Jung's theory involves the feminine and masculine aspects of our personality. According to him, each of us has elements of both masculinity and femininity. In young adulthood, however, most of us express only one of them while working hard to suppress the other. In other words, young adults act in accordance with sex role stereotypes appropriate to their culture. As they grow older, people begin to allow the suppressed parts of their personality out. This means that men begin to behave in ways that earlier in life they would have considered feminine and women behave in ways that they would have thought to be masculine. These changes achieve a better balance that allows men and women to deal more effectively with their individual needs rather than being led by social stereotypes.

Buhler and Massarik (1968) described stages in personality development corresponding to biological model of growth. According to
them the major goal of the ageing individual (45 and onward) is seen as being self-limitation which involves the realization of declining energy and the focusing of goals and interests within the boundaries of available strength. They further suggest that the ageing person must come to term with the possibility of increasing physical, economic and interpersonal dependence. They maintained that life satisfaction into old age is related more to an individual's assessment of whether life goals have been achieved than to biological decline. They do not make any mention of sex differences.

5.2 Erikson's Stages of Psycho-Social Development

Erikson's (1950, 1959) theory has been the most influential view of adult development proposed so far. There are traces of this theory in every other stage theory of adulthood and his terminology has been widely adopted. Buhler and Masseril's (1968) theory cited above clearly shows the impact of Erikson. He proposes that the life cycle comprises eight stages of ego development, spread over the entire life span. The individual moves into a new stage because of changes in cultural or role demands, or physical changes and must then resolve the dilemma or the crisis associated with the stage. Incomplete or imperfect resolution of a dilemma or crisis leaves unfinished business to be carried forward to the next stage, increasing the likelihood that the next stage, too, will be imperfectly resolved. The stages are:

1. Trust versus mistrust
2. Autonomy versus shame and doubt
3. Initiative versus guilt
4. Industry versus inferiority
5. Identity versus role confusion
6. Intimacy versus isolation
7. Generativity versus stagnation
8. Ego integrity versus despair

We are concerned with the last stage which according to Erikson occurs at about 50+. It can be best described in Erikson's own words.

"Only he who in some way has taken care of things and people and has adopted himself to the triumphs and disappointments of being, by necessity, the originator of others and the generator of things and ideas -- only he may gradually grow the fruit of the seven stages, I know no better
way for it than integrity ... It is the acceptance of one's own and only life cycle ... and an acceptance of the fact that one's life is one's own responsibility (1959, p. 104).

Erickson argues that this sense of integrity must be built upon the foundation of successful resolution of all the crises that came earlier in life. The task of the last stage is to examine and evaluate one's life and accomplishments and to verify that it has meaning. Those who feel a sense of meaninglessness do not anxiously anticipate old age and they experience despair. A feeling of regret about one's past and a continuous nagging desire to be able to do things differently are the expressions of despair.

In later writings, Erikson (1968) suggests that identity formation followed by intimacy may not be true for many women, for whom the identity may be created in a network of relationships.

Talking about gender differences in identity development in the light of Erikson's theory, Gilligan (1977) maintains that women's identity development is, from the beginning, interdependent rather than independent. Women define themselves, and think about their choices and dilemmas, in terms of relationships while men appear to define themselves more by what they do or what they are separate from relationships.

Friedman (1993) has also pointed out that the trajectories of their lives plotted by a number of older women taking the 'Life Stages' course differ greatly from the ones plotted by men. The plot of the life stages of men charted a straight line of development. The women's trajectory seemed to show a different kind of curve, with interruptions, changes a less orderly, more complex development.

Several consistent differences also emerged in Lowenthal, Thunber and Chiribogas (1975) study. They found that men moved from insecurity and discontent through buoyancy and almost uncontrolled energy to a mellow, satisfying relationship with themselves that arose out of making fewer demands either on themselves or on environments. Women progressed from dependency and helplessness to a more assertive aggressive and energetic style.

These differences reflect alternative developmental courses for men and women. How far they are due to cultural factors, has not been studied. In any case what they point out is that it may not be possible to talk about developmental sequence that ignore sex problems.
5.3 Changes in Life and Problems Associated with them

As one grows old certain important events take place in the life of the individual which necessitate changes in life style. This creates problems of adjustments and readjustments. The following section deals with some common problems associated with ageing.

6. GENDER DISCRIMINATION AND PROBLEMS OF THE OLDER WOMEN

In societies where being a woman means being a second class citizen, old age creates further problems and complications. Sexism and ageism are the twin prejudices directed against them. Women who have experienced sex discrimination all their lives are confronted with age discrimination after they have lost their youth.

These prejudices take the shape of stereotypes which are formed quite early in life and are further shaped and reinforced by media. There are few if any positive images of old women in the mass media, but there is an abundance of the negative ones. Old persons in general and old women in particular are shown as complaining, unhappy, miserable, and lonely. The typical image of the scheming, nagging, trouble shooting mother-in-law dominates the screen.

In fiction, whether written by men or women, middle aged or old woman are virtually invisible. They have hardly any heroine who is over 25. If they portray any older woman, she is usually cast in a negative mould.

In most of the children's stories, old women are depicted as evil, scary and plotting.

In our daily parlance unmarried aunts are scorned as 'old maids', and Dadi a 'busy body'.

The message is loud and clear. It implies that a woman is valued as long as she is fit to bear and rear children and to cater for the needs of her husband. After that she is relegated to oblivion.

The impact of these attitudes on the ageing woman is that she starts placing herself in the image commonly held by other. And the image is not
a desirable one. Greer (1991) has rightly stated that if we as women continue to see our own age through the eyes of observers much younger, we will find it impossible to understand the peculiar satisfaction of being old. She advises the older women to conquer their own lack of interest in themselves and their kind.

For the ageing woman, the development of a positive self-image is a must for maintaining sound mental health. The development of a positive self-image requires an analysis of her environments, as well as an understanding of her personal characteristics.

6.1 Loneliness

When a person's social relations is deficient loneliness is the result. Peplau and Perlman (1982) define loneliness in terms of a discrepancy between one's desired and achieved levels of social contact.

According to them it includes both quantitative and qualitative aspects of relationship.

Loneliness may overcome an individual at any time of his life; however, among the older people feelings of loneliness are likely to be more common. Termination of relationship may result from death; separation from children due to immigration to foreign land either for education or job. The older woman may become housebound as a result of lack of transport or on account of poor health. In some cases, as pointed out by Paplau et al (1982) the belief that loneliness is inescapable or uncontrollable may become a self-fulfilling prophecy preventing some old people from taking steps to alleviate their loneliness.

Social psychologists and gerontologists are becoming increasingly aware that a sense of control and responsibility is an important determinant of aged individual's physical and psychological well being. (Shultz 1976, Moore and Shultz 1989)

Moore and Shultz (1989) noted that in their study of "loneliness among the elderly", the tendency to take responsibility for loneliness was associated with decreased loneliness.

Moreover, perceived personal control over loneliness, like responsibility was associated with decreased loneliness.
They found no sex differences.

6.2 Widowhood

Being a widow represents the greatest emotional and social loss suffered by women. The mourning process itself occurs at the same time as the need to make practical, though emotionally laden decisions about where to live, what to do about the family home and possessions; how to dispose of the spouses personal effects; what kind of contact to maintain with the spouse's relatives, and what to do about new social roles.

The widow and her children may be ambivalent about the more involved roles that the grown children feel compelled to accept in relation to the remaining parent.

Friends tend to socially ostracize the widowed woman for variety of reason pain over the loss and the presence of a widow among them as a reminder, anxieties and denial of their own ageing, awkwardness in knowing how to comfort a grieving person and uneasiness about accepting a single woman into a social function of couples. Widowed women themselves feel awkward in attending such social occasions.

Thus, widowhood is an experience to be lived through and a social status to be lived with.

In Pakistan, a very small proportion of widows are well off financially, generally they are left with very little source of income. Even where there is enormous wealth left by the deceased, the distribution of the inheritance is to be carried out according to the Muslim law of inheritance. This limits the financial resources of widows. Their first experience of limited financial resources, and in some cases, of poverty is very traumatic.

Adjusting to the loss of a spouse, as a process, is an emotional journey as one moves in fresh and painful memory through all the anniversaries, festivities and family gatherings that have meant so much.

Immediately after bereavement, the widow may suffer from such physical symptoms as loss of appetite and sleep, panic, guilt, depression, and contemplation of one's own death. Research show that the widowed also die sooner. (Berardo, 1968)
However, the gender differences in widowhood represent a higher mortality rate for men than for women (Berardo 1968).

In Pakistan, relatives and friends of the widower are very keen to get the man remarried soon after the death of the wife, whereas a widow is expected to stay single.

As compared to men, women are less well off financially after widowhood. They are much more dependent on their children for economic as well as emotional support. However, the literature on the psychological adjustment following loss of a spouse suggests that men generally suffer more than women. While reviewing the research on gender differences, Stroebe and Stroebe (1983) concluded that although women have typically higher rate of reactive depression, mental illness in general and physical illness than man, the deterioration associated with the partner’s loss is more among men. They suffer more from loneliness hence the greater incidence of remarriage among them. The widower must find comfort for his loss while at the same time learn to care for himself.

The widow-to-widow programme was established in the Boston area. The main objective of this experimental programme was to find ways of reaching the widows and to determine what would ease their distress and grief.

Silverman (1970) opined that this programme proved promising and was widely accepted.

The programme was staffed by widows. It was based on the premise that the best help of a widow at the time of grief is another widow.

Lopata’s (1979) findings suggest that those widows who tend to reach out to others, maintaining or increasing social contacts show least loneliness and best adjustment. It was further noted that widows with a positive attitude towards themselves and others report lower level of loneliness and distress.

6.3 Singlehood

Older women who have never married are in the special situations of having neither their own children nor grand children toward who to extend themselves. One study suggest that elderly single, as life long isolates, do not find old age especially lonely (Gubrium, 1975).
Single women, especially, are highly involved with relatives, caring for nephews and nieces and aged parent, living with a sibling. Loneliness is not present (Essex & Nam, 1987).

Sister-sister ties are strongest (Shane et al, 1968).

6.4 Post-parental Years

An important event the life of a woman is the launching of the last child into adult life or to education away from home, to a career or to family independent of the family of origin. An empty nest syndrome is likely to be created. The departure of the youngest child can be a traumatic time especially for mothers and more so for those who had defined their identity in terms of their children.

For a woman, children or thought to be a central source of satisfaction. Moreover, she feels that she has lost what may have been the most central role of her early life that of a mother. As a result she may lose a powerful sense of her own worth. It may be hypothesized that those women who do experience heightened distress at this role transition are the ones who attempt to maintain their old home making, parenting role, especially those who do not work outside the home.

On the side of gain, there is an upswing in marital satisfaction occurring during the post-parental years (Glenn, 1975). In Pakistan, the empty nest syndrome may be absent in some homes due to the joint family system.

Parental role continues till quite late in life. However, with the weakening of joint family system, many women are trying to seek satisfaction in the role of a wife and a grand mother.

One reason for the increase in marital satisfaction during the post parental period may be their career identity. Many working mothers had experienced role overload with many demands placed on their time. Now with their children gone, they have more time to pursue other interests and more time for their husbands.

6.5 Retirement:

Every one is bound to agree on one point about retirement that it is a transition in life causing stress. It is generally associated with one's being
old and unwanted. It means going to work for the last time, getting some symbol of a job well-done, having co-workers throw a farewell party and so on.

Though research is lacking on gender differences in attitude and adjustment to retirement, it appears that retirement is a major event of life for men and may become so far women if they strongly feel career identity. McGee and Wells (1982) are of the view that because masculinity is often associated with productivity and control over material resources, men may regard retirement as a threat to their traditional masculine identity. Women, in contrast, have more continuity of their gender related tasks of middle age into old age. Household chores continue into the elderly years and even though children may have left home, many elderly women have ample opportunity to demonstrate nurturance by watching over their husband's health.

Women who have dual roles as homemakers and career working women may feel burdened in earlier years. Retirement can serve them well. They can fall back whole heartedly on keeping a home. Whereas majority of men have no such diverse identity. Over identification with hob may be a factor in the maladjustment after retirement in men.

No doubt the loss in income and economic independence may be equal among men and women, yet it appears that being dependent is more traumatic for men than for women.

Attitude toward retirement depends on the person's financial situation, job satisfaction, degree of pre-retirement planning and activities a woman is engaging in after retirement. It is advisable that one should begin to prepare mentally and emotionally for retirement some years before retirement.

6.6 Financial Problems

There is considerable financial distress among older men, in general, and among women, in particular. Women most often than not, are dependent on men for financial support. When they become old, widowed, or start living on pension's of their husbands, they can expect to suffer from financial constraints. There are very few who are well off in old age.

Contribution in the shape of money from children, however, a modest one, provides them a sense of independence. In lower middle class
homes, some older women are seen to be generating income by doing piece work for garment and other industries at their homes. NGOs should direct their attention to the financial plight of the elderly women.

Those who have some sort of regular and comfortable source of income are usually tempted by higher rates of returns on their savings and become victims of confidence tricksters. The recent financial scandals such as Taj Company and Cooperative scams are examples of debacles which have thrown many into poverty and destitution. The safest investment is in government sponsored schemes. There, too, one should not put all the eggs in one basket.

6.7 Self-esteem

During the old age there is a crystallization of the individual’s personality, which include some significant attitudes to self. We have discussed the role off gender stereotypes in shaping the self-image. How an ageing woman perceives herself, whether she has a sense of worth will contribute to the successful resolution of the psycho-social crisis of her age.

Family members can do a lot to help her maintain a modicum of self-esteem. By involving the old lady in decision making, appreciating her point of view and by showing respect to her in daily conversation they can revive the values of ‘adab’ that is respect for older people. They can encourage her to dress well and appear presentable. Whenever they wish to do something for the family like cooking, they should not be discouraged. It is generally seen that the old mother likes to visit and stay with those of her children who let her help in the kitchen encourage them to sit with the guests, and seek their advice on different family matters, even such a minor one as what to cook today. In this way they feel wanted and a sense of living in the mainstream of life.

6.8 Living Arrangements

For older women, the living arrangements pose one of the greatest paradoxes of their lives whether widowed or childless, one has to decide where to live in old age. Even with the spouse alive, it is a problem for the old couple. If she chooses to live with the married children, her status in the household is in question. She may delegate all the responsibility to her daughter-in-law. She may find it difficult to the change in her status. Difficulties arise when other married children especially daughters come to
visit the parents. The mother may feel that they are not well-treated. It may be a fact or her perception of the reality.

In case she reigns supreme and continues to run the home, she soon starts feeling that she is just a housekeeper. Her efforts are not appreciated and the daughter-in-law is living like a guest.

There is no ready solution to this problem. The old lady has to assess the attitude of her daughter-in-law, strain on her son, her own financial, and her emotional and physical resources. A realistic attitude to changes in life and their acceptance may alleviate much of her distress.

7. DEVELOPMENTAL TASKS

So far we have seen the years from 50 until death as a period of continued, change. Why call the change decline. We may say that this period signifies growth. As the life span continues to expand, the period of late adulthood will become increasingly long and will provide opportunities for experiencing new relationships, developing skills, pursuing long forgotten interests; and discovering personal potentialities.

This is the period during which one must move to new roles and discover creative outlets for one's leisure.

In old age individual must resolve the struggle between a sense of ego integrity and a sense of despair. According to Erikson (1982) the main task is to examine and evaluate one's life and accomplishments and to verify that it has meaning. The process involves reminiscing with others and actively seeking reassurance that one has accomplished something in life and adapting to the changes by discovering new relationships.

As redefined by Newman and Newman (1975) the tasks are as follows:

1. Acceptance of one's life.
2. Redirection of energy to new roles and activities.
3. Developing a philosophy of life.

7.1 Acceptance of one's Life

There appears to be number of response to the challenges posed by this life task. Some women become extremely depressed in thinking about
their past and resign themselves to a life of unhappiness. The illnesses, personal crises of the past, and death become dominant preoccupation. Other older women respond by becoming rigidly self-confident and are reluctant to accept any gesture of either help or intimacy. An alterate type of response would be to accept the areas of disappointment but put them in perspective with personal achievement. In order to create an overall balance in one's life a flexible attitude toward one's life history is needed. In old age, evidence about one's successes and failure in the major tasks of middle adulthood marriage, child rearing and work has begun to accumulate. One must not look back in anger. In viewing her own children as mature adults, the parent, that is the mother, is able to determine whether she has helped them to grow as responsible, humane and productive members of the society. In the work, whether as a housewife or a career woman, she can begin to estimate the degree to which she has contributed to the maximum of her abilities. It is possible that while she has had considerable achievements in some areas, she may fall short of her level of aspiration in other direction. The process of acceptance of one's past life can be a difficult challenge. One must be able to incorporate certain areas of failure, crisis, or disappointments into one's self-image without being over burdened by a sense of inadequacy.

