Menopause: A fresh look at the much misunderstood phenomenon

Indira Jai Prakash*

Menopause in women is a significant biological marker of ageing that has several psychosocial connotations. Earlier efforts to understand the effect of menopause on physiology and psychology of women were shaped more by popular myths, societal stereotypes and medical opinion. Research in this field has moved from uncritical reliance on medical views of menopause to more women-oriented studies. There is also an active movement to ‘demedicalize’ and ‘demystify’ menopause and encourage women to examine their feelings and experiences. This article traces the historical views and evaluates the current findings regarding the effect of menopause of women’s health, well-being, and sexuality.

A major transition in the life cycle of women during middle age is menopause. The cessation of menstruation announces, in unequivocal terms, that a woman’s reproductive role has come to an end. As dramatic an event as the menarche, menopause is often believed to be a significant event that strains the coping abilities of women. It is a topic that is surrounded not just by old wives’ tales but also with ‘scientific myths’. Menopause, as a field of investigation presents several interesting contrasts. An ubiquitous event in the life of women, it never got the attention it deserved. An experience that millions of women undergo all over the world, was often devoted a page or so in standard text books of Gynaecology. Feminists who were so vocal about premenstrual syndrome were slower in picking up issues of menopausal women. Psychology of women was so engrossed in disproving psychological difference based on biological sex that it had little time to focus on developmental issues of middle aged and older women. With dramatic increase in life expectancy, women had more than a decade of post-

* Professor of Psychology, Bangalore University, Bangalore-560 056.
menopausal life to live. And yet, medical profession showed a laissez-faire attitude regarding menopause and there was a reliance on physician’s subjective ‘experience’ in managing menopausal ‘cases’ (McKinlay & McKinlay, 1973). This was seen in the cursory consideration given by medical profession by prescribing such ineffective treatment as aspirin and/or sleeping pills or equivalents with little sympathy. Or using hormonal treatment because of its apparent effectiveness in reducing symptoms (and thus complains) without weighing the possible dangerous side effects. Traditional psychiatry found it convenient to deal with the psychological problems of older females by pushing them under the label of ‘involutional meloncholia’.

This paper briefly traces the historical views on menopause and reviews of available literature on different aspects of menopause with special reference to the Indian scene. An effort is made to bring forward some of the main issues that are relevant for researchers. Considering the paucity of documented studies in India and difficulty in accessing information from different sources, the paper does not make any claims to exhaustiveness.

One hundred years ago, Currier presented the first comprehensive discussion of menopause. In this impressive but neglected document, Currier (1897) made following observations: 1) Menopause lacks scientific attention, 2) There is no menopause reported in animals, 3) It is the abnormal which is remembered (i.e. instance of problematic menopause are recalled more often than normal), 4) there is evidence of pre-disposing factors in women with severe menopausal symptoms. 5) The appearance of symptoms varies: within a society, ‘highly bred’, ‘civilized’ women and ‘those with many troubles and ills’ appeared to be the main sufferers; across societies, Eskimos and Mexican Indians were contrasted with the French and the Irish. 6) There appeared to be no association of parity with menopause, given the available data. Further, he said 7) Menopause is uneventful for majority of women.

Though Currier’s paper attempted to generate scientific interest in menopause, it was only in the 1940s that the subject gained recognition. This interest was due to two principal catalysts. First, with the development of facilities for describing populations (surveys, census etc,) there was a growing interest in describing health and fertility of populations. Second, development of hormone therapy, effective extraction and manufacture of estrogen compounds, provided a method to alleviated hot flushes and sweating that are frequently associated with menopause. Yet well formulated scientific studies on menopause were slow to appear. There was also very little change in physician’s attitude toward menopause (Bart & Grossman,
1978). In the 18th and 19th century Europe, physicians believed that women decayed at menopause. The frequency and seriousness of symptoms during menopause were considered to depend on “indiscretions; of earlier life and ‘transgressions’ of nature’s laws by women (Haller & Haller 1975). Bart and Grossman (1978) noted that such pervasive ‘sexism’ was persisting in gynaecological writings even in the 70s and there was a traditional male ambience in medical education (Campbell, 1973). Things obviously have not improved much in medicine over the years. For, after reviewing research published during 1984-1994. Rostosky and Travis (1996) conclude that there is a dominance of biomedical model, failure to acquire base line data, lack of control groups in studies, vague definitions and blatantly pejorative language in the accepted knowledge base regarding menopause.

