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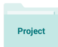

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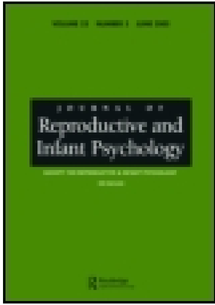

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Arend T. Veeninga [a] & Floris W. Kraaimaat [b]
[a] 'De Grote Riviereri Psychiatric Hospital, PC Wijnkoperstmat, Wijnkoperstraat 2, 4204 HK, Gorinchem, The Netherlands
[b] Department of Clinical Psychology, University of Amsterdam, Roetersstraat 15, 1018 WB, Amsterdam, The Netherlands
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A multifactorial approach to complaints during the climacteric

AREND T. VEENINGA
'De Grote Rivieren' Psychiatric Hospital, PC Wijnkoperstraat, Wijnkoperstraat 2, 4204 HK Gorinchem, The Netherlands

and

FLORIS W. KRAAIMAAT
Department of Clinical Psychology, University of Amsterdam, Roetersstraat 15, 1018 WB Amsterdam, The Netherlands

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Abstract: Besides somatic experiences such as vasomotor symptoms, and sexual difficulties related to atrophy of the vagina, the climacteric is frequently associated with psychological symptoms. However, no evidence exists that psychological symptoms are directly related to hormonal changes during the climacteric. Psychological and social factors not specifically related to the climacteric appear to be an important predictor of psychological complaints during this period. Menopause has for long been regarded as a deficiency disease, requiring medical attention and hormone replacement therapy. However, it may be concluded that oestrogen is only a specific treatment for hot flushes and dyspareunia, but has no clear role in the management of psychological symptoms in menopausal women. A multifactorial approach, paying attention simultaneously to biological, psychological and social factors supposed to influence complaints during the climacteric may be more appropriate. A description of an integration of medical and cognitive–behavioural treatment procedures in case of climacteric symptoms is given.

Introduction

The climacteric is associated with a variety of physical and psychological complaints. There appears to be a wide variation in women's experience of physical as well as psychological symptoms during this period. However, most general population studies, investigating the relationship between symptoms and menopausal status suggest that only vasomotor symptoms, sexual difficulties related to vaginal dryness, and perhaps insomnia, are closely related to menopause (Neugarten and Kraines, 1965; McKinlay and Jefferys, 1974; Hunter *et al.*, 1986; McKinlay *et al.*, 1987; Kaufert *et al.*, 1988; Hunter, 1990a; Oldenhave and Jaszmann, 1991; Veeninga and Kraaimaat, 1992). The belief that the climacteric is a period of high risk for depression in women is not upheld in the literature (Neugarten and Kraines, 1965; McKinlay and Jefferys, 1974; Ballinger *et al.*, 1985; Hällström and Samuelsson, 1985; Gath *et al.*, 1987). If anything, there is some information that is suggestive of a rise in psychological distress (Jaszmann *et al.*, 1969; Bungay *et al.*, 1980; Greene and Cooke, 1980; Oldenhave and Jaszmann, 1991) and psychiatric morbidity (Ballinger, 1975) in the years preceding menopause. It is unclear whether this is related to age or menopausal status. No evidence exists that such an increase in minor psychiatric morbidity is directly related to hormonal changes preceding menopause (Ballinger, 1990). However, there appears to be an association with changes in menstrual patterns. Jaszmann *et al.* (1969) reported psychological complaints to be related to

irregular menstrual periods. Other investigations (Ballinger *et al.*, 1985; Gath *et al.*, 1987) give some support for the possibility of a relationship between psychopathology and menstrual dysfunction in the period prior to menopause. An explanation could be that menstrual disorders and psychiatric disorders in premenopausal women share a pathophysiologic substrate of a hypothalamic–pituitary–ovarian axis dysfunction. Another possibility is that menstrual complaints are perceived as stressful, leading to emotional distress and vulnerability to psychosocial stressors. The latter possibility was also suggested by Gath *et al.* (1982), Wijma (1984) and Ryan *et al.*, (1989). These investigators reported, after hysterectomy for benign conditions such as menorrhagia and dysfunctional bleeding, a substantial improvement in the high levels of psychiatric morbidity found before operation.

Research on the etiology and treatment of physical as well as psychological symptoms presented during the climacteric has largely focused on hormonal concepts explaining complaints. A direct relationship between depression and hormonal changes around menopause is not supported by most studies (Osborn, 1984; Ballinger, 1990). Pharmacotherapy research indicates that hormone replacement therapy (HRT) is appropriate only in treating hot flushes and dyspareunia associated with vaginal atrophy, but has no clear role in the management of psychological symptoms (Ballinger, 1990; Hunter, 1990a). Most studies report that psychological complaints often improve on oestrogens, but this improvement is not superior to placebo (Van Keep and Haspels, 1980; Hunter, 1990b). Thus, it may be concluded that HRT is not justified as treatment for psychological symptoms in women during the climacteric. However, there is some information suggesting the possibility that the stress of coping with vasomotor symptoms could lead to psychological distress (Oldenhave and Jaszmann, 1991). Therefore, relief of flushes with HRT might have the secondary benefit of reducing the distress in women with severe vasomotor complaints.

