Geographical location

Research carried out in the 1970s in the USA suggested that rural women held strongly to values reflective of a traditional rural culture and characterized by conservatism, resistance to change and oriented to the family. One survey (Flora & Johnson, 1978) found more rural and urban women agreed that ‘women should run the home and leave running the country to men.’ A number of factors experienced more often by rural than urban women have been advanced as possible sources of greater vulnerability to stress. These include a lower level of education (Bescher-Donnelly & Smith, 1981), a lack of child care (Bigbee, 1984), geographical isolation and economic and occupational disadvantages resulting in higher levels of poverty and the need for public assistance (Kjervik & Martinson, 1979; Bescher-Donnelly & Smith 1981; Bigbee 1984). One study of stress among farm families (Berkowitz & Hedlund 1979) did find that farm wives identified particular stressors relating to farm life including fatigue, isolation, lack of vacations and the uncertainty of the weather. However, one later study (Hardesty, 1983) found that main problems reported by the rural women concerned other family members and a more recent comparison of rural versus urban women in the USA (Mansfield et al, 1988) corroborated this finding and did not find that location per se was a significant discriminator of well-being as defined by life satisfaction, stress, tension, strain or exhaustion. Marital status differed between the two groups with more married and widowed women in the rural group. There were no significant differences in overall life satisfaction or stress, but the sources of each of these differed between the groups. Life satisfaction was only rated as very low for 16% of rural and 21% of urban women. For rural women, a high perceived health status, older age and being married, all predicted high life satisfaction, whereas for urban women there were no significant predictors of life satisfaction amongst those considered in the study. Stress for both groups was most often associated with family and friends, which was reported by approximately half the women in both groups. The pervasiveness of stress from this source may indicate the high level of the emotional work of care undertaken by women generally. Other factors which predicted stress for rural women only were a higher level of socioeconomic status, education and the number of children under 18 living at home. Interestingly, a high proportion of women in both groups reported that work never interfered with family life indicating that the increased workforce participation of rural women has not resulted in a sense of conflicting role responsibilities. Workforce participation by rural women, more than doubled in the USA between 1970 and 1980 (Bescher-Donnelly & Smith, 1981) and was linked with marked changes in rural women’s traditional roles (Walters & McKenry, 1985). The lack of role conflict and strain reported in Mansfield et al study suggests this change has been effected with little psychological cost and in this sense it is at odds with a number of other studies which will now be considered.

5.2 The Impact of Physical and Sexual Violence

Despite the lack of inquiry concerning the presence of childhood sexual abuse in adult women with Somatization Disorder commented on by Morrison
(1989), there is a growing body of literature on the short and long term effects on the mental health of women of child sexual abuse, adult sexual abuse and physical violence. However, even in 1990, some researchers felt it necessary to advise psychodynamic clinicians not to dismiss their patients’ recollections of sexual abuse as ‘merely oedipal wishes or fantasy’ (Ogata et al, 1990).

Given the influence of Freud’s view that his female patients’ accounts of sexual experiences with their fathers were fantasy not reality, it is not surprising that child physical abuse was recognized before childhood sexual abuse by health professionals. Thus in 1962, Kempe and his co-workers described the ‘battered child syndrome’, but only in the last decade has serious attention and research been paid to sexual abuse, beginning with Finkelhor’s study of 795 college students published in 1979.

Before examining the research findings on the mental health effects of childhood sexual abuse, those on physical violence will be briefly considered.

This is not to suggest that the two forms of abuse are independent of one another because as the research shows, they often occur together (Scutt, 1990).

Physical violence and the family

The family, which ideally provides the structure for nurturance, security and mental health, is often in reality ‘the most frequent single locus for violence of all types including homicide’ (Hilberman, 1980). And while violence outside the family is publicly condemned, violence inside the family has been and still is condoned by many as private, normal and legitimate. An Australia wide survey in 1987 found that nearly half the population knew personally, either a perpetrator or a victim of domestic violence (Office of the Status of Women, 1988). Similarly Hilberman (1980) reviewing studies carried out in the USA, reported violence occurs in at least 50% of American families. It has been estimated that up to two million American wives are battered each year (Lempert 1986). The public response to family violence is inconsistent. Both disbelief and denial that such violence occurs at all (Koss 1990) and a view accepting and condoning violent behaviour to women (Office of the Status of Women, 1988) have been reported.

Violence in the family is disproportionately directed towards women and children and the assailants are typically men with whom these women have intimate relationships, rather than strangers (Hilberman 1980; Koss, 1985).

90% of physical and sexual assaults reported by psychiatric patients were committed by family members (Carmen et al, 1984).

Koss (1990) in a review of research on the mental health impact of violence notes a set of common core responses. These include a post-victimization distress response, which if not resolved, develops into longer term,
chronic symptom patterns consistent with the criteria for posttraumatic stress disorder.

Further, what is interpreted by clinicians as depressed mood may in fact be long term posttraumatic responses to intimate violence. Carmen et al (1984) have argued that victimization histories in psychiatric patients tend to be ignored or misunderstood. Victims of violence are also at increased risk for repeated victimization and the likelihood of using violence against their own children (Strauss et al, 1980). However, Finkelhor (1984) has shown that while both female and male children may be violently abused, it is men who, disproportionately, go on to become abusers as adults.

Mental health effects

As pointed out in the Australian National Women’s Health Policy (1989):

‘Women who suffer sexual and physical violence are at greater risk of psychological problems’ (p44). Medical attention is sought in less than 50% of known cases (Walker, 1989).

Walker (1984) developed a three-phase violence cycle based on a tension reduction hypothesis. The three phases are first, a period of tension building, when the woman has some minimal control over the abusive incidents, second, a period of inevitability when the acute battering incident occurs and third, a period of loving contrition and/or no tension. Psychological responses accompanying each stage are shock and denial, terror and in response, attempts at integration and appeasement and finally depression, characterized by withdrawn and self-accusatory behaviours (Symonds 1979). The battered woman in this situation develops learned helplessness (Seligman 1975). This concept explains the loss of the ability to predict outcomes after exposure to repeated random and variable aversive stimuli which are inescapable. Cognitive distortions including minimization, denial and dissociation and a loss of faith in their own ability to predict whether they can stop the violence are common. Victims fear confrontation and learn methods of hiding their pain to protect themselves and the abuse. They appear compliant and emotionally stable and therapists unaware of the psychological effects of family violence may terminate treatment prematurely (Walker 1989).

Sexual violence

Victims of sexual violence exhibit more psychiatric symptoms, especially depression, anxiety, somatization, obsessive compulsive disorder and paranoid ideation than non-victims (Frank et al 1979; Atkeson et al 1982; Becker et al 1984). A recent community based study found that recent rape victims were significantly more likely to meet DSM 111 criteria for current major depression and drug abuse diagnoses than for other disorders (Winfield et al 1990).
However in the remaining discussion on the effects of sexual assault and abuse the focus will be on the effects on mental health of childhood sexual abuse.

Finkelhor's (1979) study revealed that 20% of female and almost 10% of male students had been sexually abused as children.

It is known that the incidence of reported abuse cases and of rape is increasing and that girls are more commonly abused than boys. One estimate is that one in six women will be raped in her lifetime (Martin et al, 1983).