Acceptance of one's life also implies acceptance of physical changes with the passage of time. One cannot be like the heroine of Rider Haggard's book 'She who has drunk from the fountain of eternal youth. As the physicians advise their patients that they must learn to live with their ailment in her case, with her age.

7.2 Redirection of Energy to New Roles and Activities

For a woman, the end of motherhood, as a result of grown up children leaving the nest, is an event which requires coping with lot of time at hand and little to do. It demands a redirection of energy and discovery of new roles and activities.

The new role of grandmother which many women accept as a matter of pride and a great source of happiness, may require a renewal of skills which have been lying in storage. Telling fairy tales and sharing innocent jokes, playing games and riddles, taking trips to parks, and wherever possible, to Zoos, and having the pleasure of helping with baking, cooking and knitting. Sometimes, even helping them with the homework. The utilization of her skills, her patience and knowledge may be as much in demand as where they were in mother's role.
In fact, many grand-mother see their role easier than mothering, affording pleasure and gratification without requiring them to assume major responsibility for the care of the child. A few grandmothers, however, have to play the role of the surrogate mothers filling in for working mothers. In the past grandmother used to transmit religious, social and moral values thorough storytelling. It appears that satisfaction with grand-parenthood is higher in grandmothers than in grand-fathers. This observation is duly supported by Thomas's studies (1986a, 1986b).

It was also noted that the opportunity to nurture and support grand children is an important source of satisfaction for women.

Hegestad (1978) found that grandmothers and grand-daughters have better relationships than do grand fathers and grand sons.

A word of caution in the light of research is given here; those who resort to advising their grand-children and daughter-in-law, tend to be less satisfied with grand parenting role than those who feel that their role is mainly to enjoy their grand-children (Thomas, 1986a).

Community work is another area which may provide meanings to existence older women can and do contribute by teaching and raising the literacy rate in Pakistan. Hospital visits, patient's aid societies, work for the physically disabled or visually handicapped or for those suffering from other disabilities is another venue. Such work provides good opportunity to meet other people, listen to the problems of parents, and lighten their burden by giving them a patient hearing. Such work is therapeutic for those who tend to dwell on their own miseries. However, one must identify activities with considerable thought so that they become personally satisfying.

Many older women elect to adopt a variety of leisure activities to fill their time and for which they have not been able to find time in their youth or middle age. If one has no activity planned for old, one can always learn. Learning something new is always rejuvenating, in fact, it recreates and refreshes. One may rummage through the past and revive long forgotten pursuits such as painting or writing. There are books one has always to read. This is the time to fill gaps in reading.

In the Pakistani society, many older women find considerable solace in activities which promote spiritual growth. Meditation and prayers help them in meeting the crisis of integrity versus despair.
Another new role that must be initiated is being a member of one's own age group. Measures of life satisfaction and emotional attitude toward social activity showed that those who are most active are most satisfied with life (Havighurst, Neugarten & Tobin, 1968).

Many women who form such age groups or already have friends receive considerable social and emotional support. Moreover, an array of intimate relationships is most likely to meet the needs across a wide variety of stressful situations. Friends are compassionate but objective listeners, companions for social and leisure activities or a source of advice, transportation and other assistance. Women tend to base friendship on more intimate and emotional sharing (Huyck, 1982). Whereas men base friendship on shared activities and interest. As such women are in a better position to benefit from friendship.

It may be a monthly meeting of a formerly organized society or some informal gathering of friends. Such meetings may provide opportunities for recreation, outing or social welfare activities.

'Daras' or some other religious function can also be organized. They may form a lobby which attempt to promote the passage of legislation in the interest of older women.

7.3 Development of a Philosophy of Life

As positive view of life aids the individual in coming to terms with one's life and accepting the realities. Whether it be a religious or personal philosophy. Some systematic network of beliefs and values enables the person to view her life as a part of some larges, more abstract and infinite order and gives meaning to her existence. In order to achieve integrity, as opposed to despair, an individual must rise above self-preoccupation and develop a broader perspective.

Greer (1991) has rightly pointed out the object of facing up squarely to the fact of ageing is to acquire serenity. One must make use of spiritual resources. Religion is the way the ageing woman can unlock the door to her interior life. It is not just being pious, it is the joy of entering into the intellectual and spiritual edifice of the religion and faith which matters.

In a Greer's own words "to partake of the oceanic experience' as the grandeur and the pity of human life begin to become apparent". (p. 379).
8. SUCCESSFUL AND HEALTHY AGEING

Old age for women can be an emotionally healthy and satisfying time of life. They are at the stage when they do not have to struggle with the conflicts in being a housewife. In many cases they are free from the conflict between careers and child rearing. Nor do they have to keep up with the Joneses in the rat race for status. It means that they have freedom and time at their disposal to plan their lives and have a fresh start.

Past as well as current history shows that a considerable number of older women have forged a unique position for themselves in terms of identity, personal achievement and even financial and political power. Hazrat Khadijah Kubra (PBUH) is a prominent example from the past.

Bilquis Edhi and Mother Teresa are the examples from the current scenario.

Following are some profiles of the older women living in anonymity butt more or less successfully. In order to make the concept of successful and healthy ageing some profiles of those women have also been given who are finding it hard to cope with the crisis of integrity versus despair.

8.1 Profiles

1. There is Miss T. who has celebrated her seventy fifth birthday. She started living with her married nice and nephew (cousins now married) after retiring from a senior post in the Education Department. Financially, she is not dependent. A well dressed and graceful old lady, she is very cheerful. She brightens the company, she is in by her funny and happy anecdotes from the past. She recites naat as well as writes her own versions. She is invited to many milads because of this is welcome in family gatherings. Suffering from diabetes, she is on a strict diet and insulin but she hardly ever refers to her ailment. She attends the meetings of Girl Guides because she has been one when she was young.

2. Mrs. J. is 70 years of age and very frail looking. Her husband who is about 82 years old is not very healthy but is mobile. They are living with their married sons in fact, the married sons are living with them. The household appears to be a happy one. Where there is considerable respect for each other. The weakness of others are accepted and not maximized. Strengths are highlighted. The old lady of the house has been an ideal house wife all her life. Now she is imparting her skills to her daughters-in-law.
They make detergents and washing powder, do backing, prepare sherbets in summer and achars in winter. Home baked cakes and biscuits are given as gifts to relatives. In short, it is a pleasure to visit them. No doubt Mrs. J. has lot to contribute and keep herself busy.

3. Tai Bhulan, a childless widow, is a much wanted lady in her locality. In her fifties she is healthy, active and versatile. She is there when someone is sick and hospitalized. She is willing to render help if somebody's son or daughter is getting married. She takes complete charge of the kitchen if there is death in any family. Neither begging nor indulging in self-pity, she makes her living by selling home-made chat masala, achar and chaatni, peeling garlic and chopping vegetables for various households. At the same time she is a good company and trustworthy. She even chaperons young girls to schools and for shopping.

4. Mrs. P., a divorce with a son is in her sixties. She has retired as a principal of a college. Her son married and living in Islamabad has two sons. Mrs. P. is in Lahore living in a spouse and beautiful house which is her pride and whole time occupation. She has a large social circle of friends who are very supportive and helpful, something which she has not received from her brothers and sisters, most of them now dead. She has always wanted to write. But family responsibilities never let her achieve what she wanted. Now that she is free from the major obligations she has published two books and is about to start the third one. She has never been a cheerful and satisfied person. But now she is a welcome companion. She has diverse interests like music, literature, cooking and knitting, so when one meets her there is never a shortage of topics. She is adored and wanted by her grandsons and she dotes on them.

5. Mrs. H. is a widow in her seventies. A physically fit and mentally alert lady. She is very active in the care of physically handicapped and is doing voluntary social work four days a week. At home she knits, stitches and does work in the garden. Cooking and care of the house is left to the daughter-in-law. One of her outstanding characteristics is her realism. She has a strong sense of reality and as such she accepts others with all their flaws and virtues.

8.2 Unhappy Ones

1. Let us now see the other side of the coin. Miss M a retired teacher has taught for many years at home and abroad. She has a small but well constructed house. She has completely disengaged herself. Does neither go
out nor invite anyone. Depressed and always complaining, she cannot get along with anybody. She says that her neighbours are torturing her, the maids are pinching lemons from her garden, she has no money. She has many household appliances but none in use, they are all covered and stored. Her beautiful and expensive carpets are rolled and stacked.

II Mr. and Mrs. K. have married children all living separately. She feels that she has wasted her potentialities in child rearing and household chores. Now no body cares for her. Even the husband does not communicate with her. The sons-in-law are selfish and the wives of the sons are callous and hard to live with. She has stopped caring for her appearance and is always complaining of being tired. She seems to be losing interest in life.

III Mrs. A.A. well to do lady is living with her son. Her husband has recently died. She feels that she is not sleeping well and has lost her appetite. She is living in the past, all the time talking about her bygone style of living, beauty and the relieve of servants. Now the one hired help does not listen to her, is even rude. When she goes for shopping, the shopkeepers pay more attention to the younger customers. A very unhappy person indeed.

To sum up in a nutshell the journey of adulthood requires:

1. Insight into the process of growth.
2. Acceptance of the changes in the light of a philosophy of life.
3. Redirection of energies.
4. Finding new roles and relationships.
5. Living on positive emotions such as joy, love humour and serenity.
6. Keeping oneself healthy by exercise, proper diet and sleep.
7. Enjoying and making full use of what time is left.

It is by following the above mentioned prescription that one can attain integrity. Let us again have a look at what integrity, which is the key to healthy old age, means.

Integrity, as it is used in Erikson’s theory, refers to an ability to accept the facts of one’s life and to face death without fear. The old person, be it a man or a woman, who has achieved a sense of integrity views his/her past in an existential light.
Integrity is not so much a quality of honesty and trustworthiness, but an ability to integrate ones sense of past history with ones present circumstances and to feel content with the outcome.

8.3 Concerns for the Future

So far we have been trying to study how the ageing women can cope with the changes in their lives. In the following discussion an attempt will be made to highlight the role of family, NGOs' private and public sector as well as that of the media in facilitating the adjustment of women to the ageing process.

8.4 The Role of the Family

It is generally noted that the grandmothers tend to talk mostly about themselves especially about their health. When they wake up they complain that they could not sleep at night. During the day, they like to tell you that their digestive system is not working, they have no appetite, or a particular food did not suit them. When they meet other their favourite topics are the medicines they are taking or that the doctors are not prescribing the right drugs. Naturally the family members shun them because who likes to listen to listen to the tales of miseries. What needs to be understood that older women are leading confined lives, they have very few outside contacts. That is why they turn toward themselves or may be it is their way of attracting attention and communicating with others. Family members who are perceptive enough try to improve the quality and quantity of interaction with the senior members of the household. Providing them with T.V. with dish antenna and making them sit in front of it like a zombie is no service to them. No doubt the grandmother must also realize that the best place where you can talk about your ailments is the doctor's clinic children and adults are likely to come near to those who have pleasant things to talk about.

Another complain which the family members have is that the old lady is always grumbling or nagging. Why be a "masi Musoobatey". The "no body cares for me" attitude is not likely endear her to others. The children on their part should try to understand the reasons for her dissatisfaction. Some of her grievances may be genuine.

In our society, old people need to be respected, hard and understood. These are the values which have to be inculcated in children. It is only when the middle generation demonstrates and translates these values in their behaviours that they are transmitted to the young. A time together is what
the family needs ad can provide. It may be meal time or prayer time. For the grandmother 'room service' is no service at all. Her needs for human contact are very intense.

9. THE ROLE OF THE GOVERNMENTAL AND NON-GOVERNMENTAL ORGANIZATION

Private as well as public sector concentrate on the welfare of younger age groups. Their efforts and resources are mainly directed towards family planning, literacy, teaching vocational skills and income generating projects. So far very little has been done in the interest of older people. Health care facilities, recreational and adult literacy projects can be initiated both at private and public leave.

A national social security act may be designed to provide minimum income and some old age benefits to women of age 50 and above. Other benefits to senior citizens include travel passes, and free or subsidized medical treatment. Even where there are some medical facilities available for retired persons, they do not include dental and eye treatment.

Older women can be involved in raising the literacy rate and the projects designed for improving the community health. A multage day care programme can be started. The day care centres for the children are quite in vogue. Such a facility could easily be expanded in order to serve a wider group. One of the problems we have identified as a task for older women is to discover new activities and roles. Women could be encouraged to participate in the day care programme in a variety of capacities. They might be asked to read or talk to young children. They can train them in skills.

Some can be involved in some productive unpaid jobs. They have a wealth of experience and expertise that should not go to waste. In such cases transportation has to be provided.

Mass media can do a lot by building up positive attitude to older people, especially the women. Their image, their work and their contributions must be taken into consideration.

9.1 Role of Research Worker

As you must have noticed and must have felt that all the researches cited in this chapter have been conducted in the western countries. There is
a dire need to undertake and disseminate research in Pakistan. We must have reliable data to draw sound conclusions. Not only this, we need a multidisciplinary approach. A good example, is the need for a blend between physiological – biological research and behavioural science research. We need research not only to understand more about adult development and ageing but also to know what programmes to design for them and also how to better commit resources for the future.

**SELF ASSESSMENT QUESTIONS**

**Physical, Cognitive and Emotional Changes**

What are the major physical changes which take place in women after 50?

1. Describe the impact of intellectual changes on the ageing women. What suggestion do you make to cope with them?

2. There are some emotional reactions to the changes in the lives of women during their late adulthood. Discuss them.

**10. PROBLEMS IN OLD AGE**

1. What do you understand by the term loneliness? What are the research findings in this area?

2. Why is retirement and losing a spouse more traumatic for man than for women?

3. Gender discrimination and self-image are the major problems of older women, what steps can be taken to improve their self-image and self-esteem?

10.1 Developmental Tasks

1. What is meant by acceptance of life changes: Why is this essential for the attainment of "Integrity"?

2. Describe the areas in which the older women can participate.
3. Explain in detail Erikson's concept of Integrity and its relationship with a positive philosophy of life.

10.2 Concerns for Future

1. Highlight the role of governmental and non-governmental organizations in improving the lot of older women in our society?

2. Develop at least two research proposals related to stereotypes of ageing women, and problem faced by retired persons comparing the attitudes of males and females.

3. How can older women face the challenge of their ageing?
BIBLIOGRAPHY


OBJECTIVES

The author has attempted to promote the reader’s understanding of the complex and wide-range spectrum of mental disorders. Thus, it is expected that after reading this unit, the student:

1. will identify various misconceptions about mental illness and mental health which are prevalent in our society.

2. can describe what is mental disorder and what are some symptoms of mental disorders?

3. will learn how to classify specific mental disorders and differentiate one from the other?

4. will develop an understanding of the psychological factors that often predispose women to some specific psychological disorders, such as, Hysteria, depression, phobia and Eating Disorders.
the generous, compassionate attitude towards oneself and others that healthy living requires and often places unreasonable expectations on self and others that frequently are followed by bitter disappointment.

f) **Habitually Falling Below Potential:** If a person lacks the skills or orientation to reach goals in life equal to his potential, training can correct this situation. However, if he is adequately equipped to do well but continually performs far below his/her usual ability, the possibility of an emotional disturbance should be considered.

3. SOME OF TYPES OF MENTAL DISORDERS

Historically, mental disorders have been classified into three categories: (i) Neurosis, (ii) Psychosis and (iii) Personality Disorder. Currently, the process of classifying psychological disorders follows a multiaxial approach. Thus, the clinical psychologists no longer use these three categories in a simplistic fashion. The most commonly used classification system for psychological disorders is the revised third edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM III-R).

DSM III-R and DSM-IV use what is called a multiaxial classification system. This means that each case is not merely assigned to a category (for example, schizophrenia); instead it is characterized in terms of a number of clinically important factors, which as grouped into the following five AXES.

- **Axis I** contains the primary classification or diagnosis of the problem (psychiatric in nature) that requires attention. For instance, fear of heights.

- **Axis II** classifies any developmental and personality disorders that begin in childhood or adolescence and usually persist in stable form into adult life. For instance, mental retardation and borderline personality.

- **Axis III** refers to any physical disorders that seem relevant to a case. For example, cardiac illness.

- **Axis IV** rates the severity of Psychosocial Stressors in the client's recent and past life that may have contributed to the main clinical
problems and might also influence the course of treatment. For example, divorce, death of a parent, loss of a job.