Perhaps the most comprehensive and evaluative review of the work in this area was that of McKinlay and McKinlay (1973). They provided an annotated bibliography of the work on menopause from three main sources: general reports of clinical observations or experience; reports of surveys, generally of non clinical population that provide descriptive data; and, clinical trials aimed at evaluating effectiveness of proposed treatments of menopausal symptoms. This paper lucidly presented the methodological problems in each type of study and raised several pertinent questions that influenced subsequent research in this area. It was as late as 1976 when the first International Congress on the Menopause was held in France and the workshop report on international consensus on menopause research was published (Vankeep et al. 1976).

Psychological aspects of menopause, however, received even less attention than physiological. Parlee (1974) in her survey of psychological literature on the climacterium found biased statements about menopausal women that had no empirical grounding. In psychology, focused study on adulthood and middle age and in turn, of menopause developed around the 70s. Initially, however, there were somewhat unbalanced views of middle age as either a plateau or a crisis (Neugarten & Datan, 1974). Popular literature joined in declaring midlife a crisis and menopause in women and retirement in men as turning points in life. Recent years have brought changes in the medical treatment of menopausal women as well as in social attitudes about menopause. Self help guides and book on women’s health during pre and post menopausal years, and practical advice for maintaining general health are becoming popular (Cherruy & Runowicz, 1994). There is also a re-examination of the transition period between middle and old age from different theoretical perspectives (Pretat, 1994). Changes in psychiatric view
of menopause and mental illness reflecting a more holistic stance have also been reported (Herrick et al. 1996).

A. Age at menopause: Perhaps the most striking event during midlife for female is the menopause. While for male there is a gradual tapering off of sperm production in old age, female proceed to a fairly abrupt menopause sometime between 42 and 52 years on the average at which time ova production ceases entirely. The exact age at which menopause occurs varies from population to population. The age of menopause in Japanese, Caucasian, Chinese, and Hawaiian women in Hawaii was between 49 and 50 and was unrelated to the age at which the women began menstruating (Goodman et al. 1978), 49.8 years for a sample of U.S. women (MacMahon & Worcester, 1966), 49 years for Israeli women (Maoz et al. 1970), 50 years for Newzealand women (Rutherford, 1978), and 51.4 years in semi-urban community in Holland (Jaszmann, et al. 1969), and 48 years for Filipion women (Romiro-Jalbuena, 1994). Studies on South Indian women have reported median age at menopause to be around 45 years (Indira, 1979; Prakash, 1989, 1994; Shirolkar, 1992, Uma, 1981). This reported age is closer to earlier studies on other Indian samples (Rakshit, 1962; Chowdhury, 1963). This median age at menopause for Indian women is considerably lower than the median age of 50 that is reported for US women.

Determining the most probable age at menopause is not as straight forward as it appears. Many studies report findings based on clinical groups. Very rarely are samples of ‘well’ women at risk to a natural menopause surveyed. Another major methodological difficulty is the retrospective of the reports. Bulk of such information depends on recall and involves memory factors (McKinlay & Mckinlay, 1973). Also, women tend to round off to the nearest five or zero while reporting the age at menopause. There is tendency to understate the age at menopause particularly by women who are at least five years post menopausal (McKinlay et al. 1972). The findings of the these studies may be affected by the age range of the samples selected. Most studies take middle aged women in the range of 36 to 50 years. If samples are drawn from higher and lower age ranges, there is a possibility of getting a different median age.

There has been inconclusive debate as to whether age of menopause has increased over the last century or has remained constant. According to Flint (1976), following factors affect age at menopause. The aspects of reproductive history that affect menopausal age are parity and marriage vs non-marriage and abortion; genetic factors like race and familial patterns; diseases such as diabetes, fibroids, polyps, cancer of the body, of the uterus,
cervix, and breast are associated with late age to menopause while cancer of ovaries, vulva, pruritus senilis and hernia are associated with early menopause. The only geographical factor known to affect this age is altitude and it has been found to accelerate the age. No socio-economic factors have been conclusively correlated to this age. Whether or not there is a secular trend for a later age at menopause is not clear yet.