However, the true magnitude of the problem has still not been reliably established and numerous methodological problems exist, including variation across studies in how child sexual abuse is operationalized. This may cover acts from fondling to intercourse; single incidents or chronic abuse and include both sexual intercourse between adolescents or similar and violent attacks by adults on small children. Other difficulties include the issue of the accuracy of retrospective recall, differences in the duration which has elapsed between the age at which abuse occurred and when the study was conducted and variation in type of sample, from self-selected clinic samples to community populations. Few studies have used standardized data collection and outcome measures or a control group or address the question of whether early sexual abuse is causally related to the outcomes measured (Browne & Finkelhor 1986; Wyatt & Johnson Powell, 1988; Sheldrick, 1991).

Initial effects

Initial effects of rape and sexual abuse include fear of injury and death, anxiety, depression, anger and hostility (Herman et al, 1986; Briere & Runtz 1986; Brown & Finkelhor,1986; Herman, 1986; Sedney & Brooks, 1984). Guilt and shame are universal responses (Lempert 1986). In the short term, one-fifth to two-fifths of abused children who are seen by clinicians show pathological disturbance (Gomes-Schwartz et al, 1990).

Long-term effects

Childhood sexual abuse is a significant predictor of long term mental health impairment. Studies of adults suggest one-fifth exhibit serious psychopathology (Sheldrick 1991). Further, despite differences in the definition of child abuse and the type of sample employed there are certain mental health outcomes which have been commonly reported in a number of studies.

Depression

The most commonly reported outcome is a dramatically increased rate for depressive and anxiety disorders. It has been found in community samples (Bagley & Ramsay 1986; Burnam et al, 1988; Mullen et al, Romans-Clarkson, Walton & Herbison, 1988) and student samples (Sedney & Brooks, 1984). The study by Mullen et al, 1988 was methodologically strong and its findings are
likely to be generalizable. It was based on 2,000 randomly selected women in New Zealand and found that 20% of women who reported sexual abuse as children compared with 6.3% of the non-abused population were identified as having psychiatric disorders on the two measures of psychiatry morbidity employed in the study. Confirming the findings of other studies, 75% of the disorders were predominantly of the depressive type and the remainder were phobic and anxiety conditions.

Self-harm

Women who have experienced childhood sexual abuse are more likely to have thought about or engaged in self-destructive acts. Scratching or cutting, often to the arms and wrists is common. Other symptoms include anxiety, tension and sleeping difficulties (Sedney & Brooks 1984; Browne & Finkelhor 1986; Bagley & Ramsay 1986). In adolescence, many abused girls leave their abusive homes and become homeless, with all the consequences noted earlier.

Psychiatric diagnoses

As noted earlier, Morrison (1989) found childhood sexual abuse was significantly more common in women with somatization disorder. Briere & Runtz (1988) found an association of both somatization and dissociation with prior sexual abuse. Abuse has also been connected to hysterical seizures (La Barbera & Dozier 1980) and is frequently found in patients with borderline personality disorder (Ogata et al 1990).

Sexual adjustment and interpersonal relationships

Nearly all clinical and non-clinical studies show deleterious effects on later sexual functioning with women reporting low levels of sexual self-esteem, fear and retreat from sexual experiences and frigidity and vaginismus. There may also be a preoccupation with sexuality, increased sexual activity and masturbation (Meiselman 1978; Finkelhor 1979; Herman 1981; Browne & Finkelhor, 1986).

The fear, hostility and sense of betrayal associated with childhood sexual abuse often produces a lack of basic trust in others, compromising the possibility of women with this background being able to form close and satisfying intimate relationships. A vulnerability to victimization, prostitution and early unplanned pregnancy, a pattern seen in homeless girls, has also been reported (Fromuth 1986; Russell 1986).

Gynaecological consequences

Linking in with the findings on somatization disorder, an association between pelvic pain and other gynaecological complaints and sexual abuse has been documented (Backman et al 1988; Harrop-Griffiths et al 1988; Draijer 1989) Harrop-Griffiths and co-workers, for example, found that 63% of women undergoing laparoscopy for chronic pelvic pain had been sexually abused as
children compared with 23% of women undergoing laparoscopy for other reasons. Some women with a history of abuse have extensive histories of medical and surgical intervention. One small study of seven psychiatric patients found an average of eight operations per patient despite normal pathology findings. The women had been investigated by a variety of specialties including gynaecology, gastroenterology, rheumatology, orthopaedics and neurology suggesting that failure to deal with a history of abuse can result in numerous, costly, futile, surgical procedures (Arnold et al 1990).

Drug abuse

Finally, as Finkelhor (1984) and others have shown, high percentages of the drug abusing population have been sexually victimized as children (Burnam et al, 1988). Like all the foregoing categories, the true prevalence of this disorder amongst women who have experienced childhood sexual abuse has not yet been established. Estimates range from almost 15% of adolescents in a residential chemical dependence treatment programme (Cavaiola & Schiff 1988) to more than 70% of inpatient substance abusers studied by Rohsenow et al (1988).

Similarly, recognition and adequate treatment of the physical, psychological and emotional consequences of abuse which underlie the presenting diagnosis of drug or alcohol abuse, is unlikely to be undertaken by the staff of emergency departments or psychiatric services (Carmen et al 1984).

Chemically dependent women report affective reasons as the primary motivation for using, compared with men who report physical reasons (Cavaiola & Schiff 1988). Also women cite more family distress in childhood, over and above child abuse, including divorce, death of a family member, psychiatric illness, affective disturbance and chemical dependency. Thus substance abuse of both licit and illicit drugs may be seen as a flawed and self-destructive attempt to cope with chronic emotional distress. In adulthood, substance abuse is strongly linked to depression, anxiety, extreme low self-worth, a sense of powerlessness, the experience of traumatic flashbacks, difficulties with trust and learned helplessness, thus reiterating many of the features of other groups of women who have experienced sexual abuse in childhood (Holman & Brown 1989; Mondanaro 1989).

Adequate treatment of chemically dependent women is hampered by the stigma which attaches to substance abuse, especially alcohol, for women compared with men; poor recognition by primary care-givers that there is a problem, especially amongst middle class white women; models of treatment which have been predicated on the experience of men and are not cognizant of the issues, such as sexual abuse, which are central to substance use in women; programs which do not make provisions for children to live in with their mothers and sexual harassment by staff (Mondanaro 1989; Astbury et al, 1991; Moore & Fleming 1989).
Summary

This review has been confined to research carried out on the mental health of women in developed countries, who still live lives characterized by inequality, fear and discrimination. There is, however, no reason to believe that women in developing countries would not also experience the range of mental health outcomes which have been described, as they have even longer hours of work, both in the paid workforce and at home, are poorly paid for the work they do and are subject to physical and sexual abuse, including in some countries such as the Philippines and Thailand, forced prostitution at very early ages. Whether depression is the main adverse mental health outcome of a relatively powerless and subordinate position in society for women in developing countries, as it is for those in developed countries needs to be documented. What is clear is that there are sufficient causes in current social arrangements for depression and anxiety to be a totally understandable and realistic reaction.

6. STRESS AND WOMEN’S REPRODUCTIVE HEALTH

Stress is a frequently heard term that appears to affect many people on a regular basis, yet it is poorly understood, commonly distorted and its implications are often taken for granted. The stress construct has suffered from a lack of clear definitional criteria arising from long-standing confusion over its use as both stimulus and response. In addition, until recent years there have been few well-validated psychometric instruments to measure the subjective elements of this ubiquitous human experience.

The stress response represents the epitome of mind-body interaction, that underpins physiological and emotional arousal. Arousal, which has evolutionary value for preservation and survival, can be both activating or inhibitory on target organs, resulting over time if unrelieved, in disease or dysfunction. A major role in the stress response is played by the individual in the ways she selectively interprets stress stimuli and their effects, and this subjective analysis serves both to initiate and maintain the stress experience. Each person is able to tolerate particular levels of stress and these highly individualistic thresholds are the product of genetic features, acquired temperament and cognitive style, and learned behaviours.