- Axis V contains a global assessment of psychological functioning, social relationships, and occupational activities attained by the client. Ratings are made for both current functioning and the highest level of functioning during the past year.

The first three axes constitute the official diagnostic categories of APA. Axes IV and V are regarded as supplementary categories for use in clinical settings for diagnostic, treatment and research purposes. 'In fact, diagnosis is not an immutable process. Rather, it changes with advances in knowledge and alterations in what society defines as a psychological disturbance. DSM III-R and DSM IV classify psychological disorders as follows:

- Organic Mental Disorders
  a. Transient
  b. Permanent

- Psychoactive Substance use Disorders.
- Sleep and Arousal Disorders.
- Schizophrenic Disorders.
- Delusional (PARANOID) Disorders.
- Psychotic Disorders Not Classified Elsewhere.
- Mood (AFFECTIVE) Disorders.
  a. Depressive Disorders.
  b. Bipolar Disorders.
- Anxiety Disorders.
  a. Panic Disorder.
  b. Phobia.
  c. Post-traumatic Stress Disorder.

- Somatoform Disorders.
  a. Somatization Disorders.
  b. Conversion Disorders (Hysteria).

- Dissociative Disorders.

- Gender and Sexual Disorders.

- Factitious Disorder.
(Adler, 1991). The International Journal of Eating Disorders has repeatedly published findings that show that the females are more prone to develop eating disorders (Anorexia Nervosa and bulimia nervosa) than males. Thus, the focus of this chapter will be on understanding specific psychological disorders frequently found among women. It will also be briefly discussed what is going on in a particular person's life that may result in a specific psychological disorder and what can be done to alleviate the sufferings of such persons? In order to respond to these questions, it is crucially important to define what is "Mental Health"?

1. WHAT IS MENTAL HEALTH?

Mental health has to do with the way one adjusts to life. Good mental health involves the way a person thinks, the way he/she acts and his/her relationships with others that facilitate his/her personal growth and prosperity without obstructing others'. Sarason & Sarason (1987) suggest that failures in living (manifested in form of psychological disturbances) are due mainly to failures in adaptation. Adaptation involves the balance between what people do or want to do, on the one hand, and what the environment (or the community) wants; on the other hand. How well we adapt determines our mental health? As we go through different seasons in our life and pains of growing up, the success of our adaptation depends upon two factors: (i) our personal characteristics, such as, inner potentials, coping skills, attitudes and physical conditions; (ii) the nature of the situations that confront us, for instance, family conflicts or natural disasters because nothing - neither ourselves nor the environment - stays the same for very long, adaptation must take place all the time. The extremely rapid rate of change in the modern world may overwhelmingly strain our ability to adapt resulting in feelings of being bogged down. Although nobody is entirely free from worry, things happen that can cause quick and sometimes chronic anger, anxiety, fear and distrust. The important point is that these feelings should be only responses to life's everyday stresses.

A mentally healthy person can cope with life even when going becomes rough and tough. Of course, it is not always easy, and it is not without some struggle. But, he or she is able to handle life's usual challenges and changes, and the different stages every one faces in life, such as school, marriage, loss of loved ones, and retirement without becoming "bogged down".
4. SPECIFIC PSYCHOLOGICAL DISORDERS AND WOMEN

4.1 Hysteria (Conversion Disorders): Case - A

Historically, the term Hysteria is derived from the Greek word meaning "Uterus". During the Golden Age of Greece, the Great Greek Physician Hippocrates suggested that "Hysteria" was caused by sexual difficulties particularly by the wandering of a "frustrated uterus" to various parts of the body primarily because of sexual desires and an overwhelming longing for children. Consequently, Hippocrates restricted this disorder to women and considered marriage the best remedy for it. Later, Freud (1909) used the term "Conversion Hysteria" to indicate that symptoms were in fact an expression of repressed and deviated sexual energy..... psychosexual conflict converted into a bodily disturbance. Hence, the term "Conversion Hysteria" was coined by Freud.

During the World War I and II, conversion reaction were the most frequent type of psychiatric syndrome among the combat personnel. The clinical studies showed that many soldiers faced a highly threatening approach-avoidance conflict in which military orders and doing one's duty were pitted against the fear of being killed or captured as POW by the enemies. The sudden onset of conversion symptoms, such as, paralysis of arm or a leg or blindness or inability to straighten one's hand enabled the soldier to avoid the combat situation without being labelled as a "Coward" or being subject to court-martial. Interestingly enough, conversion disorders were common in both the civilian and military life several decades ago. But, it is now rarely encountered in the Western countries though quite prevalent among the Pakistani females. Perhaps, this decreased incidence (in the West) is closely related to their growing knowledge and sophistication about medical and psychological disorders. There is sufficient clinical evidence that conversion disorders lose their defensive function if it can be readily and clinically shown to lack an organic basis. Unfortunately, the Pakistani women continue to be the lowest in terms of their academic and socio-economic status. Consequently, the conversion disorder does serve a defensive function for them. Whenever, they face an overwhelming psychosocial stress, such as, threat of divorce or family conflicts.

In the contemporary psychopathology, the term Hysteria has been dropped and "Conversion Disorder" is used as one category of a spectrum of disorders under the major diagnostic class of "SOMATOFORM Disorders" (DSM III-R, 1988). Second, there is no clinical evidence or definite information available to suggest that this disorder is restricted to
appropriate and thorough medical investigation, before an individual is given the diagnosis of conversion disorder. A guideline for the diagnosis of Conversion Disorder is given in Box 17:3.

Box. 17:2. Histrionic Personality Traits

1. Constantly seeking or demanding reassurance, approval or praise.
2. Sexually seductive in appearance or behaviour.
3. Overly concerned with physical attractiveness.
4. Self-centered, impulsive in obtaining immediate satisfaction, probably, due to low tolerance for the frustration of delayed gratification — of needs.
5. Rapid shifting and shallow expression of emotions.
6. Exaggerated expression of emotions, often inappropriate — temper tantrums; or uncontrollable sobbing on minor sentimental occasions.
7. Dramatic and impressionistic speech-style which is excessive in nature.
8. Irritable in situations in which he or she is not the centre of attention .... attention-seeking behaviour.

Adapted from DSM III - R (1988) pg. 349.

Box. 17:3. Diagnosing Conversion Disorder (Hysteria)*

1. A loss of, or alteration in, physical functioning suggesting a physical disorder.
2. Psychological factors (interpersonal or intrapsychic conflicts or psychosocial stressors) are judged to be etiologically related to the symptom because of the temporal relationship between a traumatic event or psychosocial stressor and the initiation or exacerbation of the symptom.
3. The person is not conscious of intentionally producing the symptom.
4. The symptom is not limited to pain or to a disturbance in sexual functioning.
5. The symptom is not culturally sanctioned response pattern and cannot, after appropriate medical investigation, be explained by a known physical disorder.


It has been observed that such misconceptions about mental disorders have aggravated the agony of those who already feel like swimming against the voracious tides of life stressors. Nevertheless, it is quite true that often mental disorders (especially, psychotic in nature) make us uncomfortable or even a little frightened probably because these are the unusual instances of human failure, inadequacy and unhappiness. Consequently, the stigma associated with mental disorder— the sense of disgrace and shame or the reality of rejection—is experienced by most of the people who have a history of mental disturbance. Ironically enough, the general public tends to respond to the physically sick people (such as, cases of T.B., Cancer etc.) in a sympathetic and compassionate fashion, but, callously shrinks away from the mentally sick. Perhaps, the pain and the suffering of the physically ill individual is visible, and it does not threaten the ego of others, whereas, the psychic distress of the mentally disturbed is invisible and too complex to be understood easily. As a result, the psychosocial problems of such patients would exacerbate their state of emotional turmoil. Moreover, there is sufficient clinical evidence that suggests that once a woman is identified as a "Mental Patient" in our society, she experiences more of the prejudice, rejection, and discrimination as compared to the male patients. APA (1991) advocates the notion that women’s emotional problems, such as, depression are often caused by a system that is historically a male-dominated system. Women continue to receive unequal treatment, unequal opportunity and unequal compensation both in the West and the East. Thus, the clinical psychologists are rightly concerned with the inevitable effects of such inequalities on the mental health of the women.

It is worth-mentioning that the spectrum of mental disorders is wide-ranging from reality-defying delusions and hallucinations accompanied by debilitating (as is true in case of schizophrenia) to simple worries or mildly queer behaviour (such as, compulsive hand-washing or checking the door-knobs) that does not interfere significantly with our everyday life. Interestingly enough, clinical studies have indicated that some specific disorders are more prevalent among females than males. (Sarason & Sarason, 1987; DSM III-R, 1988 Youngstrom, 1991). For instance. (Adler, 1991; Avis, 1991) found a correlation between depression and menopause. "Women become depressed and irritable during menopause"
Impulse Control Disorder.

Adjustment Disorder.

Psychological Factors Affecting Physical Condition.

Eating Disorders.

a. Anorexia Nervosa.
b. Bulimia Nervosa.
c. Binge Eating.

Personality Disorders.

Developmental Disorders.

Since the present chapter deals with specific psychological disorders prevalent among women, it will be restricted to the discussion on following disorders only:

I. Conversion Disorder (Hysteria)
II. Phobic Disorders
III. Depression
IV. Eating Disorders

Self Assessment Questions

Q.1. Name any five myths about mental disorders which are prevalent amongst the Pakistani rural community.

Q.2. Name two specific disorders that are more prevalent among females than males. Why?

Q.3. What are some symptoms of Mental Disorders?

Q.4. What is DSM?

Q.5. Give five axes of DSM III-R.
2. WHAT ARE SOME SYMPTOMS OF MENTAL DISORDERS?

a) *Undue, Prolonged Anxiety*: This is an anxiety out of proportion to any identifiable reason or cause. Of course, there are some life events or situations (such as, a small child in danger of being hit by a car) that would cause anxiety and tension. However, a deep and continuing anxiety, a state of constant fear and apprehension, fastening itself upon first one "cause" and then another and another - is not healthy.

b) *Depression*: The kind of overwhelming sadness that takes hold and usually is followed by withdrawal - from friends, from loved ones, from the usual occupations and hobbies that previously gave pleasure. A person suffering from depression does not seem to care or to be aware of what goes on around him. Other symptoms may include feeling badly about self, losing confidence, being unduly pessimistic or feeling constantly helpless.

c) *Abrupt Changes in Mood and Behaviour*: Others may notice these changes more than the person himself/herself. For example, when a person becomes depressed after a job promotion, which should give pleasure or, when one's usual habits become markedly different and contrary to him/her usual way of thinking, such as, when a person usually careful with money suddenly begins gambling heavily.

d) *Tension - Caused Physical Symptoms*: These are physical ailments and complaints having no apparent organic cause. They may range from daily headaches to nausea, exaggerated pains, and a general attitude of physical complaints without physical basis. However, these psychosomatic symptoms, including pains are very real for the individual suffering from mental disorder. Nevertheless, any persistent physical ailment should be checked with a personal or family physician first. Because, sometimes medical tests may reveal an organic cause after the person has decided his ailment is "all in his head". Thus, in such cases, only a physician is qualified to determine whether or not a physical complaint has an organic basis.

e) *Perfectionism*: An attitude of perfectionism may mean unrealistic demands by the person upon himself, his family and friends, or job situation. The requirement that everyone and everything, including oneself, be "perfect" is an unrealistic ideal that can cause great stress to a person, his family and associates. The perfectionism often lacks
INTRODUCTION

There has been a worldwide and ongoing effort to better understand mental disorders; find more effective therapeutic interventions and preventive programmes in order to alleviate the psychic distress of the mentally disturbed individuals. Historically, diverse terms have been used to refer to the wide variety of human problems that find expression in the so-called "Abnormal Behaviour". These terms are: Maladaptive Behaviour, Mental Disorders, Psychopathology, Emotional Disturbance, Mental Illness, Behaviour Disorder, Mental Disease, Insanity and Lunatic Behaviour. Currently, the American Psychologists and American Psychiatrists prefer to use the term "Mental Disorders" or "Psychological Disturbances" instead of "Disease" or "Illness" (DSM III -R, This writer will, also, use the terms "Mental Disorders" or "Psychological Disorders" or "Psychological Disturbances" interchangeably.

Traditionally, there have been myths about mental disorders. Let us see how many of these are still generally upheld by people.

Read the following statements and put a cross (X) against TRUE if you agree or cross FALSE if you disagree.

<table>
<thead>
<tr>
<th>Box. 17:1</th>
<th>Statements</th>
<th>TRUE</th>
<th>FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Disorder does not strike the &quot;Average&quot; person.</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>There is little hope of recovery from Mental Disorder.</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>The &quot;Average&quot; person can not afford Psychiatric Treatment.</td>
<td>-</td>
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<tr>
<td>The Mentally disturbed act &quot;CRAZY&quot;.</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Medications only sedate patients.</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>Mental Hospitals are scary places.</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Mental Disorder is a Hereditary Stigma.</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Mental Disorder is primarily a problem of adults.</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>People should be able to handle their own emotional problems.</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>People who talk about suicide rarely commit suicide.</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Answer: Correct response is &quot;FALSE&quot; to all of these Statements.</td>
<td>-</td>
<td>-</td>
<td></td>
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</table>
4.2 Phobic Disorders: Case - B

The word PHOBIA is derived from the Greek word "PHOBIAS" who was a Greek god of FEAR. His likeness was painted on masks and shields to frighten enemies in battle. Thus, the word PHOBIA came to mean fear, panic, dread or fright. In DSM III-R (1988), Phobic Disorders considered as one type of anxiety disorders.

In phobic disorders, the individual experiences overwhelming anxiety if he or she confronts the dread object or situation. Gradually, it becomes a persistent fear of some person or object or situation that presents no actual (real) danger to the person. Unlike the generalized anxiety cases, the phobic patients know exactly what they are afraid of. Thus, they usually do not engage in gross distortion of reality. However, their fears are out of proportion with reality which seem inexplicable, and are beyond their voluntary control as is true in case of Mrs. B.

Case: B

Mrs. B is a 30 year old married female who sought psychotherapy for her persistent fear of thunderstorms that had become progressively more disturbing to her. She acknowledges being afraid of storms as a child though this fear seemed to abate somewhat during her adolescence. However, she has noted that it is increasing again for the past 6 or 7 years.

- During a thunderstorm, she experiences intense anxiety and is most frightened of lightening. Interestingly enough, she recognizes that her fear of being struck by lightening is an unlikely occurrence and an irrational fear. Yet, she cannot control her anxiety which is immediately triggered by any sound or signs of a thunderstorm. During a storm, she tries to be with another person or a friend which often reduces her fear to some extent. Sometimes, when her husband is away on official tours, she would rather stay overnight at a friend's or a relative's place if a storm is forecast or ask them to come over her place. She further stated that during the storm, she feels extremely anxious, covers her eyes and immediately moves away from the windows so that she could not see lightning.

- She has 4 young children and described her marriage as a happy one. Her husband appeared very supportive and cooperative. However, she was afraid of being a poor 'role model' for her children because of this phobia of thunderstorms. Her intense fear interferes with her routine life as
case of Malingering. On the other hand, "fits" - without any organic etiology - seem to occur in response to stressful situations. Thus, the diagnosis of Conversion Disorder - Recurrent was given.

The patient is being treated with her husband in family sessions at the present.

Looking at the complicated and fascinating nature of this illness, the question arises what the person derives from conversion Symptoms? Clinical studies reveal two main mechanisms that explain why and how the conversion symptoms are maintained? These mechanisms are:

(i) Primary Gain.
(ii) Secondary Gain.

In the first mechanism, the person achieves "primary gain" by keeping an internal conflict or a threatening need or impulse out of his/her awareness. In such cases, there is often a temporal relationship between an environmental stimulus that is apparently related to a psychological conflict or need and initiation or exacerbation of the conversion symptom. For instance, in case of Mrs. A, we notice that sudden onset of "fits" occur after family conflicts or psychosocial stressors. In other cases, after an argument, the person may develop "Aphonia" loss of speech or "paralysis" of arm which infact is a symbolic expression of underlying conflict about intense feelings of rage and hostility. Similarly, if the person views a traumatic event and experiences conflict about acknowledging that event, it may be expressed in form of conversion (hysterical) blindness. In such cases, the disorder has a symbolic value that is a representation and partial solution of the underlying psychological conflict.

In the second mechanism, the patient achieves "secondary gain" by avoiding a particular activity that is noxious to him/her. At the same time, the person also gets much support, attention and sympathy from the significant others that otherwise might not be forthcoming. For example, with a "paralysed" hand, a soldier can avoid firing a gun and/or being court martialled. Thus, he may be sent back to a supportive social setting instead of being in the battlefield.