B. Symptomatology of Menopause: The questions as to what are the symptoms of menopause, who experiences what type of symptoms, how frequently they occur, when do they reach a peak of occurrence and severity, and to what extent they are related to past event, personality characteristics, to social milieu of the women are only partially answered. According to organic aetiological views, symptoms during menopause are primarily due to temporary endocrine imbalance and should be treated by correcting estrogen deficiency. However, it is more or less accepted that estrogen depletion alone cannot be responsible for all the symptoms that women complain of. Menopause is said to occur at a time in the life cycle when a woman is facing physical, social and familial stresses. When the cultural under evaluations, myths, beliefs and superstitions are added it may result in a period beset with many ills.

In a recent review of symptoms associated with menopause, Pearce et al. (1995) report considerable inconsistency in the result of studies of psychological and sexual sequelae of the menopause and their treatment. The existence of a large commonly occurring group of menopausal symptoms has been questioned. There is some general agreement about physical symptoms that may occur with menopause. Out of the many symptoms supposed to be related to menopause, vasomotor symptoms such as hot flushes and night sweats have been linked to estrogen depletion. In Indian studies, presence of vasomotor symptoms seem to clearly distinguish menopausal from pre and post menopausal women (Indira, 1979; Prakash, 1989; Shirolkar, 1992).

There continues to be debate and disagreement between gynecologists and psychiatrists as to which psychological symptoms and disorders, if any are directly attributable to the normal changes of the menopause and what should be the treatment (Ballinger, 1990; Studed et al. 1990). The major reason for this appears to be the methodological issues involved in researches in this field. The prevalence of psychological symptoms may belong to a vulnerable population who are likely to develop symptoms in relation to stress.
Cross sectional studies leave uncertainty about the direction of causation of any associations that are found. There are also inconsistencies in the way menopausal status is defined in different studies. Psychological symptoms have also been assessed from different conceptual perspectives. Few studies have control for non-menopausal factors such as environment and social stresses (Gath & Iles, 1990; Ballinger, 1990). These factors should be kept in mind while evaluating the studies on psychological symptoms associated with menopause. Depression is one symptom that is very often associated with symptoms associated with menopause. Slightly significant increase in depressed mood during menopause (Hunter, 1990; McKinlay et al. 1987) has been reported in cross sectional and follow up studies. But well designed prospective studies not report such an increase in depression of anxiety. There are to date virtually no studies which have included objective performance tests and most studies have depended on clinical observation or on self report. When psychological symptoms are present, non-menopausal factors such as psychosocial stresses appear often to be relevant (Pearce et al. 1995).

Research suggests that post menopausal state increases some aspect of women's physiological responses to psychological stress. Using laboratory stressors such as speech or serial substitutions, higher cardiovascular or catecholamine stress reactivity in post menopausal women has been reported. It has been suggested that this reactivity is associated with reduced estrogen level and Hormone Replacement Therapy (HRT) may play an ameliorative role. Since heightened stress reactivity contributes to cardiovascular diseases, HRT may be considered as an health-protective option for post menopausal women (Burleson et al. 1998). A modest effect on memory function of women using estrogen has been reported (Sherwin, 1997). The important role that HRT plays in preventing degenerative diseases such as osteoporosis has been acknowledged. This in turn may have a preventive effect on psychological health in later decades (Pearce et al. 1995). The lack of HRT in post menopausal women may increase the likelihood of Dementia of Alzheimer's type and also Ischemic vascular dementia (Mortes & Meyer, 1995). Evaluating the use of HRT, Doughty (1996) concludes that its advantages include elimination of hot flashes, reduced risk of calcium depletion, reduced risk of atherosclerotic plaque formation, and possible reduced risk of Alzheimer's dementia (AD). Among the disadvantages are such possible side effects as increased risk of breast cancer, risk of liver or gall bladder disease, and growth of uterine fibroids. Henderson (1997), however, suggests caution in interpreting a link between HRT and AD. Reviewing publications on this topic between 1978-1996, Henderson points out that even
the best epidemiologic studies indicate a modest range of relationship. A number of demographic features and lifestyle choices distinguish estrogen users from non-users. There is a possibility of undetected selection or observation bias that could account for reported association.