Two broad categories of stressors have been described by Everly (1989), these are: i) biogenic stressors and ii) psychosocial stressors. Biogenic stressors effect a stress response through electrical or biochemical properties that may initially bypass the higher brain centres where interpretation of events normally occurs. Some biogenic stressors, called sympathomimetics, (e.g. stimulants), activate the human stress response through direct physiological mechanisms that may override a person’s interpretation of them. Psychosocial stressors, alternatively, become stressors mainly because of the individual’s cognitive interpretation or meaning given to the event, the physiological arousal experience, or both. Thus, these stressors may be real or perceived events.
from both/either the external social environment or internal physical experience. While they cannot cause the response directly, psychosocial stressors work through the person’s own cognitive appraisal mechanisms. Clearly, the greater part of repeated stress in a person’s life arises from psychosocial stressors that come to possess stress-evoking characteristics through the individual’s interpretations of stimuli that are otherwise neutral (Everly, 1989, p.7).

The temporal sequence of the human stress response involves neurological, neuroendocrine and endocrine axes.

a) The neurological axis provides the most immediate response to stimuli through direct innervation of endorgans by the autonomic nervous system (ANS) via the limbic system and hypothalamus, which register emotional arousal and cognitive interpretations of the arousal experience. The parasympathetic and sympathetic branches inhibit or activate endorgans and though the effects can occur simultaneously and immediately, these responses are not sustainable over time without some additional impetus.

b) The neuroendocrine axis is responsible for the active coping response system termed the "fight/flight" response by Cannon (1929). Activation of this pathway from the amygdalar complex, via the hypothalamus, to the adrenal medulla causes output of the catecholamines, norepinephrine and epinephrine, which activate the sympathetic nervous system. Three different patterns of catecholamine output have been identified in relation to qualitatively different attentional states. These are: i) the defence or "flight" pattern, characterized by high levels of epinephrine; ii) the immobile or "freeze" pattern, accompanied by high levels of norepinephrine; and, iii) the vigilance or "fight" pattern that is reflected in high levels of testosterone. Activation of the sympathetic adrenal medullary system appears to occur following a 20-30 second delay phase but it produces a tenfold increase in the duration of effects.

c) The endocrine axis is responsible for chronic, prolonged somatic responses to psychological and psychosocial stimuli. This final pathway, the hypothalamic-pituitary-adrenal-cortical system, which requires maximal stimulation, functions via activation of four hormonal axes:

i) the adrenocortex, releases glucocorticoids and mineralocorticoids with a minor release of norepinephrine and epinephrine. This profile characterizes the so-called "passive coping system", related to subjective feelings of helplessness, hopelessness, loss of control and depressed immune response;

ii) the somatotropin axis, that mobilizes the output of mineralocorticoids (aldosterone, deoxycorticosteroids);

iii) the thyroid axis which alters the rate and quality of general metabolism; and
iv) the posterior pituitary axis, which is responsible for release of luteinising hormone (LH), vasopressin, prolactin, testosterone and oxytocin.

The role of the individual’s cognitive processes in the stress response has been the subject of considerable debate regarding whether cognition occurs primarily or secondarily in person-environment transactions (Lazarus, 1984; Zajonc, 1984). Several leading researchers (Ellis, 1962; Lacey, 1967; Lazarus, 1974; Schwartz, 1979) give support to the cognitive system as one of the key factors in stress transactions and as a necessary precondition for emotional experience (Arnold, 1970; Beck, 1976; Ellis, 1962; Lazarus, 1980). Individual differences also function to determine the quality of cognitive interpretations and inferences that are made about perceived and real demands. Some people appraise many events as sources of threat, alarm and defeat. Others may view the same events as challenges to be mastered. It appears the qualitative differences of the individual’s cognitive determination mediate the hormonal patterns of response. Frankenhaeuser (1980) has identified three patterns of hormonal responses linked to cognitive states:

i) activation of the sympathetic adrenal medullary axis when demands are interpreted as challenges ("effort without distress");

ii) activation of the hypothalamic-pituitary-adrenal-cortical axis when demands are interpreted as overwhelming and defeating ("distress without effort"); and

iii) activation of both the sympathetic adrenal medullary and hypothalamic-pituitary-adrenal-cortical systems when demands are interpreted as threatening ("effort with distress").

6.1 Stress and Gender

The stress response is a complex process for both men and women but some differences between the sexes have been identified. Most notably, the physiological response to stress by women is qualitatively different along the adrenal-medullary pathway. When experiencing mental stress tasks, Collins (1985) reported that women respond with lower levels of epinephrine than do men. However, the subjective reports of women’s perceptions of stress arousal tend to be greater in terms of emotional discomfort and lack of confidence than the actual levels of circulating epinephrine would suggest. This finding could indicate that women respond with greater emotional arousal to smaller amounts of hormonal activation than men do, or that they have a lower tolerance threshold for experiences of physical arousal.

Women’s sex-role orientation has been linked to differential psychophysical outcomes in measures of sympathetic adrenal medullary hormones (Collins, 1985). It was found (Collins, 1985) that women engineering students with demonstrated ‘masculine’ interests and capabilities, excreted higher levels of epinephrine during stress tasks than did women scoring highly
on more traditional 'feminine' characteristics. Similarly, several earlier reports on menstrual cycle dysfunctions reported that feminine sex-role acceptance was negatively related to menstrual acceptance and satisfaction (eg. Berry & McGuire, 1972; May, 1976; Schneider & Schneider-Duker, 1974; Gough, 1975). Other researchers (Spencer-Gardener et al, 1983) reported no differences in sex-role identity between women with or without menstrual cycle problems. In a review of the relationship of sex-role identity and adjustment in women, Thomas and Resnikoff (1984) showed that a feminine role identity was not especially related to psychological distress. The more important factor was 'instrumentality', i.e. the perceived freedom to be active and instrumentally effective in directing one's life. Individuals with optimal emotional health were those with a combination of androgynous (A) scores combined with either masculine (AM) or feminine (AF) characteristics. The androgynous feminine (AF) women emerged as the most emotionally stable, even more than women who scored high on either M or F characteristics.

Although there is some support for differences between individuals in catecholamine release to stressors, there also appears to be intra-individual constancy in the amount of secretion and the time taken to return to resting levels after a stress experience has passed. Indicators of appropriate or inappropriate hormonal response to stress have been referred to as the 'economy-inefficiency' dichotomy by Frankenheuser (1975). The 'economic' adjuster appears to respond to stress experiences with a rapid output of epinephrine, they score low on measures of neuroticism and high on tests of performance. Post-stress, these individuals show a rapid return in hormone profile to pre-stress levels. Conversely, the 'inefficient' adjuster demonstrates a slow rise in catecholamine output to stress experiences and levels remain higher for longer, resulting in an overuse of unrequired physiological resources that is indicative of poorer psychophysical adjustment. Thus, while some evidence indicates that sympathetic adrenal medullary responses to acute stress may be gender-specific, indicated by evidence of greater 'economy' in physiological response by women (Frankenheuer, 1978; Collins, 1985), alternately women more than men simultaneously show greater psychological costs in terms of profound negative emotions and a lowered sense of success and self-satisfaction. In a general consideration of health-related behaviours, more women than men readily seek professional help and disclose concerns (Everly, 1989). This is frequently regarded as an indicator that women suffer higher morbidity in acute conditions and nonfatal chronic conditions though lower mortality rates at all ages (Verbrugge, 1985). An alternative hypothesis refers to the fact that women bear the burdens of a greater diversity of roles and responsibilities for others than do men, so the potential for stress-related incidents and burnout is greater (Newman, 1989). A third view is that women are protected from serious life-threatening ill health during their reproductive years due to a biological protective factor afforded by high levels of ovarian steroids, particularly oestrogens. The lower incidence of vascular and hypertensive diseases in women is related to the facilitative oestrogenic effects on lipids control. During the reproductive years, women also appear to have higher levels of high-density lipoproteins (HDLs) that aid in removal of cholesterol from the bloodstream and limit the development of atherosclerotic
lesions. However, as more women desire and are encouraged to compete with men in occupational terms and in self-dependency, this picture may alter over the coming years. The question whether gender differences in health are biological, psychological, environmentally determined or the result of multiple mixings of these factors is not able to be answered at the present time.