Perhaps, it makes some sense for my readers why Conversion Disorders are so common among women living in India, Pakistan and neighbouring countries. Probably because the women are the most
fear arousing stimuli tend to be animals, objects or events that presented real dangers in earlier stages of human evolution. Such as, dogs, snakes, spiders, etc. Traditionally, phobias have been named by means of Greek prefixes that stand for the object of the fear, as follows:

- Acrophobia - fear of high places fear.
- Agoraphobia - fear of open and unfamiliar setting.
- Hematophobia - fear of blood.
- Zoophobia - fear of animals

The DSM III - R (1988) have avoided these names because a staggering number of labels (mostly Greek) would be needed to take account of the great variety of phobias that have been observed among the clinical population. Today, the professionals have grouped phobic disorders into three categories, as follows:

(a) Simple Phobias.

(b) Social Phobias.

(c) Agoraphobia.

(a) Simple Phobias:

Simple phobia is an irrational and persistent fear of a circumscribed stimulus — object, or situation which is excessive and produces intense anxiety in the person. For instance, fear of snakes, dogs, rats or spiders. Simple phobias are relatively rare, and are miscellaneous. Often, these fears tend to be chronic and need psychotherapeutic interventions to disconfirm
the mistaken belief about the stimulus. A guideline for the diagnosis of simple Phobia is given in Box 17.5.

(b) Social Phobias

Social phobias are characterized by fear and embarrassment in dealings with others. Such as, fear of public speech or fear of choking on food when eating in front of others. Often, the individual's greatest fear is that signs of anxiety such as intense blushing, tremors of the hands, and a quavering voice will be detected by people with whom he or she comes into contact.

Clinical studies reveal that most phobias about interpersonal relationships involve one or more of the following fear: fear of asserting oneself; fear of criticism; fear of making a mistake; fear of public speaking; fear of scrutiny etc. Often, such individuals go through life feeling inadequate and also have many interpersonal difficulties. As a result, we may also notice secondary depressive symptoms in such cases. At times, panic disorder and simple phobia may co-exist with Social Phobia.

(C) Agoraphobia:

The most common phobia is agoraphobia. It is an intense and unreasonable fear of being in places or situations from which escape might be difficult or embarrassing or in which help might not be available in case of emergency. Consequently, agoraphobic avoid going to open spaces, travelling, or being in crowds. In severe cases, the individual may not leave familiar home-setting or even walk down the street alone. Sarason & Sarason (1987); Foa, Steketke & Young (1984) suggest that agoraphobia is more common among women than among men. It often begins in late teens, although it is also observed in older people. See Box 17.7 for further guidelines to diagnose agoraphobia.

Recent clinical researches suggest that agoraphobic can be divided into two groups - those with and those without panic attacks. Chambless, Caputo, Craig, Jasin, Edward & Williams (1985) found that agoraphobic report more disturbing thoughts and stronger bodily reactions (physiological over-reactivity) when nervous than normals do. They are often passive, dependent and clinging persons. Gittelman & Klein (1984) found an association between childhood separation anxiety and
physical or known pathophysiologic mechanism. Thus conversion symptoms seem to be naive inventions or defenses unconsciously developed by the patient without regard for the actual facts of anatomy as is manifested in Case A.

Case: A

"Mrs. A came to this author's clinic with complaints of "fits" for the past five years. Her husband described these "fits" as sudden in onset and usually lasting for 10-15 minutes. Both the patient and her family believe that her "fits" are evidence of a physical illness and are not under her control. Nevertheless, they recognize that these "strange fits" usually occur after family disorders or serious arguments with family members or friends. During the fits, she becomes unresponsive, her eyes are tightly closed, jaw is clenched and her body becomes very rigid. Often, there are bizarre and thrashing movements of extremities. At such moments, she shouts, cries and abuses. However, after the "fit" she can not recall anything.

These episodes have been occurring suddenly for the past five years. She is reported to function quite well in between the "fits" and does not complain of depression or anxiety.

Mrs. A is a 26 year old female who comes from a middle-class, urban family with low education. She has been married to a Technician in a Govt. Office for about six years. They have four children. Her in-laws (including a sister-in-law, mother-in-law and father-in-law) also live with the family. This often leads to family conflicts and economic pressure. The family members describe Mrs. A as a somewhat immature, but, quite social. Psychological test results and case-history interview give the impression of a self-centered, insecure and somewhat demanding young lady who craves for attention from others, and tends to react with irritability and anger if her wishes are not immediately fulfilled. She handles her routine household tasks well except for the episodes of "fits".

The Mental Status Examination did not reveal any pathology in her speech, thought, perception, orientation or intellectual functioning. No mood disturbance was noticed. Her recent and remote memory was intact. The Skull X-ray was normal and EEG (Electroencephalogram) slightly resembled epileptic seizure; the absence of essential features of organic seizures as incontinence and biting of the tongue strongly suggested a non-organic etiology of "fits", further supported by normal EEG. I also did not see any evidence of intentional feigning of these symptoms as is noted in
a mother and a housewife, therefore, her husband encouraged her to see a psychologist.

Her case-history interview did not reveal any stressful situation in the recent past. However, she reported being abandoned by her father (at age 6) on a stormy night when her parents finally separated. Her mother did not re-marry and Mrs. B was brought up by her maternal grand-parents and uncles in a joint-family system. However, the family avoided discussing this distressing event that resulted in the separation between her parents.

The mental status examination did not reveal any abnormality in her speech, thought, perception, orientation or intellectual functioning. Her mood was somewhat anxious. She appeared to be in good physical health. She denied any past or present history of panic attacks or social phobia.

Usually, she fulfills her house-hold responsibilities well. However, her irrational fear and avoidant behaviour frequently interfere with her normal life only temporarily. Thus, the diagnosis of Simple Phobia was given.

Presently, she is receiving individual psychotherapy on a weekly basis.

It is true that many people feel uncomfortable during thunder and lightning storms, but, Mrs. B’s fear of this circumscribed stimulus is clearly excessive, causes her considerable distress and is recognized by her to be irrational. Yet, she is unable to control her fear and the avoidant behaviour that significantly interfere with her normal routine. It may be further argued that the phobic cases do not need the actual presence of the feared object or situation to experience intense tension and discomfort. Consequently, such persons strive to organize their lives in such a way as to minimize exposure to the fear-arousing stimuli.

Sarason & Sarason (1987) suggests that the onset of many phobias is so gradual that it is difficult to tell whether there are any specific precipitating factors. Torgerson’s study (1979) of phobic patients showed that their fears fell into five categories as mentioned in Box 17:4. These are: (i) Separation, (ii) Animals, (iii) nature, (iv) bodily mutilation, (v) social situations.

One of the most interesting feature of phobias is that the stimuli that evoke the phobic reactions are not picked at random. The most common
oppressed class with unequal rights, unequal treatment and unequal opportunities (for education or job in particular) in these countries. The most obvious and 'classic' conversion symptoms are:

1. Paralysis.
2. Aphonya - loss of normal speech - the person can only whisper.
3. Seizures - Fits.
5. Anaesthesia - loss of sensitivity.
6. Astasia - abasia - inability to walk or stand.
7. Coordination Disturbance - jerky motions.
10. Paraesthesia - Exceptional sensation, such as, tingling.
11. Akinesia
12. Dyskinesia - loss or impairment of voluntary movements.
13. Anosmia - loss or impairment of the sense of smell.

Often, the conversion symptoms suggest some neurological disease, at times it may also involve the autonomic or endocrine system. For instance, vomiting as a symptom may represent revulsion and disgust. Pseudocyesis (false pregnancy) can represent both a wish for and a fear of pregnancy.

It is worth-mentioning that clinical conversion cases usually involve a single disturbance during a given period or episode. However, different bodily sites might be affected in subsequent episodes. Unusually, these symptoms emerge in a setting of extreme psychosocial stress or challenging experiences of conflictual nature. Spitzer, Gibbon, Skoda, Williams and First (1989) suggest that histrionic personality traits (see Box 17...) are common, but, not invariably present. One of the peculiar feature of Conversion Disorder is La Belle indifference that suggests a relative lack of concern (on the behalf of the patient) about what appears to be an incapacitating physical disturbance.

In some instances, the patients are given an initial diagnosis of conversion disorder incorrectly, because, the true organic pathology or a neurological disorder has been missed. Thus, it is strongly recommended to rule out physical disorders with vague, multiple, somatic symptoms, such as, multiple sclerosis or systemic lupus erythematosus by carrying out
females only. However, one particular conversion symptom "**GLOBUS HYSTERICUS**, the feeling of a Lump in the throat that interferes with swallowing is apparently more common in females" (DSM III-R, 1988, pg. 259). Spitzer, Gibbon, Skodol, Williams & First (1989) and Sarason & Sarason (1987) suggest that the usual age at onset is often the adolescence or early adulthood though the symptoms may appear for the first time in middle age or even in later decades of life.

According to DSM III-R (1988)), Conversation Disorder is one type of Somatoform Disorders. The essential features of this group of disorders are:

(a) Physical symptoms suggesting physical form (hence, the terms Somato) for which there are no known pathophysiological mechanisms or any solid visible organic cause. The essential feature of conversion disorder is an alteration or loss of some physical functioning that suggests physical disorder without any real underlying organic pathology. For instance, the individual may be unable to feel anything in one hand (Glove Anaesthesia) although the arm has normal sensations and normal evoked potential as measured by EEC. Second, it is anatomically impossible to have Glove Anaesthesia, because, the sensory nerve supply to this part of the body is organized so that Glove Anaesthesia could not be a result of a neurological disorder. The conversion reaction, in fact, is an expression of psychological conflict or unmet needs or unfulfilled wishes or impulses that are threatening to the ego of the individual.

(b) There is positive evidence or a strong presumption that these so-called physical symptoms are linked to the psychological factors or underlying conflicts. However, these symptoms do not seem to be under the voluntary (intentional) control of the patient as is true in case of Malingering (Factitious Disorders).

Sarason & Sarason (1987) argue that conversion disorder (Hysteira) refers to a condition in which psychological factors are judged to be etiologically related to a "loss or alteration of physical functioning that suggests a physical disorder" (DSM III - R, 1988, p.g. 255). As a result, these symptoms cannot be explained in terms of the principles of medical science. Often, the appropriate and thorough investigation rules out any
Agoraphobia which was much stronger in women than in men. The psychosocial, cultural, and religious factors for "sex typing" and "gender stereotypes" might be responsible for the higher incidence of agoraphobia among women.

**Box. 17:4 Torgersen's Five Categories Of Phobias**

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategories</th>
</tr>
</thead>
</table>
| I. Separation Fears | Crowds.  
                               Travelling alone.  
                               Being alone at home. |
| II. Animal Fears   | Mice.  
                               Rats.  
                               Snakes  
                               Insects. |
| III. Mutilation Fears | Open wounds.  
                               Blood.  
                               Surgical operations. |
| IV. Social Fears   | Eating with strangers.  
                               Being watched writing.  
                               Being watched working. |
| V. Nature Fears    | Mountains.  
                               The Ocean  
                               Cliffs, heights, storms etc. |
Box. 17:5 Simple Phobia

1. A persistent fear of a circumscribed stimulus (object or situation) other than fear of having a panic attack or fear of humiliation or embarrassment in certain social situations.

2. Exposure to the specific phobic stimulus or stimuli almost invariably provokes an immediate anxiety response.

3. The object or situation is avoided, or endured with intense anxiety.

4. The fear or the avoidant behaviour significantly interferes with the person's normal routine or with usual social activities or relationships with others or the individual expresses marked distress about having the irrational fear.

5. The patient recognizes that his/her fear is unreasonable or excessive.

6. The phobic stimulus is not related to the trauma of Post-traumatic Stress Disorder or to the content of the obsessional thoughts.

Adapted from *DSM III R* (1988), pg. 244-245.

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Box. 17:6 Social Phobia

1. A persistent fear of one or more social situations in which the person is exposed to possible scrutiny by others and fears that he or she may do something or behave in a way that will be humiliating or embarrassing.

2. During some phase of this disturbance, exposure to the specific phobic stimulus or stimuli almost invariably provokes an immediate anxiety response or avoidance behaviour at the very idea of being exposed to such a social situation.

3. The phobic situation is avoided, or is endured with overwhelming anxiety.

4. The avoidant behaviour interferes with occupational functioning or with usual social activities or relationships with others, or there is marked distress about having the fear.

5. The person recognizes that his or her fear is excessive or unreasonable.

Adapted from *DSM III - R* (1988), pg. 243.
Box. 17:7 Agoraphobia

1. Fear of being in places or situations or fear of entering unfamiliar situation from which escape might be difficult or embarrassing or in which help might not be available in the event of suddenly developing a symptom that could be incapacitating or extremely embarrassing. For instance, dizziness or falling; depersonalization or derealization; loss of bladder or bowel control; vomiting or cardiac distress etc. Consequently, the person either restricts travel or needs a companion when away from home or else endures agoraphobic situations despite intense anxiety.

2. Usual agoraphobic situations include being outside the home alone, being in a crowd, or standing in a line at a shopping plaza, or being on a bridge, or travelling in a bus, train or car.

3. Has never met the diagnostic criteria for panic Disorder.

Adapted from DSM III - R (1988), Pg. 241.

4.3 Depression: Case - C

The term depression is used in everyday language to refer to a feeling of sadness or a decrease in general activity level. The general public often considers depression as a reaction to a situation or a person's characteristic style of behaviour or a feeling state. Often, people experience "Blues" in a rainy weather, during an annoying cold, or after an argument with a friend or after holidays, such as, Eid Holidays or after moving to a new place or a new home. The very fact that these feelings of depression or sadness have been experienced by almost everyone, these feelings alone are not enough to warrant a diagnosis of depressive mood disorder. The reason is that this kind of depression fades away after the event has occurred or the person becomes accustomed to the new surroundings.

Freud (1917/1957, p. 246), in his major work on depression, "Mourning and Melancholia" described both normal mourning and melancholia (depression) as responses to the loss of someone or something that was loved. Freud argues that in contrast to the mourner, the melancholic "suffers extraordinary diminution of self-regard an impoverishment of his ego on a grand scale". Thus, in psychotic depression the ego becomes cold and empty in contrast with the normal grief in which the world becomes cold and empty. In fact, the capacity to become depressed is almost universal and not restricted to any personality type.
though it's manifestation and expression of the intensity of feeling of
depression may vary from culture to culture. It is true that depressive
feelings change with development. The meaning, the dynamics and the
cognitive context for experiencing depressive feelings increase in
complexity as the child develops. Depression often seem to begin after
some stressful event, such as, marriage or parenthood or a loss. However,
when the individual continues to experience intense depression long
afterward instead of returning to normal as time passes, the person may
start showing signs of inappropriate thought patterns tending to generalize
every event into a calamity and to view the world in the bleakest of terms.
That's when we talk about "Clinical depression".

Another kind of depression is bereavement or grief reaction as a
result of a loss or a death or separation in the family or disappointment that
accompanies the end of a love affair. The ego psychologists argue that
major painful emotions like sadness, grief and bereavement sever our
adaptation to life crisis; loss helps us to preserve our life and protects us
from recurrent harm. They further suggest that absence of such a reaction
might be bad for the person in the long run. During the process of grieving,
the guilt, hostility, feelings of loss and physical symptoms (such as,
weakness, tightness of the throat or sighing) gradually disappear. Thus, it is
equally normal to experience grief and mourning when faced with death
and dying issue or object - loss.

In DSM III - R (1988) both depression which is characterized by a
feeling of sadness and low spirits; and mania which is a speeded up state
often characterized by excitement or exuberance are included in the
category of Mood Disorders previously known as AFFECTIVE
DISORDERS. If depression is severe, it is called "MAJOR
DEPRESSION". The salient features of major depression are: (i) depressed
mood most of the day, nearly everyday; (ii) markedly diminished interest or
pleasure in all or most all activities; (iii) significant weight loss or weight
gain when not dieting; (iv) insomnia or hypersomnia; (v) psychomotor
agitation or retardation; (vi) fatigue or loss of energy; (vii) feelings of
worthlessness; (viii) diminished ability to think or concentrate and (ix)
recurrent thoughts of suicide or death.