At present, there is considerable evidence that various psychological and social variables play a more important role in a woman's mental health during the climacteric, than physiological changes of menopause. A 'premorbid personality theory' as a model for psychological symptoms during the climacteric is often assumed. Recent evidence comes from two studies with prospective designs. Hunter (1990a) reported that women who have a history of emotional problems are more likely to have such problems during menopause, and Avis and McKinlay (1991) concluded that the so-called menopause syndrome may be more related to personal characteristics than to menopause. However, no standardized methods assessing personal characteristics were used in either study. More longitudinal studies, assessing personality characteristics before the climacteric and following women throughout and after this phase in their lives, are needed to answer the question on the relationship between personality factors and psychological complaints during the climacteric.

Midlife is commonly regarded as a period in which women experience many changes in social circumstances. Several studies have demonstrated the importance of the impact of life stress on complaints during the climacteric (Ballinger, 1975; Brown and Harris, 1978; Greene and Cooke, 1980; Cooke and Greene, 1981; Hällström and Samuelsson, 1985; Gath *et al.*, 1987; McKinlay *et al.*, 1987; Veeninga and Kraaimaat,

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1989, 1992). However, evidence that there is a greater exposure to deaths and familial illness in middle age than in other life stages is still not convincing (Veeninga and Kraaimaat, 1992). The possibility remains that the physical changes around menopause make it more difficult for women to cope with stress (Veeninga and Kraaimaat, 1989; Oldenhave and Jaszmann, 1991). Much emphasis is also laid on a sociocultural model of menopausal symptoms. There is some evidence that negative attitudes and expectations towards menopause result in subsequent symptoms reported during menopause (Hunter, 1990a; Avis and McKinlay, 1991). However, it is doubtful if socially induced stereotypes play an important role. Research on women's attitudes towards menopause in western societies have not found widespread negative attitudes and expectations towards the climacteric among the majority of women, but a substantial minority do have negative attitudes (McKinlay and Jefferys, 1974; Frey, 1982; Leiblum and Swartzman, 1986; Avis and McKinlay, 1991). High social class, high educational level and employment seem to be related to more positive attitudes towards menopause, probably resulting in less psychological distress during the climacteric for some women (Jaszmann *et al.*, 1969; Polit and LaRocco, 1980; Dege and Gretzinger, 1982; Frey, 1982; Severne, 1982; Hunter *et al.*, 1986).

Investigations of menopause clinic samples often reveal high rates of psychopathology scores (Brown and Brown, 1976; Studd *et al.*, 1977; Ballinger, 1985; Montgomery *et al.*, 1987; Veeninga and Kraaimaat, 1989). Treatment strategies in menopause clinics are mainly medical and based on symptomatic relief. The conclusion of most studies is that the biological event has little impact on subsequent perceived mental health, and that psychosocial factors predict the majority of psychological complaints. This stresses the importance of paying attention to psychological factors and social circumstances of patients having complaints and attending menopause clinics.

A multifactorial approach: theoretical foundations

When single factors explain little in the variance in symptoms of a syndrome, a multifactorial theory of cause may be more useful. In the past decade, the monocausally oriented biomedical and psychosomatic concepts of complaints have been replaced by the biopsychosocial model. The formulation of this model has been primarily the work of Engel (1980), and is developed from the general system theory and its applications to biology (von Bertalanffy, 1968; Weiss, 1969). The biopsychosocial model is now an approach to clinical research and medicine that simultaneously attends to biological, psychological and social factors and the interaction between these factors as regards etiology, pathogenesis, and treatment. However, this model was primarily developed within biomedical science and most emphasis is laid on the etiology and the influence of biological processes on human behaviour (Gentry, 1984).

Social sciences have made valuable contributions to understanding the process of developing and reporting symptoms. In the past decade research on people's symptomatic experiences has been considerably influenced by behavioural views on somatic

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symptoms. For instance, Fordyce (1978) has postulated that pain behaviour is socially determined, influenced by consequences in the environment, whatever the original cause of pain may be (i.e. overt behaviour occurring subsequent to the perception of somatic symptoms is modified by learning principles). Cognitive and social psychology have emphasized the role of a patient's cognitions in perceiving and evaluating symptoms. Symptoms cannot be explained fully in physiological terms, but must also be conceived as psychological or perceptual experiences: the process of perceiving and evaluating symptoms is mediated by factors such as excessive attention to internal stimuli, selective monitoring of illness-related symptoms, the context in which sensory data occur, previous experiences, social information on the relationship between complaints and illness and learned expectations (Skelton and Pennebaker, 1982; Leventhal, 1992).