6.2 Stress and Women’s Health

In traditional thinking and writings, the mind-body separation persists through theories of aetiology for health disorders that are proposed as either biological or psychosocial. This approach is outdated and Weiner (1977) proposes that serious efforts should be made, by researchers and clinicians alike, to consider an integrated perspective of contributing factors to the instigation and maintenance of any problem in health or well-being. Regarding psychobiological factors in bodily disorders, the view of Weiner (1977) is to be commended, that sick people exist, rather than diseases as particular entities. It should be recognized that pre-existing factors within and around the individual from biological, psychological and social sources all prevail to influence any condition affecting health.

A Stress Model of women’s health takes into account individual differences in symptom experience, symptom tolerance and reporting behaviours as stable characteristics of people. These psychological antecedents interact with factors from the social milieu, with co-existing physiological predispositions and response styles. This multifactorial framework can be understood within the rubric of Bandura’s (1977) triadic reciprocity system.

A modified triadic reciprocal model is proposed that acknowledges the flow of forces as interrelational and multidirectional between the woman’s psychological characteristics, her internal physiological makeup and the conditions of her social environment. The emphasis is on dynamic, ever-changing relationships with events that have stressful potential.

6.3 Reproductive Functioning

For many years, the human menstrual cycle has been shown to be stress-sensitive (Dalton, 1960; Reichlin et al, 1979; Awaritefe et al, 1980; Woods 1985) in relation to excessive self-imposed or external demands; conflicting roles; failed aspirations; threat-laden social demands; perceived low self-efficacy; and laboratory-based experimental stressors. The hypothesized role of stress appears to alter the regular physiological features of the menstrual cycle, and to result in the subjective experience of symptoms.

The sympathetic adrenal medullary and hypothalamic-pituitary-adrenal-cortical systems are exquisitely sensitive and responsive to a wide range of psychosocial stimuli that involve novelty, change, threat, challenge or conflict (Mason, 1975; Lazarus, 1966). Any subjective state of under-stimulation, stimulation, or over-stimulation is characterized by particular profiles of hormone and neuroendocrine production that correspond directly with subjective reports
of intensity of arousal, discomfort or unpleasantness (Mason, 1975; Frankenhaeuser, 1975; 1980).

In normal women distinct menstrual cycle phase effects in catecholamine production to experimental stressors have been shown to occur, with the highest values occurring in the luteal phase, together with the usual pattern of high levels of oestrogen and progesterone (Collins, et al, 1985). As reported above, the lower levels of catecholamine output produced by women in response to a variety of naturalistic stressors, and the greater intensity of negative feelings about the stressful experience (Frankenhaeuser et al, 1978), indicate that the psychoendocrine stress response in women, differs not only between the sexes, but also is influenced by the synergistic effects of ovarian hormones across the phases of the menstrual cycle. Further, the gender-specific qualitative differences in the hormonal profile of the stress response is illustrative of individual response specificity, reflecting both personal control factors and sex-role orientation (Collins & Frankenhaeuser, 1978; Collins, 1985).

When considering social factors in stress experiences, a great deal of attention has been given in earlier years to the effects of major life events on physical and emotional health (e.g. Dohrenwend & Dohrenwend, 1974). Later writers (e.g. Billings & Moos, 1982) have regarded the causal direction of this relationship as uncertain. Recently, researchers have acknowledged the enduring effects of daily roles as more salient in producing adverse effects on health and well-being. The underlying rationale in this shift of focus is underpinned by the fact that stressful life events (e.g. unemployment, divorce, financial hardship, bereavement) though of powerful impact, are events of low frequency that allow ample time and opportunity for recovery once the stress of the event recedes as the problem resolves. Conversely, the stress occasioned by life’s daily roles, termed ‘daily hassles’ (Lazarus & Cohen, 1977) is ubiquitous, arising from those minute but multiple, frustrating demands and challenges that impinge most frequently on the individual. This means that psychological and somatic responses are constantly triggered which, over time, if ineffectually managed, can result in reduced well-being and disordered health. Thus, Pearlin (1983) calls for consideration of role strains as potentially powerful antecedents in the stress experience. Role strains refer to the difficulties, conflicts, threats and challenges that people experience in their chosen social roles that impinge on the four main role arenas of parenting, marriage, economy and occupation. Six types of role strain have been identified (Pearlin, 1983, p.8). These are: a) problems in the nature of tasks required to be performed; b) problems with having too little (under-extension) or too much (over-extension) to undertake; c) involvement in too many simultaneous tasks (over-load); d) feeling trapped in an undesirable or unsatisfactory role (role captivity); e) role gains (e.g. marriage or parenting) or role losses (e.g. divorce, redundancy); and f) role restructuring (e.g. adult children becoming independent). Over the lifespan, the critical element that determines the individual’s success in managing the various gains, losses or restructuring of roles is the amount of personal readjustment required of the person at the psychological level as each change appears. When demands outstrip the
woman's psychological abilities for adaptation then strain is experienced. Adverse psychological factors that work against successful adjustment are anxiety-proneness, perfectionistic attitudes, inflexibility or dogmatism, negative self-concept, low self-esteem, and low confidence in one's ability to be effective (self-efficacy). Each one of these factors can seriously disadvantage the process and progress of adjustment to social strains (Bandura & Adams, 1977; Petrie & Rotherham, 1982; Hewitt & Dyck, 1986). Adjustment refers to coping strategies that facilitate the management of emotional arousal, physiological sensations of activation, and behaviours. Thus, the view of Lazarus and colleagues (1980) that ill-health develops from failures to cope effectively with changing demands can be readily assimilated. From the previous section, it is clear that transactional effects from the individual's personal abilities and social conditions play important parts in influencing emotional and physical health outcomes. This perspective of continuing transactions between the individual, her social world and internal physical systems is further illustrated below through examination of two problems of women's health - premenstrual syndrome and postpartum depression.

6.4 A Psychobiosocial Stress Model and Premenstrual Syndrome (PMS)

Premenstrual Syndrome has been generally thought to be due to subtle defects in luteal phase hormones in terms of oestrogen-progesterone imbalance (Backstrom et al, 1983; Dennerstein et al 1984). Luteal phase hormonal defects are hypothesized to produce recognizable symptom clusters of negative moods, information-processing deficits, uncontrolled behaviours, physical discomforts and negative self-concept, that appear in the ten days prior to menstruation and disappear by the end of the menses (Dalton, 1977). Recent studies (Backstrom et al, 1985; Rubinow et al, 1988), however, have failed to find any exact hormonal defect to account for this common but perplexing syndrome.