If depression is less severe and not as incapacitating as it may be in
case of Major Depression, it is called DYSTHYMIA (depressive neurosis).
See Box 17:8 and Box 17:9 for the diagnostic criteria. If depressive
reaction occurs as a result of an identifiable event, it is called
ADJUSTMENT DISORDER WITH DEPRESSED MOOD.
"Clinical depression" (as mentioned above) is less common and is a more serious problem than the "temporary blues" that we all have gone through sometime in our lives. For years, the professionals have been struggling with the challenging question of where does the "normal depression" end and a "clinical depression" begin? Blatt, D' Affiliate & Quinlan (1976) suggest that depression can be studied on a continuum from "the blues" through the severe clinical categories, such as, Major Depression. Other researchers think that "depression" and "the blues" are two very different things. For instance, unlike blues, depression is not alleviated by reassurance or helpful advice from friends, family or dear ones. Helplessness and hopelessness are the two integral features of depression as noticed in Case - C.

Case: C

Mrs. C. is a 41 years old housewife and mother of six children. She was referred to me by her general practitioner because of her complaints of insomnia, depressed mood and lack of concentration. She has been married to an Engineer for 18 years and was previously working as a medical doctor. For the past one year, she has resigned because she thinks that she has lost energy and interest to carry on her work as a doctor. She has lost more than 20 pounds during six months, has become indecisive, sad and often, talks about death.

Once she tried to jump from the second floor of her house had a serious conflict with her husband. She desires her husband as irritable, abusive and domineering, but, added that he was very "nice and loving till the past year". Last year, when her in-laws visited their new home, she could not prepare meals for them. Her husband suddenly became angry, yelled at her and humiliated her in front of the guests. Later at night, he also hit her with his fists. However, then he expressed remorse for hitting her, but such family discords have been the routine for one year. Once he, also, threatened to divorce her for not working as a doctor.

Mrs. C had no past history of depression, there was no family history of violence, mental illness or substance abuse in her own family of origin. Her parents were happily married. However, she described the first 15 years of her own marriage as happy. But gradually her husband became irritable and critical of her. He would often blame her for not having a son and being the father of six daughters. Often, he would refuse to allow her family or friends to visit their home. She tried to convince him to try marital therapy, but, he refused.
She has become increasingly depressed, lost weight and lost interest in her job which she finally quit. Her appetite is poor, she cries a lot, feels worthless and often, wakes up at 4.00 a.m. in the morning unable to get back to sleep. Finally, her elder sister took her to a general practitioner. Her physical examination was normal. Thus, the physician referred her to me for further treatment.

The Mental Status Examination and case-history interview suggested that Mrs. C's mood is persistently depressed. Since her husband's angry tirades and abusive behaviour, she feels worthless and helpless. She has trouble concentrating and has difficulty sleeping. She speaks slowly describing her sad mood and lack of energy. She complains of being tired and has lost interest in her job, house-hold affairs and new dresses which she was previously fond of. She does not wear any make-up and appeared older than her stated age. It seems that what has kept her in marriage is a combination of low self-esteem and social pressures against leaving her husband. She blames herself for being a hopeless wife and mother and a worthless person. The future appears so bleak to her that she wishes to die.

She is a good example of Major Depression - Single Episode and is currently receiving individual psychotherapy.

We notice that two salient features of depression are (i) dysphoric mood (depressed, sad, blue, hopeless, irritable or worried) and loss of interest or pleasure in almost all of one's usual activities and pastimes. In addition, the following behaviour or changes may be present as was true in case of Mrs. C.

1. Poor appetite or weight change (often loss, sometimes gain).
2. Difficulty sleeping or early awakening.
3. Loss of energy and libido ... complaint of fatigue.
4. Psychomotor agitation or increased slowness of response that is obvious enough to be observed by others.
5. Feelings of self-reproach.
6. Inappropriate guilt feelings.
7. Complaints of inability to think clearly or concentrate.
8. Frequent thoughts of death or suicide or wishing to be dead.

Sarason & Sarason (1987) suggests that women are twice as likely as men to be diagnosed as depressed. This differences has been found not only in the United States and Canada or Western Europe, but throughout the world. Moreover, it has been observed that women who are depressed have greater number of symptoms than men do. Brown and Harris (1978) identified four vulnerability factors which may precipitate a depressive illness among females - (i) loss of mother before 11 years of age, (ii) presence of 2 or more children aged less than 14 years at home, (iii) lack of a confiding relationship and (iv) lack of full or part-time employment.

Javed & Mirza (1992) replicated Brown & Harris' research in Pakistani community. They found that family history of depression, social adversities, loss of mother before age eleven and lack of a confiding relationship were the risk factors associated with depression among Pakistani women. Chaudhri & Nisar (1985) studied psychiatric illness following childbirth among the Pakistani women. Their research findings suggest that the 90% of the cases with the diagnosis of puerperal psychoses suffered from affective illness - depression being the most common diagnosis in this group. Frerichs, Anscheusel & Clark (1981) carried out a survey in Los Angeles which indicated that women were twice as likely to be depressed as men and people at the lowest income level were found to be three times as likely to be depressed as those at the highest income level. Boyed and Weissman (1981) suggest that life time risk of unipolar depression (in which only depression occurs) is 8-12% for men, but 20-28% for women. Similar results are found whether depression is defined by clinical impressions or patients in treatment, community surveys of people not in treatment, studies of suicide and suicide attempt or reaction to bereavement. Though various biological reasons have been suggested for this male-female difference including sex-linked heredity and hormonal differences; other psychosocial factors, such as, the differences in social roles and behaviours expected of men and women cannot be underestimated.

Alder (1991) suggests that women who thought that menopause does not change most women in any important way did not experience overwhelming depression. Contrary to it, Mathaws & Lacey (1983) found that before menopause, about 80% women thought they were likely to get depressed during menopause. Avis' (1991) findings suggest that it's almost like a self-fulfilling prophecy. It may be argued that feelings of efficacy, of an ability to control one's life, are linked with health, happiness and
survival. Unfortunately, if women are unhappily married, poor or
depressed, they have none but themselves to BLAME, then, shame and
guilt would exacerbate their state of helplessness and worthlessness. Failing
to appreciate that often females', difficulties reflect the oppressive power of
social situation or institutions that advocate inequalities adds fuel to their
problems. Community surveys show that depression is a frequent problem
among individuals who seek clinical help for psychological problems or
even among those who repeatedly see their physicians for multiple physical
complaints. In many of these cases, people don't even seek treatment for
their depression. Thus depression is inadequately treated or masked in such
cases.

Aaron Beck (1982) thinks that a cognitive Triad of negative
thoughts about oneself, the situation and the future best describes
depression. Box 17.10 indicates how depressed people tend to emphasize
the negative aspects of any situation (over-exaggeration); misinterpret facts
negatively (distortion), have pessimistic and hopeless expectations about the
future. Clinical studies further indicate that depressed patients blame any
misfortune on their personal defects. They also tend to compare themselves
with others which further lowers their self-esteem mainly due to their
negative self-evaluation. Beck argues that the tendency to have these
negative cognitions (cognitive distortions) may be related to particular ways
of evaluating situations that grow out of childhood experiences. These
thought patterns - Depressogenic Schemata - affect all the elements of the
Cognitive Triad in later life. See Box 17.11 for further details.

Beck's cognitive approach predicts that depressed person's
attributions will be personal. That is, depressed people will blame
themselves when anything bad happens. When something good does
happen, it is usually attributed to luck. Whereas, most non-depressed
people accept responsibility for the Good for their lives, but, tend to blame
the situation or others when things do not work out. Seligman (1974, &
1975) introduced the concept of LEARNED HELPLESSNESS. Three
dimensions to this feelings of helplessness are summarized below:

(i) External vs Internal Locus of Control: People who are more likely to
become depressed or have a low self-image attribute the situation to
their own inability to control the outcomes than others who believe
otherwise.

(ii) Global vs Specific Continuum: If some one sees a situation as proof
that he or she is totally helpless, that person is more likely to be
process. In fact, under stress, people's ability to self-regulate does not just go to zero — it goes into the negative direction. Nden-Hocksema, Morrow & Fredrickson (1993) found that the more ruminative responses subjects engaged in, the longer their periods of depressed mood. In addition, women were more likely than men to have a ruminative response style and consequently, have more severe and long-term periods of depression.

**Box. 17.8 Major Depression**

1. Depressed mood most of the day, nearly every day as indicated by subjective account or observation by others.

2. Markedly diminished interest or pleasure in all, or almost all activities most of the day, nearly every day.

3. Significant weight loss or weight gain when not dieting. Such as more than 5% of body weight in a month or decrease or increase in appetite nearly every day.

4. Insomnia or hypersomnia nearly every day.

5. Psychomotor agitation or retardation nearly every day observable by others, not merely subjective feelings of restlessness or being slowed down.

6. Fatigue or loss of energy nearly every day.

7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day nor merely self-reproach or guilt about being sick.

8. Diminished ability to think or concentrate or indecisiveness, nearly every day, either by subjective account or observed by others.

9. Recurrent thoughts of death not just fear of dying, recurrent suicidal ideation without a specific plan or a suicide attempt or a specific plan for committing suicide.

10. It cannot be established that an organic factor initiated and maintained the disturbance.
Box. 17:9 Dysthymia

1. Depressed mood for most of the day, as indicated either by subjective account or observation by others, for at least two years. (one year for children and adolescents).

2. Presence, while depressed, of at least two of the following:
   i) Poor appetite or overeating.
   ii) Insomnia or hypersomnia.
   iii) Low energy or fatigue.
   iv) Low self-esteem.
   v) Poor concentration or difficulty making decisions.
   vi) Feelings of hopelessness.

3. No evidence of an unequivocal Major Depressive Episode during the first two years of the disturbance.

4. No Manic or Hypomanic Episode in the past history.

5. Not superimposed on a chronic psychotic disorder, such as, schizophrenia or Delusional Disorder.

6. It cannot be established that an organic factor initiated and maintained the disturbance.


Box. 17:10 Beck's Cognitive Theory Of Depression & Cognitive Errors

<table>
<thead>
<tr>
<th>Cognitive Errors</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overgeneralization</td>
<td>1. If it is true in one case it applies to any case that is even slightly similar.</td>
</tr>
<tr>
<td>2. Selective Abstraction</td>
<td>2. The only events that matter are failures, deprivation, etc. should measure self by errors, weakness etc.</td>
</tr>
<tr>
<td>3. Excessive Responsibility.</td>
<td>3. I am responsible for all bad thing, failures, etc.</td>
</tr>
<tr>
<td>4. Assuming temporal causality (predicting without sufficient evidence)</td>
<td>4. If it has been true in the past, then it is always going to be true.</td>
</tr>
<tr>
<td>5. Self-references</td>
<td>5. I am the centre of every one's attention, especially of bad performances or personal attributes.</td>
</tr>
<tr>
<td>6. &quot;Catastrophizing&quot;</td>
<td>6. Always think of the worst. It is most likely to happen to you.</td>
</tr>
<tr>
<td>7. Dichotomous thinking</td>
<td>7. Everything either is one extreme or another black or white; good or bad.</td>
</tr>
</tbody>
</table>
Box. 17:11 Schemata Used In Beck's Cognitive Theory Of Depression

Schemata (Silent assumptions)

i) Consist of unspoken, inflexible assumptions or beliefs.

ii) Result from past (early experience).

iii) Form basis of screening, discriminating, weighing and encoding stimuli.

iv) Form basis for categorizing, evaluating experiences, and making judgements and distorting actual experience.

v) Determine to the content of cognitions formed in situations and the affective response to them.

vi) Increase vulnerability to relapse.


SELF ASSESSMENT QUESTIONS

Q.1. Define Conversion Disorder. Who coined this term?

Q.2. What was the possible "primary gain" enjoyed by Mrs. A. suffering from hysterical paralysis of arm.

Q.3. How "Globus Hystericus" is different from Pseudocyesis?

Q.4. How phobia is different from our universal fears?

Q.5. Give salient features of social phobia.

Q.6. How Freudian explanation of Depression is different from that of Beck's theory of Depression?
4.4 Eating Disorders: Case - D

According to DSM III - R (1988), eating disorders are characterized by serious disturbances in eating behaviour which may take different forms, as follows:

a. Anorexia.
b. Bulimia Nervosa.
c. Pica.
d. Rumination Disorder of Infancy.

It is worth-mentioning that these disorders usually begin in adolescence or early adulthood. Pica refers to eating non-nutritive substance, such as, paint, leaves, hair, string, insects, pebbles and cloth. Rumination Disorder of Infancy is manifested in repeated regurgitation of food without nausea or associated gastrointestinal illness resulting in weight loss or failure to gain expected weight. It is primarily disorder of very young children and unrelated to Anorexia - Bulimia. Thus, the rest of our discussion will focus on Anorexia Nervosa and Bulimia Nervosa.

a. Anorexia Nervosa

The salient psychological features of Anorexia Nervosa are: intense fear of gaining weight or becoming fat even though the individual is underweight; refusal to maintain weight over a minimal normal weight for one's age and height; a distorted body-image and menorrhrea in females (see Box 17:12).

This incidence of Anorexia appears to be increasing among females, probably, as a result of socio-cultural pressures on females to maintain internationally, the "ideal weight". Crisp & Burns (1983) conducted a study at a large hospital over a period of 20 years and found that only 9% of the patients diagnosed as Anorexic were men, whereas, 91% were females. The team of the researchers who participated in the revision of DSM III-R (1988) also discovered that 95% of the "Anorexies" were females. Interestingly enough, the onset of Anorexia Nervosa and Bulimia Nervosa is usually in the early to late adolescence though it may range from prepuberty to the early 30's (rafe). The developmental theorists suggest that 12-18 years is the crucial life-span for the development of a coherent self-image and Gender Role Identification. Unfortunately, the females face more of the social-cultural pressures to meet the requirements of an "ideal body
and weight" in order to have positive self-concept. Hence, the researchers speculate that eating disorders often begin in adolescence when pressure to be "thin" leads to a cycle of dieting and indulging. The fact is that severe dieting predisposes people to binge eating.

The underlying cultural pressure for "thinness" in women are more obvious in case of ballet dancers for whom "thinness" is especially desirable because of their occupational need. Thus, it may be argued that female ballet dancers and models are more likely to be anorexic than other women of their age group.

Though the term "Anorexia" means nervous "loss of appetite", researchers have found that anorexies are indeed "hungry". Sarason & Sarason (1987) suggest that anorexies have both physiological and cognitive feelings of hunger, along with a strong preoccupation with food. However, it has been observed that their intense fear of becoming "fat" prevents them from taking their regular meals. Often, anorexies are found saying that they "feel fat" or that parts of their body (such as, bust, hip, waist etc...) are "fat" when in reality they are either underweight or emaciated. Thus, it may be stated that the disturbance in body-image is, in fact, manifested by the way in which the individual is experiencing his/her body weight, size or shape. Usually, anorexies are preoccupied with their body size and dissatisfied with some features of their physical appearance. Because of this experience of "feeling fat", the anorexic person may refuse to eat to such an extent that her body weight would be at least 15% below the normal level or fail to gain weight during a period of growth. Thus, weight loss is usually accomplished by a reduction in total food intake, often with rigorous and extensive exercising. In case of anorexia-bulimia, self-induced vomiting, purging and use of laxative or diuretics are also noticed. Since this author has not seen any case of "Anorexia" in Pakistan so far, she should like to present the case of a Roman Catholic, Irish-American young female who was assigned to this author during her doctoral level clinical internship at Greystone Park Psychiatric Hospital, state of New Jersey, U.S.A. For the sake of confidentiality the patient would be referred to as Case "D".

Case: D

Ms. D is a twenty-two years old Irish-American single female. She was transferred to Greystone Park Psychiatric Hospital from Warren Hospital because of a chronic and complex history of eating disorders
(Anorexic-Bulimic Swings) and self-destructive behaviour (two suicidal attempts). Her present problems are: an intense fear of gaining weight - "becoming fat" -; feelings of loss of control over her eating behaviour; episodic refusal to eat resulting in life-threatening weight loss; periodic binge eating when depressed or bored; frequent self-induced vomiting and use of laxatives or diuretics to reduce weight.

The patient traced the onset of her illness to age seventeen when she became overly concerned about her "body image" as a result of nagging remarks from her brothers about "being fat" - "too heavy". Being obsessed with the idea of being "awfully overweight" and how she "looked to the boys", she stopped leaving the house and refused to talk to anyone. She further started skipping her regular meals to remain "fit" and "not to be fat". She was treated at Horsham Clinic, U.S.A. and recovered temporarily. However, when she joined the college, she again started skipping her regular meals while overdrinking coffee. During this phase, she reported frequent episodes of binge-eating followed by purging and excessive use of laxatives and diuretics to "be thin". Finally, her anorexic-bulimic swings resulted in a life-threatening potassium deficiency, serious weight loss, incapacitating somatic complaints and confused thinking requiring hospitalization. Forced feeding via i.V's and careful monitoring of her diet have been constantly required to control her self-destructive anorexic-bulimic behaviour.