It is obvious that complaints reported during the climacteric in individuals are best understood when biological, psychological and social factors that may contribute to the onset and course of the illness are taken into account. In Figure 1 we present a multifactorial model as applied to the development of bodily experiences and mood states during the climacteric.

This figure reflects the belief that hormonal changes during the climacteric produce bodily changes such as flushes, vaginal dryness and irregular periods. These changes happen in a more or less circumscribed period. A woman herself can be aware that she is in this period and may attribute ongoing symptoms to it. The process of perceiving, evaluating, and labelling bodily and emotional changes as due to the

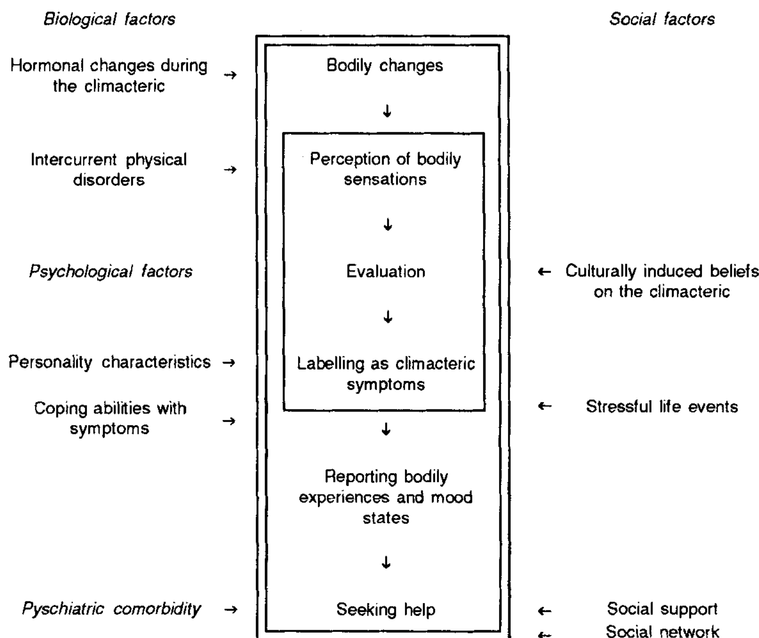

Figure 1. Multifactorial model as applied to the development of bodily experiences and mood states during the climacteric.

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menopause is influenced by psychological factors such as an individual's attention to internal stimuli and selective monitoring of symptoms, personal factors such as the context in which the sensations occur (menopausal age), and social information on the relationship between complaints and the climacteric period.

The attribution of symptoms or emotional problems to medical factors does not necessarily imply a corresponding belief that this problem cannot be dealt with, and that a woman will seek professional help. The decision to seek help depends on psychological factors such as lack of coping abilities with symptoms, and social factors such as lack of support from the social network. Besides, course and severity of the symptoms may be influenced by factors such as current physical and psychiatric disorders, and stressful life circumstances, hence the decision to seek professional help. It is obvious that somatic, psychological, and social factors can influence at any stage and any time an individual's process of perceiving and evaluating symptoms, seeking explanations for these symptoms, reporting symptoms, and making the decision that someone is able to cope with or has to seek professional help. Conversely, a patient's health and symptom behaviour may have psychological consequences such as reduced coping abilities with stress and social consequences in the environment.

It should be noticed again that, where a patient has a long-standing history of symptoms, the course of the illness and symptom behaviour has become a complicated process, influenced by a multitude of interacting factors so that little can be said of the etiology of symptoms.

Menopause clinic patient samples often comprise women with a long-standing history of complaints, and considerable differences in physical as well as psychological symptoms are found between patients and controls (Brown and Brown, 1976; Studd *et al.*, 1977; Ballinger, 1985; Montgomery *et al.*, 1987; Veeninga and Kraaimaat, 1989). Moreover, evidence was found in some of these studies that a great deal of reported symptomatology was not related to the menopause.

The model presented in Figure 1 can serve as a guide to assessment and treatment of women with climacteric symptoms. The climacteric is characterized by unpredictable and varying hormonal levels over some years. As a woman approaches menopause, her personal experiences of the climacteric period will be rather unpredictable (Gannon, 1992).

Implications for treatment

In assessing factors contributing to symptomatology in women who present themselves with complaints associated with the menopause, clinical information should be obtained on menopausal status. This may include an interview of a woman's menstrual history as well as laboratory investigations of endocrine changes related to the perimenopausal years. It should be mentioned that a careful history taken of a woman's changes in menstrual patterns before menopause is of importance since there appears to be a relationship between psychological distress and menstrual dysfunction in the period prior to menopause.