The role of stress in PMS has usually been considered from a common sense perspective of outcome of the syndrome. Rarely has stress as antecedent been seriously considered or investigated. A study from the University of Melbourne (Morse et al, 1988) found the two main differentiating features between a group of treatment-seeking women and community volunteers were reports of subjective stress and depression in the follicular (day 6-8) phase as well as during the premenstrual phase (day 25-27 of an adjusted cycle). This finding suggests that PMS sufferers are stressed, depressed women throughout the cycle, so that a singularly clear hormonal hypothesis of causation is unlikely to stand alone without consideration of contributions from psychosocial sources of strain. Recently, Rabin and colleagues (1990) reported significant differences between sufferers and controls only in transient nocturnal Adreno Cortico Troptic Hormone levels. The authors proposed that the transience of the hormonal stress response could explain why i) the gross features of the menstrual cycle appear to continue undisturbed in PMS sufferers (e.g. ovulatory cycles; regular menstruation) and ii) that the servo-mechanisms of the neuroendocrine pathway are resilient in preventing the development of aberrations to appear as grossly disordered menstrual cycles.
The psychological profiles of PMS sufferers are very well documented in many studies and the typical findings include high neuroticism, introversion, high trait anxiety and anger, marked cognitive failures, low self-esteem and ineffective coping skills (Rees, 1952; Coppen & Kessel, 1963; May, 1976; Spencer-Gardner et al, 1983; Morse et al, 1988).

As indicated above, according to Frankenhaeuser and her colleagues (1975; 1978; 1980), women generally respond to experimental and natural stressors with a moderate activation of catecholamines, but with a pronounced subjective experience of intense negative feelings that is arguably out of proportion to the level of hormonal activation. So in PMS sufferers, who characteristically are intrinsically high anxious women, it is to be expected that subjective reports of distress would be considerably greater in intensity compared to actual levels in hormonal profiles. This proposition seems to be the case as reported by Rabin and colleagues (1990) and as found in a current study in our Centre (Morse et al, in preparation).

It should be borne in mind that most of the reported symptom clusters in PMS can be identified as psychological in nature and further, that treatment-seekers commonly report "Failure to Cope" during their premenstrual phases. This self-determined evaluation clearly reflects the women’s own perceptions of inadequate personal control over environmental conditions. Cortisol excretion is of interest in several psychopathological states and can mainly be considered as an indicator of anxiety and felt-distress (Fredrikson, 1989). Fluctuations occur in cortisol excretion levels depending on the individual’s subjective sense of competent control or self-efficacy (Bandura et al, 1985). Some studies have reported increased cortisol levels in situations of low control (Miyabo et al, 1979; Arnetz et al, 1987); while other studies (e.g. Frankenhaeuser, 1978) have reported alteration of cortisol output during conditions of self-paced reaction tasks. Thus, the interaction of anxiety, perceived control and cortisol excretion could be of immense importance in understanding the psychophysical pathways that contribute to the experience of premenstrual syndrome. This perspective could be further evaluated through the applications of stress management training to increase self-efficacy or coping, together with the concurrent measure of cortisol and catecholamines. It could be that control gained with effort and learning may be significantly related to altered patterns (i.e. ‘normalized’ levels) of neuroendocrine changes in PMS sufferers as other studies have shown (e.g. Bohlin et al, 1986; Bandura et al, 1985). This hypothesis awaits further evaluation.

6.5 Psychosocial Stress Model in Postpartum Depression (PPD)

A common medical view is that the postpartum phase is the time of greatest risk for a serious depression in women (Brandon, 1982; Dennerstein et al, 1989). Postnatal negative moods and depression in new mothers have been documented for centuries, but in some reports many of the mood problems resolved within a short span of time, while others reported (e.g. Uddenberg and Engelsson, 1978) enduring mood problems which resulted in personal, parenting
and marital distress that can have long-term effects over years (Tonge, 1986; Uddenberg & Engelson, 1978).

Several hormonal hypotheses have been proposed to account for the onset of postnatal depression. The ovarian hormone sensitivity hypothesis (Dalton, 1971) proposes that certain women respond with considerable negative feelings to the profound reductions in physiological levels of oestrogen and/or progesterone in the postpartum phase after the unusually high levels maintained during pregnancy. This proposal has some intuitive appeal based on the evidence that women tend to report greater psychological mood experiences to stress inductions that occasion only moderate elevations of hormonal response. More importantly, this view of hormonal 'sensitivity' refers, in fact, to sensitivity to changes in hormone equilibrium and suggests that certain women adapt to physiological shifts with greater difficulty than others do. This hypothesis has also been proposed to explain premenstrual negative moods in PMS sufferers as due to poor adaptation to oestrogen and/or progesterone withdrawal prior to menses (Dalton, 1964; 1977). In addition, some studies have reported that significant proportions of women experience both PMS and PPD (e.g. Gard et al, 1986; Dennerstein et al, 1988), while other studies (Harris, 1980; Stein, 1980) have shown no relationships between either menstrual cycle problems (dysmenorrhoea, PMS) or gynaecological disorders (infertility, dysfunctional bleeding, spontaneous abortion). High levels of prolactin occurring postpartum through breast-feeding practices have been implicated in the onset of depression in predisposed women. Alder and Cox (1983) reported a twofold incidence of depression in women providing total unsupplemented lactation compared with mothers providing only partial breast feeding. Overall, none of the various hormonal hypotheses has been unequivocally supported in well designed prospective studies to account for the onset and maintenance of depression in new mothers. In addition, the onset of depression can occur at any point of time removed from parturition, yet the temporal relationship is presented as the explanatory feature to provide both a label and a theory of aetiology.

A challenging view of Oakley (1980) is that PPD is a 'pseudo-scientific tag' for maternal discontent that arises in response to the collected strains impinging on the new mother. The sources of stress that strain her include economic, marital, social and predominantly physical changes and psychological demands of her new role, either for first-time mothering or for subsequent deliveries (Elliot et al, 1988). These five categories of stress that affect the newly delivered woman are listed in Table 1.

The two major categories of physical change and psychological stress provide numerous instances where demands can outstrip the woman's capabilities to successfully manage her new state as a mother. Over time, it is likely her responses become increasingly frantic and simultaneously less effective in outcome so that her confidence in both knowing how to respond and being able to do so, becomes seriously damaged. Initially, efforts may be
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made to cope often by foregoing opportunities for her own rest or food intake. These desperate attempts are both triggered and maintained by feelings of anxiety, guilt and not uncommonly, hostility. When questioned, mothers admit, shamefacedly, to feelings of hostility towards the tiny demanding creature who recognizes no limits; or towards the partner who seems incapable, unwilling, or both, to assist her adequately; and towards herself for being so incompetent and ineffectual. This state of affairs leads to a downward spiral into increasing helplessness and the hopelessness characteristic of profound depression.

Several researchers have reported that PPD sufferers report being either unprepared for the demands that parenthood imposes or they have held unrealistic expectations of parenting (Moss et al, 1983). Thus, either or both parents may be seriously surprised or discomforted that their prenatal lifestyle has to be considerably altered to accommodate its new member. Or, that many parenting tasks are unpredictable and are unable to be reliably planned for ahead of time. In an English study Elliott (1985), found that mothers were disappointed and critical of much of the antenatal education offered in classes about the postnatal experiences to be expected. Often, most preparatory education for childbirth focuses on the pregnancy and delivery, with very little information imparted about the immediate and later postnatal stages. Lack of knowledge and preparedness then renders prospective parents at risk for becoming overwhelmed and defeated.