She comes from a middle class, fairly educated and religious-minded catholic family. She described her parents as overly strict and over-ambitious who gave "mixed messages" to their children. She reported frequent fights between her parents over father's alcohol abuse. At age 5, her parents separated for 6 months. At that time, she developed elective mutism for 4-6 weeks and other school problems. At age 8, she lost her only intimate girl-friend and became increasingly socially withdrawn, clinging, negativistic and oppositional during that period.

She is the 2nd born in a family of three children. The eldest brother has a reported history of "smoking pot" and younger brother encountered some legal problems because of his "reckless driving". She was an A-Grade student in school, but, she dropped out of college when she got one B-Grade .... "I was torn between school and relationships with significant others". She reported immobilizing anxiety and sexual conflicts resulting in a breakdown with her boy-friend.
Psychological testing, case-history interview and Mental Status Examination indicate that Ms. D is a bright, sociable and alert young female with no signs of cognitive disturbances at the time of this evaluation. Nevertheless, underneath this social facade is a very fragile and insecure person who is fearful of social criticism and abandonment. She perceives heterosexual relationships very threatening and dangerous. Thus, any sign of real or imagined failure or social rejection sets the stage for her self-destructive anorexic-bulimic behaviour. Low self-esteem, distorted body-image and fear of becoming fat further exacerbate her feelings of wordlessness, depression and inadequacy. Her anorexic-bulimic swings and suicidal attempts appear to be her passive-aggressive attempts to control others and receive the warmth and nurturance that she feels is lacking due to her father's alcohol abuse and mother's chronic illness.

She was treated with long-term intensive individual therapy, family therapy and out-patient Growth Groups for anorexic bulimics.

As noticed in case of Ms. D, people with eating disorders cannot exert continuous control over their intended voluntary restriction of food-intake. Consequently, they tend to have bulimic episodes (binge-eating) followed by vomiting (self-induced) or purging with laxatives to control their weight. However, it is worth-mentioning that all bulimics are not anorexies. We also noticed that the case of Ms. D came to the professional attention only when her weight loss was seriously marked. Besides being underweight and malnourished, she showed other signs too (as most anorexies do): hypothermia, edema, menorrhrea and a variety of metabolic changes (such as, electrolytes-imbalance).

Leon & Phelps (1984) found that those in bulimic-anorexic group are more likely than the anorexies to abuse alcohol/drugs or to have other problems of poor-impulse control, such as, stealing food. Moreover, the families of bulimic-anorexies are less stable, have more parental discord and physical health problems; and have experienced more negative events in the recent past. Thus, such families show higher rates of mood disorders and substance abuse disorders than others. Matthews & Lacey (1983) argue that anorexia (weight-loss and malnourishment) disturbs body's functioning in several ways, such as slow bone growth, anemia, dry skin, low body temperature and basal metabolism-rate, slow heart rate and lack of tolerance for cold, low potassium level and in extreme cases absence of menstrual periods which may occur only following hormone (estrogen) administration. Thus, anorexies are more likely to show depression and higher risk of suicide. Halmi, Lasky and Stokes (1983) suggest that the
malfunctioning of hypothalamus may precede the development of the anorexic behaviour and it may also be related to the impairment in dopamine regulation, and thus, to the development of depression. Let's see what happens in case of "Bulimia Nervosa".

b. Bulimia Nervosa

It refers to recurrent binge-eating episodes (rapid consumption of a large amount of food) at least twice a week for a minimum of three months with a feeling of lack of control over one's eating behaviour. This is often accompanied by self-induced vomiting, use of laxatives or diuretics, strict dieting or fasting or vigorous exercise to compensate for the binge-behaviour. Thus, the bulimics too manifest persistent overconcern with their body shape and weight. However, frequent weight fluctuations due to binge-purge or binge-fasts cycles are common in this group. Consequently, serious physical problems may occur, such as, potassium imbalance, dehydration, muscle weakness, and heart problems (i.e., cardiac arrhythmia). Moreover, self-induced vomiting can also damage oesophagus and tooth enamel as well as increase tooth decay.

The usual course of this illness is chronic and intermittent over several years. Usually, the parents of patients with this disorder are either obese or suffer from Major Depression. Read Box. 17:13 for further details to diagnose Bulimia Bervosa.

Johnson & Berndt (1983) found that binge-eaters usually consume 2,000 to 5,000 calories per binge which is almost twice the amount that most people consume in a day. Moreover, it has been noticed that the bulimics usually consume easily prepared, high caloric food, such as, chips and sweets. Mize (1985) further states that Binges often occur while the person is watching T.V. or in a car or in a fast food restaurant.

"Being out of Control" is a demoralizing aspect of Binge-eater's life. Youngstrom (1991) refers to Wilson and Agras' research findings that suggest pressure at work or school and problems with personal relationships often precede binges. Most bulimics feel anxious, depressed and somewhat guilty before a binge. Some bulimics report binges being prompted by contact with certain people, such as, fathers, mothers, sisters, or boy-friends which might have triggered some interpersonal conflicts i.e..... separation-intimacy. As a result, during such binges, the bulimics feel immediate relief from anxiety and depression. Thus, this chaotic pattern of
eating may be their means of coping with stress. That's why alternative coping skills and stress-management strategies are important part of their therapy.

Analyzing the "Binge-Purge Cycle", Sarason & Sarason (1987) argue that most of the bulimics feel disgust, and are angry at their lack of self-control, guilty over having eaten the "forbidden foods" that violate their perfect and strict diet standards and depression at their inability to stop binging. Mize (1985) and Rosen & Leitenberg (1982) suggest that "Post-Binge Purging" in form of vomiting may be their way of undoing the over-eating act. Abraham & Beaumont (1982) found that 70% of bulimics report thoughts about suicide at the conclusion of binge-purge cycle. Thus, it sets up a chaotic pattern that is self-reinforcing. Consequently, they need in-patient treatment followed by long-term cognitive-behavioural therapy in an out-patient setting.

Mumford, Whitehouse and Choudhry (1988) found an sufficient evidence of Bulimia Nervosa in Lahore and Mirpur (Pakistan). However, no case of Anorexia Nervosa was detected among these Pakistani girls so far. Thus, we may conclude that Bulimia Nervosa is a form of "Being out of Control" probably due to pressure at work or school, problems with personal relationships and identity issues. Furthermore, the system of social pressures and rewards is not the same for women as for men. Hence, more females show anorexia-bulimia disorder than men.

Box. 17:11 Anorexia Nervosa

1. Intense fear of gaining weight or becoming "Fat" even though the individual is underweight in reality.

2. Weight loss resulting in the maintenance of body weight 15% below the average expected weight for that specific age and height. In some cases, it may be failure to gain the expected weight during period of growth.

3. Absence of at least three consecutive menstrual cycles in case of a female who is, otherwise, expected to have normal menstrual cycle. Menorrhagia may result when a female has her periods only after hormone administration, such as, estrogen.

Adapted from DSM III-R (1988).
Box 17.12: Bulimia Nervosa

1. Recurrent episodes of binge-eating behaviour.
2. A feeling of "being out of control" during the phase of binge-eating.
3. A minimum of two episodes of binge-eating per week for a period of at least three months.
4. Persistent overconcern with body shape and weight.
5. The patient regularly engages in either self-induced vomiting, or use of laxatives or diuretics, strict dieting or fasting, or vigorous exercise in order to prevent weight gain.

Adapted from DSM III-R (1988).

SELF ASSESSMENT QUESTIONS AND EXERCISES

Q.1: Why eating disorders are more prevalent among females than males?
Q.2: What is DSM III-R criteria of Anorexia Nervosa?
Q.3: What do you understand by "Binge-Purge Cycle?"

Exercises

Exercise 1: Pick up any five myths about mental disorders in your surroundings and debate each myth in class discussion.

Exercise 2: Is it possible to be entirely free from worry, anxiety, anger, fear and distract? If not, why?

Exercise 3: Name five symptoms of mental disorders most frequently found in Pakistan.

Exercise 4: Ask five men and five women "what are the specific mental disorders manifested by women?" and why?

Exercise 5: Identify psycho-bio-social factors that predispose the South Asian Women to depression more than the men?

Exercise 6: Why the incidence of Anorexia-Bulimia is higher among the Western women as compared to the Pakistani Women?

Exercise 7: After reading this chapter, list salient features of Hysteria.

Exercise 8: Name five different types of simple phobias and give one example for each type.
BIBLIOGRAPHY


A. Kazdin. (Eds), Advances In Clinical Child Psychology, 5, 81-
111. New York: Plenum.

Matthew, B. J., & Lacey, J. H. (1983). Skeletal Maturation, Growth and
Hormonal and Nutritional Status in Anorexia Nervosa.

Mize, J. S. (1985). Bulimia: A review of it's symptomatology and
Treatment. Advances in Behaviour Research and Therapy, 1, 91-
142.

Eating Disorders in English Medium School in Lahore.

National Institute of Mental Health, (1983). Depressive disorders: Causes
and Treatment. Maryland: US Dept. of H.H.S.

styles and the Duration of Episodes of Depressed Mood. Journal of

Rosen, J. C., & Leitenberg, J. 91982). Bulimia Nervosa: Treatment with
Exposure and Response Prevention. Behaviour Therapy, 13, 117-
124.


Seligman, M.E.P. (1975). Helplessness: On Depression, development and

Friedman; and M.M. Katz (Eds). The Psychology of Depression:
Contemporary Theory and Research. Washington, D.C. V.H.
Winston.

Spitzer, R.L., Gibbon, M., Skodol, A.E., Williams, J.B.W., & First, M.B.

UNIT - IX

Treatment of Psychological Disorders
and Preventive Measures
OBJECTIVES

After reading this unit the student is expected to

1. Define the pros and cons of the traditional therapies.

2. Differentiate between traditional and current methods of treatment of various mental disorders.

3. Relate the basic process of various psychotherapies and its effectiveness for diverse clinical population.

4. Explain the ethical and professional responsibilities of the treating professionals in order to prevent client exploitation.

5. Give a view of how to live a healthy life.
INTRODUCTION

Human beings have always been concerned about their physical and psychic well-beings. Historically, there have been numerous misconceptions about the etiology of mental disorders (as mentioned in Unit 17). As a result, traditional therapies have been developed.

1. TRADITIONAL THERAPIES AND WOMEN

The traditional therapies have been the following:

I. Exorcism: *remove the evil that is believed to reside in the patient through counter-magic and prayers.*

II. Trephination: *A sharp tool, such as, a stone is used to make a hole in the skull to permit demonic spirits to escape.*

III. Mesmerism: *a form of hypnosis* Mesmer's use of "animal magnetism" to influence the distribution of the Magnetic Fluid in the Patient by touching the patient with his/her hand or his wand.

IV. Burning and Lashing the patient.

V. Use of cribs and Straight Jackets.

VI. Putting the head of the violent patient over old fashion ovens.

VII. Use of electric phrenometer.

VIII. Witchcraft and satanic rituals, such as, drum beating, flogging, use of purgatives made from animal's blood or dung or wine.

In many illiterate societies "Shamans" used to anoint the mental patients with Holy Water to break the spell of the evil spirits. In the rural areas of the Pakistani Society, such practices are still being carried out by the Piris, Faqirs or Mullahs or spiritual healers, predominantly male by sex.

During the prescientific period Shaman was the so-called "Medicine Man", a "Magician", a "Religious Man" who was believed
to have contact with the supernatural forces. Thus, he was considered to be the "Medium" through which spirits communicated with human beings. Consequently, it was believed that through Shaman the affected individual (mentally ill) could learn which spirits were responsible for his/her problems and what needed to be done to appease them. Often, such primitive healers create a "SCENE" in which he displays intense excitement and often, mimics the abnormal behavior that seeks to cure the patient. Through mystical utterances, violent movements and by acting out his dreams, the Shamans reveal messages from the spirits. Such rituals were and are still considered the basis of therapeutic change in the under-privileged and under-developed countries like Pakistan, India and Bangladesh; probably, due to lack of education and an acute shortage of trained professionals.

In Pakistan, both the patients and their families continue to believe in evil spirits, the voodoo powers and witchcraft. As a result, they tend to seek the so-called treatment from "Pirs", "Hakims", "Magicians", "Palm Readers", "Folk Healers" and other spiritual healers rather than turning to the trained mental health care workers and professionals. Most of the time, the female mental patients turn to such non-professionals mainly because illiteracy rate is much higher among the Pakistani females than males. However, with the dissemination of knowledge through television, radio and community workers, the concept of psychotherapy has been gradually introduced in Pakistan, too. Though an average Pakistani is still hesitant to consult a psychologist a the early stage of the onset of mental illness.

According to Hassan (1991) literacy rate is about 34% only for the entire Pakistani population and only one doctor is available for fifty thousand people. The medical help for mental disorder is available in very few hospitals only. As a result, many traditional faith healers enjoy flourishing business in remote areas of Pakistan where people are ignorant and mental health facilities are not available. In big Pakistani cities, there are few mental hospitals or psychiatric wards attached to the major hospitals. However, these facilities are very inadequate. Private clinics and community centers also provide modern treatment facilities to the mentally sick in some of the major cities of Pakistan, such as, Lahore, Karachi and Islamabad. Broadly speaking, the treatment of mentally sick in Pakistan can be divided into three categories:

1. The Muslim spiritual Healing Method,
2. The Pagan Rituals of Jins (Jinni) and Black Magic

3. The Modern Psychotherapies

1.1 The Muslim Spiritual Healing Method

Historically, the Muslim scholars and philosophers, such as, Ibn-e-Sina, Ibn-e-Arabi, Al-Ghazali, Al-Kundi, Miskawaih, Ibn-Tufail, Ibn-e-Rushid, Ibn-e-Khalidni, Al Mawasdi, Mohammad Ibn-e-Zakariya, Al-Razi, Roomi and Abdul Qadir Jilani have already paved the path for humanistic revolution in psychology. Their humanistic theory originated from the Islamic viewpoint that suggests that human beings have the capacity to differentiate what is good and what is evil and have an innate potential for self-fulfillment and self-actualization. In a sense, our freedom to shape our "being" - what we make of our existence - is both our glory and agony. Thus, the Muslim spiritual healers focus on helping the individual clarify his/her values and work out a meaningful way of "being in the world". The spiritual bond between Muslim Saints/Sufis and their followers facilitates empathic understanding, catharsis, and insight into one's intrapsychic and interpersonal conflicts. Hassan (1991) referred to some of the interventions used by the Muslim Sufis/Saints as discussed below:

i) Therapy through Zikr: Treatment through a sustained regime (effort) to sustain one's impulses to the moral will and thus, bring oneself close to "Allah" (God). Imam Ghazali recommended following processes for the development of a mature, healthy and full functioning personality:

a) Assigning the task to the self (Musharatulah)
b) Watching over the self (Muragabah)
c) Taking critical account of self (Muhasabah)
d) Punishing the self (Muagebah)
e) Exerting the self (Mujahadah)
f) Upraising the self (Muatabah)

ii) Therapy through Opposites: Here, the deliberate opposition to a conscious attitude has to be cultivated. This mode of treatment is especially used for such emotional disturbances which are caused by jealousy and envy.
iii) **Therapy through Similars**: Here, a client suffering from depression or anxiety may be given examples of others suffering similar maladies which enhances a sense of sharing and, thus, alleviate the pain of isolation.

iv) **Therapy through Reflection, Dialogue, Reading and Group Discussions**: Some sufis like Maulana Ashraf Ali Thanvi have used "Reflection" (mirroring the underlying feelings); persistent dialogue with God (a spiritual contact with God for going to sleep, verbalizing one's weaknesses/sins and promise to out-grow bad habits); constructive reading and group discussions among his followers to promote empathy and alleviate sufferings.

v) **Dream Interpretation**: Dreams are viewed as "Divine Guidance" by saints and sufis. Maulana Ashraf Ali Thanvi often encouraged his clients to narrate his/her dream along with one's own interpretations to the mentor. Thus, the dream analysis may help in unfolding the unconscious impulses of the person concerned and as a result, may promote self-awareness.

vi) **Music Therapy**: It is worth mentioning that most of our saints/sufis have been great poets and musicians themselves. Thus, they used music as a part of their mystic experiences. Many shrines and tombs of the Pakistani saints are famous for the special type of music session known as "Qawwali". Hassan (1991) explains that it is sung by a choir of male musicians accompanied by "Tabla" (two small drums), wind and string instrument. Traditionally, these music sessions are accompanied by "Zikr" and dance in ecstasy. The pre-condition of entering into such a therapy with a spiritual mentor is "Itiilla" (telling everything without holding back)... complete confidence in the mentor. The educated urban population, however, does not believe in such spiritual healing. Consequently, most of these methods are confined to the rural and remote underdeveloped areas or religious circles where people really have no other choice.
1.2 The Pagan Rituals of Jins and Black Magic

It has been observed that the faith healers (generally known as professors), healers of spirits (Jins) possession; palmists and so-called soothsayers also offer their services to the persons suffering from emotional disorders, particularly, in the rural areas. Such faith healers usually give amulets to their clients (which are holy verses written on a piece of paper) or after saying their prayers blow their breath over water or sugar and the clients are advised to take this water/sugar as remedy for their illness.