In Indian studies, Blatt Menopausal Index, a measure weighted for endocrine related changes, was found to differentiate menopausal women from pre and post menopausal women. Fatigue, rheumatic pain, irritability, nervousness, and pounding of the heart were the most common symptoms reported. Appearance of vasomotor symptoms, aggravation of somato-psychological symptoms constituted the menopausal syndrome for most women (Prakash & Murthy, 1982). Increased psychological morbidity is also reported in menopausal women with depression being the most common symptom reported. The curve of morbidity seems to rise and reach its height during the menopausal period with a slight drop in the post menopausal period (Prakash & Murthy, 1981). In another study, women in the age group of 41-45 were higher on psychological distress. Similarly, women diagnosed as menopausal had higher distress scores than pre and post menopausal women (Uma. 1981). A study of adjustment concluded that menopausal women were more maladjusted than other groups (Jamuna 1984). The experience of menopause, however, does not seem to bring about deeper personality changes as assessed on questionnaires (Prakash, 1991). Personality pattern appears stable during midlife. Once again it should be emphasised that most of the Indian studies are cross sectional, based on small samples which often are drawn from clinics.

There is considerable lack of clarity in the evidence concerning the effect of menopause on female sexuality. Studies based on sample of women attending gynecological or special menopausal clinics report higher incidence of sexual problems than general population studies. Most studies are cross sectional and do not take into account factors such as earlier sexual difficulties, current stress such as marital problems, mood, and other psychological changes. More important than all these, most studies do not take into account changes in male partner’s sexuality. An older woman’s sexuality is influenced in her partner’s abilities or interests as much as by changes within herself (Bachmann et al. 1985). Decreased levels of sexual desire, sexual fantasy, and activity are often associated with age. But it is unclear to what degree menopause specifically contributes to such changes. Hawton et al. (1994) conclude that there is no evidence for women developing frank sexual dysfunction at this time or of reduced satisfaction with sexual relationship. Similarly Cawood and Bancroft (1996) conclude that none of the hormonal
parameters significantly predict sexuality. Most important predictors were other aspects of sexual relation, sexual attitudes and measures of well-being. Indian studies show a decrease in sexual activity in middle aged and older women mostly due to socio-cultural factors. Widowhood and thus lack of availability of a partner affects women's sexuality in our culture to a large extent. Lack of privacy, married children living in the same house, and poor health of the spouse are other reasons for decreased sexual activity in older women rather than menopause per se (Indira, 1979; Prakash 1989). Research however, agrees that, vaginal dryness, reduced vaginal lubrication and dyspareunia seen in post-menopausal may be helped by HRT (Dow & Hart, 1983). However, estrogen alone is not beneficial for diminished sexual desire and other sexual problems. Regular and continued activity appears, to protect against such symptoms.

The effect of HRT on psychological symptoms have been studied. Controlled treatment designs using standardized psychological tests have produced conflicting results, with some claiming HRT as superior to placebo in relieving psychological symptoms (Montgomery et al. 1987), while others do not find any such difference (Stricker et al. 1977). Zweifel and O'Bren (1997) in a meta analysis of the effect of HRT on depression found lower depressed mood in treated women. It has been suggested that estrogens may help improve cognitive function in post menopausal women and probably improve mood and well-being but may not be effective as stand-alone anti-depressants for treating depression (Halbreich, 1997). Many well-controlled studies show a modest improvement in memory with HRT. The current opinion seems to be that estrogen therapy ameliorates psychological symptoms after surgical menopause while the use of HRT is still questionable in case of natural menopause (Pearce et al. 1995).

C. Artificial or Surgical menopause: Although it is not clear why menopause occurs, it appears that the ovaries stop resounding to the Follicle Stimulating Hormones (FSH) produced by the pituitary; they do not respond by bringing an egg to maturity and do not produce estrogen. Thus the cycle stops. A surgical removal of the uterus and ovaries (hysterectomy) would have similar effects. If ovaries are not removed, estrogen and progesterone are still produced but there will be no menstruation, ushering in an ‘artificial’ menopausal state. Such surgical menopause may occur at any age. While menopause is a normal phase of female life cycle, hysterectomy is a ‘non-normative’ event and as such stressful. As such surgical menopause merits a separate discussion.
In Psychiatric literature, hysterectomy is often associated with increased morbidity (Ballinger, 1977). An early study by Lindeman in 1941 is widely cited in the literature suggesting an association between hysterectomy and psychiatric disorders. Martin and associates (1977) studied women undergoing non-cancer hysterectomy. Of the 49 subjects, more than half (50%) were diagnosed as psychiatrically ill before the surgery. The most prevalent disorders were hysteria (27%) and primary depression (18%). After surgery, 16% were judged as not having any demonstrable pelvic pathology. The hysteria group were younger, had more operations and were hospitalised more often. Authors concluded that certain number of younger age group may have been placed ‘at risk’ for hysterectomy mainly because of psychiatric rather than gynecological illness.