The Depression-Prone Woman - Psychological Vulnerability Hypothesis

How well a woman adapts to the physical, emotional and life changes engendered by conception, pregnancy and delivery depends on several factors. These include childhood family experiences; the quality of family relationships; previous mood disturbances in relation to menstrual cycle phases and use of hormonal agents; the quality of her relationship to the baby’s father; current personal relationships and quality of social support networks.

In the voluminous literature on depression, a depression-prone core in the personality has been referred to by many writers (see Coyne, 1985, for review). While some have disputed a particular personality profile as indicative of vulnerability, women who have difficulties in adapting to change and demands are more likely to experience high anxiety (Beck & Emery, 1987). Anxiety-proneness triggers and maintains feelings of threat and being overwhelmed in myriad circumstances. These emotional experiences underpin ineffective coping behaviours, leading ultimately to depression. The central element, which may arise through genetic, constitutional or socialisation factors, appears to become activated by real or perceived losses or threats that trigger depressogenic thinking about events and experiences. This readiness to interpret life events as threatening demands is frequently aggravated or supported by mixed messages of support or approval, or even rejection, from significant others in their lives. In Coyne’s (1985) view, depression results from responses to serious disruptions of the social environment in which support, comfort and validation of one’s value and worth is usually obtained. In addition, Billings and Moos (1985) have linked depression to the failure of intra-individual qualities of
personal control, hardiness, coping skills, and resistance that normally maintain satisfactory interpersonal relationships. In their view, depression reflects poor relations and marital dissatisfactions that antedate the depression experience. These social strains produce maximal impact in those least able to negotiate more satisfying experiences. Thus, the depression-prone person tends to exhibit demands for control and perfection prior to making decisions; they expect more of their relationships than is possible, or justified, or appropriate; and they are rigid and inflexible in problem-solving and decision-making (Beck, et al., 1979).

The parturient woman who experiences a serious non-psychotic depression may be identified prospectively by a conglomeration of factors. These include: a history of childhood depression; depressed feelings during pregnancy; obstetrical risks at delivery; adverse psychological factors that influence competence, coping and adjustment; low satisfaction with parental and marital relationships; poor quality of social supports; and limited knowledge and preparation for the practical demands of child care (O'Hara et al., 1984). Jansen and colleagues (1991, in preparation) have carried out a long term follow-up of a group of mothers three years after a bout of postpartum depression. A significant finding was that the depression scores on the Beck Depression Inventory at the three year evaluation were predicted by the depression score obtained at 28 weeks gestation during the pregnancy. This indicates that certain women may be regarded as psychologically vulnerable (Cohen, 1979) by virtue of their personal processing style and/or social strains that may co-exist.

These identified features provide a considerable challenge to the helping professions to develop both curative and preventive strategies to protect those women most at risk. A preliminary pilot program was developed for this purpose at the University of Melbourne (Morse, 1990) that would benefit from formal evaluation and refinement. This remains an empirical issue for future research.

Summary

Considerable research has revealed that women experience and respond to stress in distinctive ways compared to men. Women's stress response process is both qualitatively and quantitatively different in terms of hormonal profiles, activation of the sympathetic adrenal medullary and hypothalamic-pituitary-adrenal-cortical response pathways, and in emotional quality. Their typical stress response is also attenuated by the phases of the menstrual cycle related to the synergistic effects of the ovarian steroids. In addition, the nature of women's lives and realities renders them at risk for stress-related effects more often than men. Only perhaps do single fathers with dependent children approach the sheer level of multiple responsibilities that the majority of women carry. It is clear that those who are psychologically fit and hardy survive (Kobasa, 1979), while those with particular personal difficulties succumb at some point or another. The task of society is clear, that of affording the maximal protection, help and support to those women who, for one or another
reason, have been disadvantaged biologically, psychologically or socially in their pursuit of health and well-being.

7. MENTAL HEALTH ISSUES FOR WOMEN

In a recent editorial in the British Journal of Psychiatry, Pilowsky et al (1991) commented that although women are the major mental health consumers, their special needs have yet to be understood and accounted for in service planning. Service development may be understood from the life cycle perspective (Subotsky, 1991). In childhood specialized services may need to be developed for girls to deal with the problem of child sexual abuse. Despite the frequency of child sexual abuse and the preponderance of girls to boys so affected, UK figures from annual reports show that local child psychiatry services see more boys than girls (2:1). The major reasons for the gender difference are evidently to do with troublesomeness rather than other criteria for disturbance or distress. There are two major types of serious problems where young women present more often than young men - eating disorders and self-harm or para-suicide. Sexual abuse may be an important predisposing factor in both conditions. Methods of intervention need continual development. Psychological problems during adulthood may be associated with menstruation, such as premenstrual tension, fertility control and infertility. Women’s experiences of difficulties in their sexual relationships range from communication problems to severe physical and sexual abuse, which increase their vulnerability to psychiatric disorder (Mullen et al 1988).

Single and repeated pregnancy losses through termination, miscarriage or stillbirth may have effects on a woman’s emotional adjustment over many years. Support groups and practice policies are needed to ensure women are dealt with sensitively and appropriate counselling is available. Special services are needed for psychiatric disorders associated with the postpartum and women’s experience of psychological distress as mothers, especially of young or handicapped children. Depression in mothers can impact on children leading to a vicious cycle of family stress. Other special areas include those of menopause and mid-life symptoms and the effects of surgery on female organs (hysterectomy and mastectomy). Sexual harassment and sexual assault are a general risk in institutions caring for vulnerable patients. Alzheimer’s disease affects women disproportionately as sufferers, because of their greater life expectancy, and also as carers. Emotional disturbance is common amongst the carers of the elderly mental infirm (Gilheard et al, 1984) but there is some evidence that community provision can help to relieve the distress (Gilhooly, 1984).

7.1 Fertility

A cultural perspective on the interaction between fertility, mortality and mental health was provided by LeVine (1991). LeVine describes how the
demographic transition by which birth and death rates decline towards the low levels currently found in Europe and North America and East Asia, is associated with an increase in the labour intensity of infant care. Mothers in post-transitional societies, with low rates of fertility and child mortality respond to the care of infants in a labour intensive way, responding to their infants with speech in a manner that demands their full attention when the baby is awake. Mothers in agrarian populations postpone verbal communications to a later stage of the child’s life, while following a cultural model of protective infant care that involves constant holding, comforting and physical contact but permits the mother to divide her attention between infant care and other tasks such as cultivation and food processing. Maternal school attendance seems to be the primary determinant of labour-intensive infant care not only across different populations but also within populations undergoing transition. Labour intensive infant care operates, through the behavioural development of the child to facilitate the decline in mortality and fertility. Verbal exchange fosters verbal interaction in the post-infancy period so that the child will demand attention to his needs in sickness and health and is less likely to be neglected. This is consistent with reports that it is after the first year of life that the relationship of mother’s school attendance to mortality is most robust. This also fosters the development of a preschool child who is active, demanding and requires increased maternal attention leading mothers to favour reduction in fertility and the acceptance of contraception. Such labour intensive childhoods lead to expectations from children for continued support and attention. This may create new vulnerabilities as well as strengths in the psychosocial development of children. Blake (1989) has demonstrated that the number of siblings with whom one is raised is inversely related to school performance in the USA. Children whose early experience has generated such expectations for continued interaction and support may be vulnerable to discontinuities occasioned by separation, death, mood disorder, parental neglect or abuse.