Healers of jins and evil spirits generally put the "possessed person" into a trance either through hypnosis or with the help of music and make him/her talk freely. Practitioners of black magic claim to have extra-ordinary powers through which they can hurt or help a person. Their therapy consists of first convincing the patient so that has and so has put magic spell on your son/daughter and it will cost this much money or so many goats or chickens for sacrifice to break this spell. The patient usually comes to the healer every week. Sometimes, the so-called healer may give some written magic words/numbers to be worn by the sick person or to be kept in his/her room.

Palmists and soothsayers read the lines in the palm of the hand and forecast the future or they may claim to have the knowledge of the future events by calculating the movements of stars and its association with one's birth date.

Unfortunately, such traditional healers tend to exploit people, interfere with or unnecessarily delay the adequate treatment because of the lack of formal training. Thus, often they end up hurting their clients rather than serving them.

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<tr>
<th>SELF ASSESSMENT QUESTIONS</th>
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<tr>
<td>Q.1. What is exorcism?</td>
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<td>Q.2. Why Trephining was used during the pre-scientific period?</td>
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<td>Q.3. Who is a &quot;Shaman&quot;?</td>
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<td>Q.4. What was Maulana Ashraf Ali Thanvi's method of treatment?</td>
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<tr>
<td>Q.5. Name five Muslim scholars who laid the foundation for Humanistic Revolution in Psychology?</td>
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and others which is pertinent to the therapist's formulation of the conceptual framework for a particular case. Through continued skillful listening, and empathic understanding the therapist is able to respond effectively to the needs of the client. The therapist's responses may take different forms. For example, questioning, commenting, analysis, interpretation, challenging, reflecting back, focusing, tracking, miraging, role play, role reversal or confrontation.

Often, therapists are genuinely interested in the degree of conflict and to what extent any one or all of the following three types of interpersonal relationships may be related to the client's current problems:


b. Current out-of-treatment relationships, such as with spouse, family or colleagues.

c. Past relationships (early childhood experiences).

For instance, the conflicts between the client and the therapist may emerge which are usually very similar to the client's earlier conflicts with parents or a friend or a spouse. Thus, certain themes may recur over several sessions that reflect the underlying needs, motives, impulses and pent-up emotions that must be dealt with professionally and in a non-threatening fashion.

Most psychotherapists adhere to some type of psychodynamic or cognitive theory. Psychodynamic orientations emphasize the role of unconscious conflicts in causing personal problems, whereas, cognitive orientations emphasize the role of unrealistic or irrational thinking. Often, psychotherapists utilize both psychodynamic and cognitive concepts while working with their clients. Strupp (1988) has very well stated that which kind of therapy, for whom, under what circumstances and by whom determines the effectiveness of therapy. In fact, treatment of abnormal behavior usually requires the therapist to combine different therapeutic procedures to create the best treatment for a given client. The speciality concerned with the diagnosis, treatment and prognosis of emotional or adjustment problems is known as "Clinical Psychology". A clinical psychologist is the one who obtains a doctorate degree in clinical psychology with 2,200 hours of doctoral level clinical internship. The APA-approved clinical internship involves
practical experiences in clinical assessment, psychological testing and all modes of psychotherapy under the supervision of licensed clinical psychologists. Consequently, with an extensive and intensive training, clinical psychologists are able to specialize in helping people change in order to cope more effectively with the developmental or situational demands of their lives or grapple with the unresolved underlying conflicts (usually unconscious). Broadly speaking, we may classify different psychotherapeutic interventions into the following major categories:

1. Psychoanalysis and psychodynamic psychotherapeutic.
2. Behavioral therapies
3. Cognitive therapies
4. Humanistic - Existential therapies
5. Family therapy
6. Group therapy
7. Eclectic psychotherapy

2.1 Psychodynamic/Psychoanalytical Psychotherapies

Historically, psychoanalysis was the first system of psychotherapy introduced by Sigmund Freud (1909). The primary goal of this kind of therapy is to make the "Unconscious" conscious. Thus, all techniques are designed to help the client gain insight into his/her intrapsychic and interpersonal conflicts. This facilitates the surfacing of the repressed material (impulses, wishes, unmet needs and unfulfilled desires) in such a manner that it can be dealt with in a conscious and rational way.

Free association, dream analysis, analysis of resistance, interpretation and analysis of transference and counter-transference are used as basic tools for making the "Unconscious" conscious. The process of most of the other psychodynamically oriented therapies (whether short or long term) follows the same pattern as shown below:
In Free Association, the client expresses thoughts, wishes and feelings in as free and uninhibited a manner as is possible.

Analysis and interpretation of Dreams and Fantasies help the client gain insight into the relationship between his/her early childhood experiences (such as, conflicts with parental figures) and a current tendency to distort reality. Thus, the agenda of each session is determined by the free associations of the patient. Freud was the first one to notice that the patient's attitudes towards their therapists changed as the analysis proceeded. For instance, feelings toward mother may be transferred to the therapist. This is called Transference. Transference means the patients projects onto their therapists qualities possessed by the patient's "significant others". Transference has been the cornerstone of Freudian analysis since the early 1900's and has been updated by other psychodynamically oriented therapists. Transference is not just a good theory, it is proven cure as well. DeAngelis (1992) states that in the social-cognitive framework, transference can occur in any social interaction in which a person reminds one of a significant other. Thus, it could be helpful to a client to recognize what is going on in real life with other people and to practice different ways of responding rather than to allow transference feelings to develop in treatment unchecked. Contrary to it, the psychoanalysts see transference as a phenomenon confined to the therapy office in which the client projects feelings about parental figure from childhood onto the therapist.
Analysts use transference as a vehicle for the resolution of interpersonal conflicts and thus, reveals the underlying meaning of anxieties to the client. Transference may be of three types, as follows:

a. Positive transference + friendly and affectionate feelings towards one's analyst.

b. Negative transference - Hostility predominates here.

c. Ambivalent transference ±. The client shifts from positive transference to negative transference as analysis proceeds.

Counter Transference

Refers to therapist's emotional reaction to his/her projected on to the parent. That's why analyst must be analyzed themselves in order to work through transference and counter-transference effectively.

In Pakistani culture where majority of the clients enter psychotherapy expecting to be told what is wrong with them and what to do about it, psychodynamically oriented techniques have their limitations. Remember psychodynamic therapies prefer that clients evolve their own interpretation and achieve self-understanding with help of their therapists. Nevertheless, in Davanloo's (1987) short-term intensive therapy carefully graded pressure, Head-on-collision, Miraging, Challenging are also used along with analysis and interpretation to achieve a "breakthrough" into the unconscious when the client is unable to make interpretation or express themselves or is stuck or is overwhelmed with resistance or is caught up in the "Triangle of People" or "Triangle of Conflict" as shown in the following diagrams:

* Triangle of Conflict. Interopsychic Conflict

Figure. 18.2: Triangle of Conflict: Interpersonal Conflict
SELF ASSESSMENT QUESTIONS

Q.1. Who is a Clinical Psychologist?

Q.2. What is Clinical Psychology?

Q.3. What is Free Association?

Q.4. What is the process of psychodynamic Psychotherapies?

Q.5. Name three techniques that Davanloo uses to achieve a "breakthrough" into the client's unconscious.

2.2. Behaviouristic Psychotherapies

Behaviouristic therapies have their roots in Operant and Classical Conditioning experiments. Consequently, behavioral therapists intentionally ignore Cognitive and Psychodynamic events. Such interventions, emphasize the influence of environmental manipulation and learning principles. Some of the behavioural techniques are, as follows:

a. Systematic Desensitization Technique.

b. Exposure therapies
   a. Flooding
   b. In vivo
c. Modeling.

d. Assertive Training and Social

e. Paradoxical Intention

a. Systematic Desensitization Technique

It was introduced by Joseph Wolpe, the Head of the Department of Psychiatry, Temple University Hospital, Philadelphia, PA, U.S.A. This technique combines Muscle Relaxation (Jacobson's Technique) with Cognitive activity (imagining an anxiety-provoking scene that is related to the patient's specific fear or phobia). The underlying rationale is that Relaxation response (previously learned by Deep Muscle Relaxation Training) competes with the past learned anxiety response (such as, fear or a phobia) or even the anxiety - arousing thoughts, ideas or images.

Wolpe (1973) argues that his technique is primarily based upon the principle of the Reciprocal Inhibition. systematic Desensitization begins with scenes or images that are only mildly fear-arousing. The individual is encouraged to focus on the prevalent relaxed state while imagining those situations. Once the person is able to achieve this relaxed state, he/she is progressively encouraged to imagine more upsetting scenes (from a list of hierarchies) till the final fear or phobic object is grappled with. This techniques works the best with people who habitually show noticeable increases in their physiological arousal (ANS arousal) when exposed to the fear-arousing stimulus whether real or imagined.

b. Exposure Therapies

The rationale underlying exposure therapies is that continued exposure to anxiety-provoking stimuli will decrease anxiety, because, the individual will become desensitized to it. Exposure may take two forms:

i. In Vivo Exposure - being in Real Situation.

ii. Fantasized Exposure - thinking of being in a real situation.
Flooding and Implosive Therapy are good examples of In vivo and Fantasized exposure. It has been noticed that if the client is willing, this treatment may show rapid improvement within 5-6 sessions.

In Flooding the client is exposed to a flood of fear-arousing stimuli which is not terminated until the client experiences a very high level of tension which finally tapers off automatically. Thus, the therapists structures the clinical sessions so dramatically that it is saturated with frightening thoughts and images. The underlying rationale is that emotional responses to these "Floods" will be extinguished through "burn out" (Extinction).

In Implosive therapy, the therapist presents imaginal scenes (much more intense than those used in Flooding) depicting behavior and situation that he/she has been avoiding in the past. As a result, the client experiences higher and higher levels of anxiety while grappling with these powerful scenes. The success of "Implosion" is based upon the therapist’s skillful interpretation of the psychodynamics underlying the client’s avoidant behavior.

c. Modeling

In everyday life we notice children imitate their favourite characters of television shows. Thus, it may be suggested that in clinical practice people can be shown and taught other ways (more adaptive) of doing thing (Bandura, 1986). In modeling, the client is encouraged to "imitate" the adaptive behavior of the "Model" with the Model helping whenever necessary. Thus, the clients may learn new responses and give up past maladaptive behavior patterns which are gradually strengthened by positive reinforcement, social learning and guided rehearsals. Modeling may be of three types, as follows:

i. Live Modeling - Direct observation of a "Model".

ii. Symbolic Modeling - Indirect, for instance through film or video or audio-tape.

iii. Covert Modeling - Individual is asked to imagine observing a "Model" carrying out a behavior that needs to be changed and it's particular consequences. Sarason & Sarason (1987) suggest that the success of a Modeling Program depends on the following factors:
1. How carefully the client attends to the modeled behavior?

2. How well he/she retains what he/she observed?

3. Client’s ability to reproduce the modeled behavior.

4. How motivated the client is in using the modeled behavior in real life situation?

d. Assertive Training and social skills

Assertive training is primarily designed to improve one's social skills, such as, standing up for one's rights, saying "No" when unwanted requests or demands are made; expressing opinions or feelings and making requests. Modeling, behavioral positive feedback, prompting and role rehearsal play important roles in assertive training programs. Home assignments are used to help the client carry out tasks that require assertiveness outside the training session. For instance, one of the home assignments is application of "Five Cs" as discussed in Box No. 18.1.

e. Paradoxical Intention

The client is instructed to carry out a behavior that appears to be in opposition to the client's therapeutic goal. For example, an individual who complains of insomnia is encouraged to remain awake as long as possible. It’s a relatively new and controversial technique. Thus, it must be used cautiously by a skillful clinical psychologist.
Box No. 18.1. **FIVE C'S OF ASSERTIVENESS**

1. **Keep Cool:** Loosing Self-Control is a sure sign of lacking assertiveness in a situation.

2. **Consider:** Consider the other Person's side of the matter. To be assertive, you must evaluate the rights of the other person as well as your own and act in fairness and consideration to both persons.

3. **Communicate:** What you feel. You need to practice self-assurance by being willing to reveal your feelings in an honest, straightforward manner.

4. **Clarity:** How you would like others to behave. If you do not let people know what you want... they have to guess.

5. **State the CONSEQUENCES** of other's behavior as you see it. State the negative as well as the positive results.

2.3 **Cognitive Therapies**

The cognitive therapists argue that faulty or irrational beliefs and assumptions are the primary causes of maladaptive behavior. Thus, they heavily use the techniques of logical reasoning, confrontation, and modeling to systematically change the "Cognitive Schemata" or the "belief system" of an individual about self, others and the world in general. In other words, the cognitive therapists attempt to correct the misconceptions, unrealistic perceptions or irrational beliefs that contribute to maladjustment, defeat and unhappiness. Thus, they use somewhat directed tactics in redirecting the way people see and interpret their experiences. Like behaviourists, they reject Freudian emphasis on "Unconscious".

The cognitive therapies focus on the importance and value of thinking (cognition). Thus, they discourage dependence on the therapist and stress the client's capacity to control his/her own destiny. For instance, Aaron Beck (1976) focuses on the thoughts that underlay intense and persistent emotional reactions of an individual. He has specialized in working with depressed patients and is currently, working as the Head of the Department of Psychiatry, Pennsylvania
University Hospital and Cognitive Therapy Center, Philadelphia, USA. Beck emphasizes termination of irrational and automatic thoughts and ideas as well as restructuring of client's cognitive schemata (Depressogenic Schemata as discussed previously on page No. 36 and 37) that contribute to feelings of depression, worthlessness and thoughts of suicide. Often, Beck's techniques involve frequent gentle questioning of the client about the rational basis for what he/she is saying in order to promote client's rational consideration of realistic and optimistic alternatives.

Albert Ellis (1970) argues that our emotional problems are the result of our beliefs about a happening rather than the actual even itself. According to his ABC theory of Personality (as shown in the diagram below) the method of logic and rational thought must be applied to dispute, challenge and eliminate the irrational beliefs about life.

![Diagram](https://example.com/diagram.png)

**Figure. 18.4: Albert Ellis ABC Model**

Instead of A, the client is taught how to dispute B to bring change in C. This, helps the client to replace his/her self-defeating outlook on life with a more rational and tolerant philosophy of life. Acosta, Yamamoto and Evans (1982) and APA (1991) have found relative effectiveness of such directed (cognitive-behavioral) therapies versus non-directed styles of therapy for the Asian and ethnic minority populations for the treatment of depression, eating disorders and anxiety syndromes.
2.4 Family Therapy

Family therapy is a specialized clinical approach in which the Identified Patient (IP) is treated in the context of the Family system rather than as a separate unit (individually). The family therapist observes how the members of a family (usually, dysfunctional families) interact and communicate. Thus, he/she helps the family members to see, feel, explain, experience and understand how one person's behavior affects other members of the family. As a result, Family Therapy provides a valuable setting for airing hostilities, reviewing emotional ties, modifying communication styles and dealing with crisis (such as, mid-life or empty-nest syndromes) which may disrupt the life cycle of the family. Minuchin (1985) suggests that facilitating the family's transition from one developmental phase to another is the basic goal of family therapy. I think the time is ripe to use this technique to help the Pakistani families cope with the stress of having a mentally ill female patient. This may facilitate the female patient's early recovery, treatment and rehabilitation rather than emotionally abandoning them or "locking them up" indoors. De Angelis (1992) refers to Maqsood clinical data derived from his therapeutic work with Middle East children exposed to the Gulf War. Macksoud's (1992) uses a community and family based approach for the treatment of the emotional problems of children exposed to war. His rationale is that families are the primary social unity in the Middle East and EL Salvador. Further more, psychotherapy is not a well-established discipline that can reach a large number of people in such countries. Thus, in the Middle East and South Asia, it is very important to find ways to reinforce the family structure and to reduce the stress of mothers so that they can keep the family functioning.