HRT is often recommended for women undergoing total hysterectomy to compensate for the sudden loss of hormones. Prospective treatment studies of HRT in oophorectomised women have more consistently demonstrated improvements in psychological symptoms (Sherwin & Gelfand, 1985; Sherwin, 1988; Phillips & Sherwin, 1992). Women who did not have any psychiatric problems were followed prospectively through abdominal hysterectomy and oophorectomy (for benign disease). Women given implants of estrogen and/or testosterone were compared with those given placebo or no treatment at all following surgery. Women under HRT showed reduction in their depression scores when compared to others, thought there was no such effect on anxiety scores. Insomnia and irritability were the most common symptoms found to improve with HRT. Alder (1992) found that when the study design controlled both vasomotor symptoms and non-menopausal social factors, minor stresses and ‘hassles’ contributed more to psychological status of oophorectomised women than did either hormone levels or time since insertion of hormone implants. Androgens have been often given as an adjunct to estrogen to improve sexual feelings of oophorectomised women. An improvement in sense of well-being in such women was reported after androgen administration by Sherwin (1988).

In an Indian study on menopausal women, higher psychiatric morbidity was seen in post surgical menopausal women. Nearly 30.77% of women who had hysterectomy were diagnosed as ‘possible case’ based on a screening inventory. These subjects also reported more severe symptoms of menopause and reported more number of psychiatric symptoms when compared to natural menopausal women (Indira, 1979). Interestingly, 3 out to 4 women of this group had history of either of in-patient of out-patient treatment prior to the interview. History of preoperative psychiatric disorder is considered one of
the main determinants of post operative psychiatric disorders. Ballinger (1977) contends that women in early stages of psychiatric illness may present with symptoms for which hysterectomy is a possible treatment. Newton and Nicholas, (1976) also report a 'sleeper effect' with a sequelae developing after first six months of hysterectomy. In the light of such reports, psychological screening and psychological care for women undergoing hysterectomy is obviously important.

D. Andropause or Male Menopause: There have been debates as to whether there is an andropause in men just as women have menopause. Technically the term menopause refers to the cessation of menses, the terms climacterium refers to the loss of reproductive ability. In women, they are two sides of the same coin since, when the menstrual cycle ends, reproductive ability also comes to an end. In men, there is no such abrupt event, but a tapering off of production of fertile sperms with advanced age. In an early study Exley and Corker (1966) showed that men too experience cyclical fluctuation in hormone production. Similarly, the level of testosterone in blood is supposed to vary in a cyclical fashion (Doering et al. 1975). With advancing age, there is a change in hormone production in men also. Unlike the marked drop in estrogen and progesterone in women, in men the level of testosterone declines gradually with age, eventually reaching a very low level. However, fertility and production of testosterone are separate phenomena in men and some rather old men have fathered children. In addition, for both men and women, the ability to engage in satisfying sexual relations is unrelated to either hormone level or to fertility.

McMorrow (1974) coined the term ‘Mido1escence’- a dangerous period of turbulent impulse. According to him, ‘male menopause’ in America coincides with a period in life when a man faces problems with parents, children, spouse and with one’s career. Sheehy claims that (1976) men experience substantial drop in hormonal level beginning between 46 to 55 years. Complaints of male climacteric include morning fatigue, lassitude, nervousness, diminished sexual potency, psychological instability, circulatory symptoms and a host of other psychological symptoms.

E. New perspectives: The media hype in the West projected menopause in women and midlife in both the sexes as a crisis in the 70s. Development of a life cycle perspective, conscious efforts of academicians against sexism and ageism in science and medicine, growing body of women focussed research, spread of women’s health movement, and self-help groups were largely responsible for a change in perspective. With feminism came the
reexaminations imposed on their biological functioning. Women decided to
talk and write about their experiences rather than accept what they were told
to expect at different stages of their life cycle.