Reproductive health care has an important role to play in increasing the choices women have in planning their lives and in the control over their health and bodies (Amaro, 1988). In order to serve each population adequately, providers must become more aware of the beliefs, expectations and problems experienced in order to design services which respond to their needs. Amaro (1988) highlights how previous investigators have studied Mexican-American women’s reproductive behaviour distally, relying on fertility rates and epidemiological data. This approach does not provide an understanding of how Mexican-American women experience interactions with the health care delivery system, with their partners and with social institutions, like religion. The need for a proximal approach is indicated to provide information on how Mexican-American women make contraceptive decisions, how they carry them out, what roles their sexual partners play in the decisions and what problems women encounter.

7.2 Motherhood and Mental Health

Pregnancy involves a critical role transition. For most women, it is a stressor leading to resolution and growth. Maladaptation will lead to personal
distress and threaten the integration of the family unit. Lewis and Cooper (1988) found that there was a greater impact of the transition to parenthood on women than on men and there were some cases of extreme stress.

Motherhood represents a major change in the life cycle, a biological, psychological, social and cultural event. While community expectations are for "blissful motherhood", there is growing evidence that many women suffer considerable psychological distress in the 12 months after childbirth. Epidemiological studies have found this to be the time of greatest risk for psychiatric illness in a woman's life (Brandon, 1982). Some workers report a five to sevenfold increase in psychological disorder (mainly depressive reactions) postpartum (Pitt, 1968).

The relative risk for a woman to be admitted to a psychiatric hospital with a psychotic illness in the first month after childbirth is about 22 times greater than in any of the 24 months preceding delivery; such an admission is 35 times more likely after the first baby (Kendell et al, 1987). The increased incidence combined with the short delay between childbirth and onset of the illness, and the early symptoms of perplexity and confusion suggestive of an organic disturbance, add weight to the primary aetiology being in the physiological domain with psychological and social factors of secondary importance. Hemphill (1952) studied rates of admission to mental hospital for puerperal illness from 1938 to 1948 and found no difference in rates in the war years, despite the presence of many severe social circumstances then. The main and consistent associations with postpartum psychotic breakdown were primiparity (2/3 of all cases), past history of bipolar illness or of postpartum psychosis, a family history of bipolar illness, Caesarean-section, prolonged and difficult labour, stillbirth and being a single mother. The increased risk of puerperal admission associated with stillbirth or neonatal death appears to be limited to non-psychotic illness (i.e., linked to depression).

Psychological disorders postpartum may be classified as follows: postpartum blues, postpartum psychoses, postpartum depression, and disorders of the mother-infant interaction.

Postpartum Blues

This disorder is variously known as maternity or postpartum blues. In the community this is known as 'baby blues' and the 'weepies'. The symptoms of postpartum blues occur in the first ten postpartum days with a peak onset around days 3 to 5 (Pitt, 1973). The symptoms can last for several hours or be present for several days but they decrease quickly and disappear before day 10 (Pitt, 1973). The features of the blues have been reported to include: weeping, depressed mood, lability of mood, sleep disturbance, anxiety and irritability, confusion and cognitive impairment. The incidence of this disorder (depending on the criteria) has ranged from 15% up to 84% (Oakley & Chamberlain, 1981). Most authors have concluded that the postpartum blues is a benign and transient disturbance, requiring recognition, explanation, empathy and support.
Postpartum Psychosis

Postpartum psychosis is the most severe disturbance which may be experienced in the puerperium and occurs with a frequency of 1 to 2/1000 births. The onset of this disorder occurs in close association to childbirth, usually within the first 1 to 4 weeks after birth (Kendell et al, 1976, 1987). Kendell et al (1987) reported the highest rate of admission within 30 days postpartum, occurred 1 to 7 days after birth. The incidence was still higher than that of prepregnancy at 21 months postpartum. There is a great deal of controversy about whether postpartum psychoses should be considered as separate entities, differing from other psychoses. Several studies reveal that more women tend to experience affective illness, depression and mania, than schizophrenia during the puerperium (Brockington et al, 1981; Kendell et al, 1987). Studies comparing the phenomenology of psychoses occurring after delivery have reported some differences from nonpuerperal psychoses (Dean & Kendell, 1981; Hayes & Douglass, 1984). For example, Brockington et al (1982) comparing 58 episodes of psychosis occurring within two weeks after delivery with 52 nonpuerperal psychotic episodes found an excess of manic symptoms in the puerperal group. Hayes & Douglass (1984) compared a group of nonpuerperal patients with a group of puerperal psychotic patients. They reported that the puerperal group experienced significantly more "gross thought disorder, misperception (particularly visual stimuli), insomnia, an anxious and hectically variable mood and auditory hallucinations". Catatonic symptoms were also present but to a lesser degree than those in the manic depressive group. Following the acute phase the puerperal group was found to be significantly characterized by the syndrome of unipolar depression. Brockington and Cox-Roper (1988) propose a single category for all acute nondepressive psychoses which begin within 2 weeks of delivery. This would include those patients who meet RDC for mania, schizoaffective mania, schizophrenia or undiagnosed functional psychosis beginning within 2 weeks of childbirth, irrespective of social circumstances. These authors cite evidence in favour of such disorders being considered as bipolar illnesses. They also favour diagnosis of a specific puerperal depressive psychosis which begins in the first 2 weeks after childbirth, meets RDC criteria for major depression with the presence of delusions, hallucinations or confusion.

Shoeb and Hassan (1990) estimated an incidence of postpartum psychosis of 3 per 1000 births in the Assir region of Saudi Arabia. 66% of the psychoses were affective in nature.

Swift (1972) reported 42 Tanzanian women admitted in Dar es Salaam with puerperal psychoses. A quarter of the women had a previous history of a febrile illness and Swift emphasized the need to exclude a physical cause for a psychosis such as infection, malnutrition or anaemia (Swift, 1972). In a study of Nigerian women with puerperal psychoses, Ebie (1972) also found a high incidence of schizophrenia or organic psychosis.

In a later Nigerian study, 12% had an organic psychosis, 20% had schizophrenia, 28% had worries and 34% had depression. These findings again
emphasize the importance of physical complications in the puerperium - 2 mothers with organic psychosis died (Ifabumuyi & Akindele, 1985).

In Senegal, Colomb et al (1972) reported that a third of women admitted to the mental hospital between 1965 and 1969 had a puerperal psychosis. The high incidence was attributed to a high fertility rate and the prevalence of disabling fears or anxieties among pregnant women.

Postpartum Depression

There is growing concern amongst health care workers about the much larger number of women who suffer from postpartum depression. The nature of the condition is often not diagnosed, despite evident distress and difficulties in coping with the child. Recent prospective research has drawn attention to the pervasive and widespread effects of this disorder. Postpartum depression causes considerable distress to the new mother, interferes with her attachment to her baby and the baby’s development, and with marital, family and social relationships (Tonge, 1984). Recognition, early treatment and if possible, prevention, may thus help in promoting the mental health of the woman and her family.

Postpartum depression has been variously termed puerperal depression, postpartum depression, neurotic depressive reaction, neurotic disorder, atypical depression and maternal depression. Several studies providing data on the duration of this disorder have reported a range of one week (O’Hara et al, 1984) to 4 years (Uddenberg & Engelsson, 1978). Watson et al (1984) reported that 25% of their depressed women had episodes lasting 3 months and a further 25% of their depressed women had episodes lasting 6 months or more.

The period of onset for depression which has been regarded as puerperal has varied from one week to one year postpartum. Tonge (1984) in an Australian study reported that women were six times more likely to become depressed within the first 4 weeks and all of the women who were depressed became so within the first six months.