Careful attention should be paid to changes in social circumstances during the

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climacteric period since the influence of stressful life events on symptoms is demonstrated in several studies. In considering the influence of life stress it should be mentioned that not only are changes in social circumstances of importance, but also the possibility that a woman may have more difficulties in coping with stress and subsequent symptoms due to physical changes around the menopause. Thus, stressful life circumstances that were already present before the menopause may produce more distress during this event. Moreover, it is important to mention the possibility that a woman's physical changes of menopause, subsequent symptom behaviour and difficulties in coping with stress, can change reaction patterns of the social environment.

Relatively high levels of psychological distress were found in menopause clinic patient samples. However, the conclusion of most studies is that menopause has almost no impact on subsequent perceived mental health, and that psychological and social factors predict the majority of psychological complaints. This suggests that psychopathology may co-vary with symptoms presented in these patient selections. Therefore, in eliciting information emphasis should be placed on interviewing the patient and significant others on the presence of psychological problems including personality characteristics and coping abilities with complaints, and possible co-existing psychiatric disorders. Evidence that women who seek help during the menopause often have a history of emotional problems (Hunter, 1990b) and help seeking behaviour for symptoms that are equally ill-defined, both with respect to type and etiology (Polit and LaRocco, 1980), emphasize also the importance of a patient's medical and social history in understanding climacteric symptoms.

The decision of some women to seek help for affective symptoms at menopause clinics suggests that they may fail to recognize having psychological or social problems. Reaching menopausal age, a woman may attribute symptoms to this biological event that are related to other factors. This can result in differences in opinion between patient and therapist about appropriate treatment, and subsequently in treatment outcome. Therefore, the therapist should be aware of a patient's explanations for symptoms and, in case of misattributions, discuss with the patient the available information, based on scientific information of the relationship between symptoms and the menopause.

The dramatic fall in circulating oestrogen levels is one of the most obvious biological changes of the menopause. Therefore, there has been a great deal of emphasis on the use of oestrogen replacement therapy in climacteric symptoms. However, only hot flushes and atrophic vaginitis respond beneficially to hormone replacement therapy (HRT). In treating psychological symptoms, a strong placebo effect has been found to any kind of medication. This implies that HRT is only justified when typical menopausal symptoms are present. However, it could be possible that relief of vasomotor symptoms by HRT has the secondary benefit of reducing psychological distress. There is some evidence that the severity of vasomotor symptoms is related to levels of atypical complaints, suggesting a reduced sense of well-being in women with severe flushes.

After assessment of all possible factors contributing to the perceived symptom-

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atology, as well as the consequences of a patient's climacteric changes and subsequent symptom behaviour in the environment, a treatment programme can be designed that is based on a functional analysis of symptoms. The following clinical guidelines are suggested.

(1) *Assessment period.* Assessment of typical and atypical climacteric complaints can be achieved by means of self-observation and self-report of symptoms. The influence of life stress can be assessed by asking the patient to keep daily records of the impact of environmental stress on the reported distress.
(2) *Treatment strategies.* Therapist and patient have to negotiate on explanatory models for the perceived complaints. Cognitive restructuring may be appropriate in case a patient attributes to the climacteric symptoms that do not appear to be related to the biological event of menopause. Coping skills training such as effective problem solving through interpersonal negotiations, social skills training and relaxation training may be useful for alleviating the effects of environmental stress on symptoms. The presence of severe vasomotor symptoms during some time may produce sleep disturbances and interfere with daily activities. Hence, training in self-management skills such as making a concrete and realistic planning of daily activities may be required. In case of adverse consequences of the social environment on a patient's physical changes of menopause and subsequent symptom behaviour, couples or network therapy may be indicated.
(3) *Treatment evaluation.* Self-monitoring of symptoms in relation to behaviour change during treatment may result in a more appropriate coping behaviour with distress perceived in the climacteric period.

Conclusion

Menopause has for long been regarded as a deficiency disease, requiring medical attention and hormone replacement therapy. However, it may be more appropriate to discuss the climacteric in the context of a normal development stage in the female life. The period around menopause is associated with dramatic changes in hormonal levels, physical problems, identity issues and changes in social circumstances. Emphasizing the importance of biological factors and negatively experienced consequences of menopause runs the risk of medicalization and stigmatization. Placing menopause in the context of a normal development stage may encourage a view of the menopause as a natural and potentially positive event. However, it cannot be denied that in some women menopause is associated with severe physical symptoms and psychological distress. It appears that the biological event has little impact on subsequent perceived mental health, and that psychosocial factors predict the majority of psychological complaints. This emphasizes the importance of paying attention to psychological factors and social circumstances of patients having complaints and applying to menopause clinics. In such cases, a biopsychosocial treatment approach is in our opinion justified.

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