2.5 Group Therapy

Group therapy provides a social setting in which the clients can learn both by observing how other group members attempt to solve their personal problems in an adaptive or a maladaptive fashion and by comparing their own relationship with the therapist and with those of other members. Group therapy is less costly and more powerful to enhance interpersonal skills. Different therapeutic techniques, such as, analysis of resistance, behaviour rehearsal, role play, feedback exchange, modeling, confrontation and logical reasoning may be used depending upon the theoretical framework of the group leader. However, the overall socio-cultural and religious background of the
group members must be kept in mind; otherwise, group may become a traumatic experience instead of a growth-enhancing process.

2.6 Humanistic - Existential Therapies

These therapies present sharp contrast to the therapeutic approaches so far described. The roots of Humanistic - Existential perspective are in a number of philosophical and religious systems (such as, Muslim, Greek, Roman and Chinese) that have stressed the dignity, inherent goodness and freedom of human native. Thus, the Existential - Humanistic therapists argue that "we are our choices" and our existence and it's meaning are squarely in our own hands, for we alone can decide what our attitudes and behavior will be. As a result, each individual becomes a "Unique being" who is constantly going through the process of "becoming". For instance, Rogers (1980) suggested that the therapist must accept the clients as having worth and dignity in their own right despite their problems. Instead of providing diagnosis, analysis or interpretation, Rogers states that the presence of empathy unconditioned positive regard and congruence on the behalf of the therapist would automatically help the client make constructive choices. Thus, the Humanistic - Existential therapists do not present any structured model of therapy.

2.7 Eclectic Psychotherapy

Norcross (1986) states that eclectic approach is simply an integration of all therapeutic approaches, because, the eclectic therapist attends to the equally significant and complimentary roles of cognition, emotion and behavior in human development and growth as well as in the psychological treatment of mental disorders. Lazarus' (1985) Multimodel Technique is the best example of such a systemic approach.

**SELF ASSESSMENT QUESTIONS**

Q.1. Briefly differentiate between "Transference: and "Counter-Transference".

Q.2. What is Davanloo's "Triangle of People" and "Triangle of Conflict"?

Q.3. Make a list of hierarchies for the treatment of Examination Phobia by Systematic Desensitization Technique.

Q.4. Name three types of Modeling.

Q.5. How would you use ABCD of Albert Ellis for a depressed patient?
3 ETHICAL AND PROFESSIONAL ISSUES

There is an increasing concern among Pakistani Clinical Psychologists as to how to prevent client exploitation in the presence of an acute shortage of trained professionals. Unfortunately, the general public in Pakistan, particularly, the females are naive and often, uneducated. Second, there are no written guidelines for the providers of Psychological services, no Licensing system, no Examining Board and no Peer Review system to safeguard the interest of the patients. Consequently, blatant lapses in the moral and professional ethics remain unreported in Pakistan, especially, if the victim is a female patient. Often, the victims of professional exploitation, domestic violence, sexual and physical abuse remain in a legal, professional and financial limbo that further exacerbates their state of psychic distress. As a result, frequently the so-called professionals end up hurting their patients more rather than rendering the services as mentioned in the Guidelines for the providers of psychological services (APA, and 1991).

This author has repeatedly attempted to address these ethical and professional issues, but, with a few fruitful results. Thus, it may be desirable to give a brief description of the ethical and professional issues often ignored by the Pakistani Practitioners, as follows:

a Competency in Clinical and Diagnostic skills for working with a specific population. This requires sound education, clinical internship and training experience under the supervision of Licensed Clinical Psychologists.

b Educate the client to the processes of Psychological interventions, such as, goals, expectations, legal limits of confidentiality, and disclosure of sexual and physical abuse. TV, radio and mass media must be used for this purpose so that we can protect females from any kind of professional exploitation or harassment.

c Relative effectiveness of directed Vs non-directed styles of therapy must be verified through case-studies or clinical researches so that a therapy is selected according to the needs of a client rather than one's own preferences.
Respect for the roles of Family members, community structures, hierarchies, values and religious beliefs within the client's socio-cultural setting, but, not at the cost of client's well-being.

Psychologists should be cognizant of the socio-political context in conducting psychological evaluations and providing psycho-therapeutic interventions. They need to develop sensitivity to issues of oppression, sexism, elitism and racism. Thus, their active participation in the community programs and mental health movements may promote the psychological well-being of the masses.

The topic of client-therapist intimacy often arouses anxiety in both clients and therapists whether they belong to the West or the East. Pope & Tabachnick (1993) argue that certain feelings, such as, anger, hate, fear and sexual attraction or arousal are difficult to acknowledge. Yet, recognizing and accepting such feelings as a part of counter-transference "can result in decrease in tension and feelings of guilt (Boccellari & Dilley, 1989, P. 197). Otherwise, such discomfort on the behalf of the therapist and trainees may lead to neglect of the complex, stressful and sometimes dangerous work that clinical psychologists are expected to do. Moreover, their responsibilities are not the sort that can be carried out in an unfeeling manner. Acknowledging and trying to accept the nature and the intensity of our feelings that come with our clinical work is in fact a crucially important part of our work itself.

Thorn, Shealy & Briggs (1993) advocate use such "informative Brochures" that would educate the client of their rights in psychotherapy. In addition, they found that the experimental group who read the "sexual misconduct brochure" showed increased ability to understand what is appropriate and inappropriate therapist-behavior; see unwanted touch as non-therapeutic; regard a therapist talking a lot about his/her own sex life as inappropriate; view sex in therapeutic relationship inappropriate and intend to behave assertively within the session if their therapist behavior should make them feel uncomfortable. Farooqi's (1992) assessment of Pakistani female clients' exploitation by their male therapists suggests the immense need for use of such informative brochures for Pakistani clients to prevent the unspoken and unnecessary abuse of the victims.
In a recent study by Farooqi (1992) it was found that 30 out of 40 (75%) of the female clients were exploited by their so-called therapists in any one of the following forms:

i) Asking for personal favours or commercial gains in addition to charging fee.

ii) Breach of confidentiality - discussing the client openly in social or public gatherings without client's consent and because, the therapist may get some form of personal gratification from it.

iii) Use of coercion or Social Deception advocated by the client's family, spouse or a friend without informing the clients.

iv) Sexual harassment of clients (often, female clients by male therapists).

v) Sexual abuse of the female clients, such as, making unwanted sexual advances, offensive comments, sexist language and sometimes, even sexual assault during therapy session - mostly, by male therapists.

vi) Submission of False or distorted test results in order to prevent or unfairly help the client get admission to some Graduate school, Military Academy, Public/Federal Service Commission, etc.

vii) Falsification of one's education and training, such as, use of the "doctoral title" by a Master's level student or calling oneself a Clinical Psychologist without fulfilling-the requirements that specifically demand a Ph. D. degree (in Psychology) with a 2,200 hours doctoral level internship in clinical Psychology.

viii) Use of clients for Research Projects without seeking consent from the client.

ix) Stealing and enticing patients from other practitioners for the sake of one's personal gains or commercial profits.
x) Ignoring the female clients' disclosures of domestic violence. Thus, it is strongly advocated that the Pakistani Clinical Psychologists need to develop a strict code of ethics and a unified standard for professional behavior that should serve the patients in the best possible way and thus, reduce exploitation and sexism in therapy.

We must remember, that ethically and legally we can not leave the patient in a worse condition than what he/she was in at the time of the first visit. Since words are subject to interpretation, it is very important how a message is given to; what is said and what is not said. We communicate through gestures, tone of voice, facial expression, eye contact, body posture, timing in speaking and physical distance. Thus, communication is not just a matter of speaking or writing. The flow of effective communication determines the success of personal, professional and therapeutic relationships. Whenever verbal or non-verbal communication is hindered, messages are crossed and feelings are hurt; trust is shattered; and logic and reason become ineffective. Consequently, authority figures are challenged or threatened or rebelled against. That's where, we, as clinical psychologists need to carry out an "operation clean-up" with justice and fairness to all the parties concerned. Gone are the days when inhumane and brutal treatment of the mental patients was advocated by the community. Legally and ethically a clinical Psychologist is as liable for negligence, malpractice and abuse as a medical doctor.

It is important to consider the cultural background of our clients when counselling patients from different cultures. Nevertheless, we must keep in mind that all people despite their diverse ethnicity, culture, religion, language and gender characteristics should be treated as individuals. For instance, in my own clinical practice with culturally diverse populations (White-Americans, Hispanics, Asians, Indians, Pakistanis, Irish, German, Black American etc.); I have noticed that the South Asian women, even though beaten up by their husbands, would be highly reluctant to seek help from the outsiders (especially, a psychotherapist) without consulting their elders. Mexican women when abused by their husbands (emotionally and/or physically) do not seek professional help, because their "Latino Culture" has taught them that such a situation is "God's Will". Moreover, I also noticed that the African-American and Pakistani women who suffer from low self-esteem tend to believe that psychotherapy is for the Whites only. Given the history of slavery and racism; feelings of powerlessness is very high
among black women. Thus, assertive training is one tool of empowerment. By the same token, the most oppressed and underprivileged Pakistani females suffering from feelings of helplessness, worthlessness and hopelessness may also benefit from "Women Support Groups", "Women Advocacy Alliance", and "Assertive Training Programs" at large scale community level.

**SELF ASSESSMENT QUESTIONS**

Q.1 Name three ethical issues often ignored by the Pakistani Practitioners.

Q.2 What is the purpose of providing "Informative Brochures" to the clients?

Q.3 Highlight the most serious forms of exploitation experienced by the Pakistani female clients as documented by Farooqi (1992).

Q.4 Who is legally allowed to use the title of "Clinical Psychologist" according to APA?

Q.5 Give one example that shows the immense value of understanding the cultural background of our clients.

4. PREVENTIVE MEASURES

We all know that mind and body are inseparable partners; thus, we need to have healthy mind and healthy body in order to enjoy perfect health. The fact is that "an ounce of prevention is worth a pound of cure". Yet, there seems to be a serious lack of willingness in our society to take certain steps that would prevent minor problems of adjustment from turning into serious emotional disturbances. Broadly speaking, preventive measures can be classified into two categories as shown in diagram below:

![Preventive Measures Diagram](image)

Figure. 18.5: Types of Preventive Measures
Both the situation-focused and competency-focused preventive measures must be introduced to prevent mental disorders and promote the mental health of a community. All of us know that certain stressful life events, such as, divorce, exposure to life-threatening violence, rape, assault, mutilating surgery, natural catastrophes etc. can cause nervous breakdown. In such situations, the preventive measures would primarily focus on changing the stress-arousing situation, for instance, removing the victim to a safe sheltered home. On the other hand, some of the stresses (such as, the death of spouse/child) require coping skills to grapple with such distressing situation. Some of us lack personal, social, vocational, and problem-solving skills which make them more vulnerable to breakdown under stress. Thus, we need competency-focused preventive programs at an early developmental stage which should aim at strengthening the individual's academic, interpersonal, vocational and coping skills and, thereby enhance their stress-tolerance. Consequently, they would be more resistant to various types of stress-arousing situations.

Early education and competency-focused programs can be introduced even at school level for children who tend to show weak interpersonal skills; lack of self-assertiveness or poor cognitive problem-solving skills. Play groups, workshops, psychodrama and informative seminars should be arranged for children, adolescents and young adults to identify problems and feelings in others and oneself; to think of alternative solutions to a problem; to see relationships between the alternative problem-solving strategies and the achievement of goals; and to appreciate the consequences of one's actions with a sense of responsibility and accountability. The fact of the matter is that there is no easy formula to avoid stress or to cope with it effectively. The continuous developmental process of acquiring stress-tolerance starts from our birth. Every child has to experience some stress if he/she is to become progressively capable of dealing with it successfully. Too much protection or too little emotional support from parental figures may have a detrimental impact on one's handling of life stresses in later life.

From the standpoint of prevention, family is the most important site of prevention, next to it is the school, and finally, the community at a larger scale. We all know that much of the child's learning and development takes place within the family setting. Unfortunately, many of the parents fail to teach their children how to accept substitute goals when necessary or to become accustomed to certain delays in the
gratification of their impulses, desires and needs. As a result, such children enter into adulthood with slow stress-tolerance; poor modulation of affect; deficient problem-solving skills and cling to inadequate ways of responding to the stresses of every day life.

We must remember that family is child's first exposure to the real world though at a mini scale. Exposure to domestic violence, child abuses, spouse abuse, divorce, separation, parental deprivation, or family conflicts and poor child-rearing practices may have serious adverse impact on the mental health of growing children. Thus, parent education programs should be introduced through T. V., radio, magazines or community based workshops to teach the young and 'would-be' parents how to grapple with their own uncontrollable impulses and frustrations rather than dumping them onto their children. Family is the most important site of prevention, because, good role model and non-threatening warm home environment is necessary for the healthy ego-development of a child. Premarital counselling, family life education, parent behavior training and self-care programs are strongly recommended to prevent maladaptive behavior in children, adolescents and adults. Furthermore, enrichment programs for infants who come from under-privileged or broken homes may also improve children's overall intellectual, and emotional functioning; coping skills and their overall academic performance in school.

Unfortunately, most of our public schools are understaffed and over-crowded. Consequently, large class rooms become unmanageable and unwieldy. Moreover, majority of the teachers are unskilled and very low paid. Thus, special training programs should be organized for teachers also for early detection of children with adjustment problems. Clinical help should be available for such children and their parents in form of personal or vocational counselling and guidance centers, in every school. In fact, carefully planned in-school and after-school activity programs and parent-teacher team work may help prevent many of the behavior disorders in our children.

Counseling, Group Therapy and other crises interventions are strongly recommended after an individual has been exposed to a traumatic event, such as, armed robbery; accident; rape; assault; war; riot breakdown or death of a loved one. Such timely psycho-social supports would reduce an individual's vulnerability to stress. The crises prevention centers(on non-profit basis) should be established to encourage the troubled people to seek timely help either through
telephone contact or in person. This would reduce their sense of social isolation, self-destructive thoughts and behavior. Moreover, Pakistani psychologists should carry out multi-disciplinary researches to understand the underlying psycho-bio-social causes of different mental and physical problems in Pakistani society so as to suggest adequate preventive measures.

Just as we do not rush to a doctor every time we yawn or sniffle, we can not run to a clinical psychologist every time we are mildly upset. Thus, the availability of a non-professional, such as, a friend, a mentor, a teacher, a community leader, a religious leader, a social worker or a senior citizen - can do a lot of therapeutic listening. However, when emotional stage becomes overwhelming we need to consult a clinical psychologist. Standard mental health services should be available in every community so that the impairment that may result from a given disorder could be reduced. This can only be achieved through well-trained staff and well-staffed treatment centers and after-care programs in rural and urban areas.

Moreover, public information programs about mental illness; retardation; prevention and rehabilitation should be planned at a global level so that we can help make de-institutionalization a positive experience for both the patient and the community. We must always remember that barrier-ridden environments create and deepen emotional wounds, they are clearly incompatible with our healing mission. Our governmental and non-governmental developmental programs should aim at improving the living condition of our people in terms of their physical and economic conditions in home and neighborhood; security to the person and property of the masses; exposure to constructive role models instead of anti-social pressure and free primary level education to all. Training should also be provided how to find employment; change jobs; deal with child-rearing problems; family planning issues or street violence and stay away from drugs and crime. Let us sincerely summon our empathy, moral courage and integrity to tear down all barriers and support social and economic justice for all irrespective of their colour, race, age, gender, religion or ethnicity.
SELF ASSESSMENT QUESTIONS AND EXERCISES

Questions:
Q.1 Name two categories of Preventive Measures.
Q.2 Give one example of situation-focused preventive program for Battered Women in Pakistani Society.
Q.3 Name three sites of prevention.
Q.4 Which competencies would you strengthen to reduce your vulnerability to breakdown under stress?
Q.5 What could be the role of crisis prevention centres in prevention of mental disorders?

Exercises:
1. Divide the class in small groups and encourage each member to apply Five C's to promote their Assertive Skills.
2. Visit any one of the Psychiatric Unit/Clinic and find out which mental disorders are most frequently diagnosed and treated there?
3. How Psychoanalysis is different from behaviour modification?
4. Give three reasons to support that cognitive therapies are different from behavioural interventions.
5. What are the limitations of Group Psychotherapy in Pakistani Society?
6. Out of the given factors, which one you will like to adopt?
   i) A generous and compassionate attitude towards oneself and others.
   ii) Setting up realistic goals in one's academic, professional, personal and social life.
   iii) Losing self-control when encountered with interpersonal conflicts.
   iv) Its OK to seek professional help (psychotherapy or personal counselling) when life becomes rough and tough.
   v) Have a balanced life with work-play.
   vi) Life is not a bed of roses, one must be ready for the pain of necessary losses.
   vii) Communicate your feelings in an honest and straightforward manner.
BIBLIOGRAPHY