Postpartum depression refers to a common and serious disorder in which there is a persistent lowering of mood. Features of this disorder summarized by Oppenheim (1983) and Cox (1983) include feelings of inadequacy, difficulty in establishing a new routine, inability to cope, social withdrawal and despondency, guilt over not loving or caring enough for the infant, mood lability and depression, often in conjunction with anxiety over the baby. This anxiety can often manifest itself in somatic concerns, anorexia or weight gain. Other symptoms include loss of sexual interest, undue fatigue and exhaustion, sleep disturbance including difficulty getting off to sleep and early morning awakening, obsessional thinking and fear of harming the infant. Depression might not necessarily be the leading symptom. Symptoms can vary in intensity from day to day and are reactive to circumstances, often with a tendency to worsen as the day progresses. Prospective studies using standardized diagnostic criteria have reported an incidence of depression of 12-14% at 3
months after birth with a period prevalence of 22-24% for all episodes in the first postnatal year (Kumar & Robson, 1980; Watson et al, 1984).

The aetiology of postpartum depression is unlikely to be attributed to a single cause. It would seem appropriate to view depression after birth within a multidimensional model. Biological, psychological and social factors are likely to be interrelated in several ways. Current research tends to indicate that the role of biological factors in the puerperium is unclear. One factor (premenstrual/menstrual complaints) however does seem to have some predictive value. Interpersonal relationships, social support and general stressful life events have been demonstrated to be significantly associated with depression postpartum. Life events were more often associated with non-pregnant and pregnancy depressions than they were with postnatal depressions. Martin et al (1989) used the Life Events & Difficulties Schedule and found that women admitted with severe depression were twice as likely to have suffered a significant event as were puerperal controls. Seven of 8 women with prepartum depressions reported the depression was preceded by a severe event or major difficulty in the 38 weeks before onset compared with 9 out of 26 women who became depressed after childbirth. Thus social difficulties may be more important in prepartum than postpartum illnesses.

Several studies also suggest that a number of psychological and social factors measured during pregnancy are predictive or associated with depression in the postpartum period. Past history of depression in self or family has been identified as a risk factor and an association with postpartum depression is consistently reported.

There have been few published reports of research based on a multidimensional model of postpartum depression. An international collaborative study of psychological adjustment in pregnancy and postpartum was carried out in Australia, The Netherlands and Italy (Dennerstein et al, 1989). The study aimed to identify factors contributing to a depressed mood postpartum and to determine the way in which these factors interact. The study also sought to establish the minimal risk of mood disorder for new mothers. Criteria were therefore selected in order to exclude women thought to be at higher risk (aged under 18 years, or over 40 years, single mothers, and those whose pregnancy was induced artificially, and immigrant women who were not fluent in the first language of the country concerned). The sample was obtained from women attending antenatal classes and outpatient clinics. The 329 women studied were in their first pregnancy to reach 28 weeks gestation. The study was prospective, with interviews and rating scales repeated at 28 weeks gestation, 4 days postpartum and 4 months postpartum. 293 women completed the study. A follow up study of the Australian cohort for 3 years postpartum has also been carried out. Forty-three percent of women reported experiencing emotional problems in the 4 months after delivery. In 14% of the sample these problems lasted for more than four weeks. The major outcome assessment of mood was the Beck Depression Inventory (BDI). A multivariate analysis was utilized to identify the most important predictors of postnatal depression. The most important factor predicting depressive mood
postpartum was the Beck Depression Inventory score during pregnancy. Those women who had the lowest depression scores postnatally, had low BDI scores in pregnancy, were aged under 30, and had no past personal or family history of mood disorder. Those women with the highest BDI scores postnatally, had higher scores on the BDI during pregnancy, were aged over 30, had a past personal and/or family history of depression and continued to breast-feed until the fourth postpartum month. The continuation of breast-feeding, age greater than 30 years, and prior history of mood disorder appeared to interact in a multiplicative way. Stress during pregnancy or delivery, and a lack of support from the woman’s parents, were factors which had an additive effect in predisposing the new mother to depression. Women who were older having their first baby and who had low symptom scores in pregnancy had a better mental health outcome if they lived in Italy. This reflected the greater family support received, particularly from the woman’s mother.

A 3 year follow-up study of the Australian women in this prospective study found a significant positive relationship between Beck depression scores 3 years after delivery and Beck scores in pregnancy. These findings provide strong evidence that depression during pregnancy is a predisposing factor to later depression (Janson, 1991).

Kleiberda (1991) investigated factors associated with well-being in pregnancy and the postpartum using a prospective design studying 170 nulliparous Dutch women. Well-being and depression during pregnancy were related to self-esteem and the quality of the partner relationship. Postpartum well-being was strongly related to well being in pregnancy, but not to objective or subjective birth experiences, nor to whether the delivery occurred at home or in a hospital.

An anthropological critique (Stern & Kruckman, 1983) reviewed the cross-cultural literature on childbirth and identified the following components as supplying necessary social support which may help cushion or prevent the experience of postpartum depression: structuring of a distinct postpartum time period; protective measures and rituals reflecting the presumed vulnerability of the new mother; social seclusion; mandated rest; assistance in tasks from relatives and/or midwife; social recognition through rituals, gifts, of the new social status of the mother.

Proscriptions for behaviours in many cultures which allow the new mother to receive extra help from her family and to rest were described by Cox (1988). For example in Chinese society the mother avoids washing, does not go outside during the whole month, does not eat any raw or cold food, eats chicken, does not move around, does not go to another person’s home, does not have sexual intercourse, does not read or cry. These proscriptions give the Chinese woman the sanction to be idle in bed for an entire month. The question is whether such customs will help prevent postpartum depression. Jamaican women have a ritual seclusion for the first 9 nights and then spend the next 31 nights at home with the baby being looked after by the woman’s own mother. In Nigeria the mother and baby are placed in a special hut within
the family compound for 2-3 months, being cared for by the baby’s grandmother. In contrast in Western society only vestigial remains of the 40 day lying in period remain and there may be only limited support available. Rituals associated with childbirth are also less frequent than formerly, suggesting an ambivalence of society to the role of mothering. The lack of recognition, value and structured support may contribute to depression. Nevertheless a review of 202 traditional societies found that half of them expected a woman to return to full duties within 2 weeks of childbirth.

While postpartum depression has been identified as a common experience in Western countries, there have been fewer studies from other countries. A preliminary study (Shimizu & Kaplan, 1987) compared Japanese and US women. Women’s role expectations and family relationships differ greatly for these 2 cultures. In Japan the 3 generational interdependence of parents and children together with the traditional stay of the new mother with her parents for a month after delivery provides the new mother with help and support. In contrast the nuclear family style of most Americans forces dependence on the husband-wife unit. Contrary to the investigator’s hypothesis, there was no significant difference in depression between American and Japanese women. Furthermore, the isolation scores of Japanese and US women were similar. However step-wise multiple regression revealed that different variables were important in predicting depression for women of different cultures. Interestingly traditional role concept was the only factor predicting depression for Japanese women.

Cox (1983) reported his study of Ugandan women. 10% were found to have a depressive illness 3 months after delivery - similar frequency to that found in the Scottish study (13%). These findings suggest that postnatal depression is not confined to Western societies and is not necessarily caused by the fragmentation of postpartum rituals. In Uganda “Amakiro” had long been recognized as a serious puerperal mental illness of the mother which might result in death.

Further research into postnatal depression in different cultures is needed, including an assessment of the degree of support received by women and whether postnatal rituals were observed.