In the seventies, two women's groups, one in Seattle and the other in Boston
investigated the experience of menopause in women. The publication of the
Boston group “our Bodies, Our Selves” (1971) pioneered the ‘women-
oriented’ approach to female experience. Feminist publications (such as
‘prime time’) started addressing older women’s issues. Such efforts have
culminated in a large body of literature that tries to demedicalize and
demystify menopause. Greer (1992) examined theories about menopause and
aging for the past 200 years. Challenging traditional views, she encourages
women to become responsible for their own health and listen to their own
perceptions than accept common ‘truths’ about this misunderstood subject.
Coney (1994) critically examines the social and medical issues surrounding
menopause and the politics behind its ‘medicalization’. The success of HRT,
according to her, derives from the willingness of vested interests to exploit
negative stereotypes of older women. Carolan (1994) points out that
traditional views suffer from either a minimalist or maximalist bias. The
minimalist view suggests that this phase is a natural process of little
consequence and as such, women can be criticized if they do experience
difficulties with menopause. From the maximalist view, women could be
treated as if undergoing a health catastrophe. Both views fail to consider the
influence of the timing of the event, social circumstances and socio-cultural
attitudes on the experience.

Gerontologists call for a reorientation within the health care system. Studies
collectively named Women’s Health Initiative (WHI) are currently enrolling
164,500 post menopausal women in several overlapping clinical trials and
observational studies. The overall goals of WHI are to understand the
determinants of postmenopausal woman’s health, to evaluate the efficacy of
practical interventions in preventing the major causes of morbidity and
mortality in older women (Matthews et al. 1997). Butler (1995) suggests that
an important goal for managing the health care of older women is prevention
of late-life disability, and physicians can integrate several health promotion
strategies into their primary care practice. Osteoporosis and heart disease can
be prevented through HRT and regular exercise. Weight control and diabetes
prevention can result from dietary changes. Vitamin D and calcium play an
important role in avoidance of bone fractures; pap smears and mammograms
prove effective in early detection of cancer. There are several woman-friendly
books that provide information on every aspect of life for middle aged women
(e.g. Davis, 1996; Culter & Celso-ramon, 1992; Cherry & Runowicz, 1994; Preatat, 1994) Such efforts help in disseminating of current information and help counter the trend toward making menopause a medical event in women's life and also encourage new approaches to scholarly research (Callahan, 1993).

Indian studies reveal that menopause is not generally perceived as a crisis by women in our cultural context (Indira 1979; Parakash 1989). At the most it is seen as a period of transitory stress. Vatuk (1975) noted that Indian women do experience the physical changes of menopause but do not regard them as forming a complex. Many studies report that menopause is often welcomed by Indian women as it releases them from many social restrictions (Flint, 1974), taboos and fear of pregnancy (Indira, 1979). The concepts like loss of femininity or sexuality (as in the West) did not seem to apply in such cases. The presence of self help groups or menopausal clinics for well women are also not noticeable. Nor is the much talked about "empty nest syndrome" seen in Indian samples where women are likely to have the stress of a 'large full nest' during midlife (Indira, 1979).

There is no doubt that socio-cultural factors play a dominant role in perception of and attitude towards menopause. In the West, menopause was often associated with loss of youth, vigour, sexuality and femininity. It was perceived as a threat to the self-image of a women and thus given the status a crisis. Interestingly, in India most women do not feel that they are less feminine because they are menopausal. Widowhood, familial and financial problems and health concerns seem to influence the well-being of middle aged women than menopausal status in India. Cross cultural studies show that African-American women perceive menopause as a natural transition (Padonu, et al. 1996). Filipino women (Romiro-Jalbuena, 1994) accept menopause disorders as unavoidable natural stage of woman's life cycle, Similar findings have been reported from a study of seven South-East Asian countries (Boulet et al. 1994); Chinese factory workers, (Tang, 1994); from north-east Thailand (Chirwatkul & Manderson, 1994), and Portuguese women (Figueiras & Merteu, 1995). This speaks volumes about the influence of culture on the experience of menopause.

In conclusion, it is not easy to understand the impact of menopause on physical and psychosocial well-being of women. There are several methodological issues that need a closer look. Sample selection, study design, definition of menopause, techniques used to assess psychological status / symptoms affect the findings. There are several non-menopausal factors that
need to be controlled in such studies. Longitudinal prospective studies with well controlled designs and standardised measures are necessary to reach unequivocal conclusions. Similarly, awareness of cultural differences in the perception of menopause is essential to avoid uncritical acceptance of Western findings. Multidisciplinary studies that assess the gynecological status of the women along with her psychosocial condition are needed. A holistic perspective is needed that examines her condition in society and her life circumstances.

References


185  Social Change : March-June 1999


