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# Menopause

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## Aim and intended learning outcomes

The aim of this article is to provide an overview of the menopause to improve nurses' knowledge and understanding of the changes that occur as a consequence. Medical and non-medical treatments are reviewed. After reading this article you should be able to:

- Describe the physiology of the menopause.
- Outline the symptoms commonly associated with menopause.
- Understand the association between the menopause, bone loss and subsequent fracture.
- List the various types of HRT available and the current indications and contraindications for its use.
- Describe the complementary therapies sometimes used during menopause and know where to access information about them.
- Discuss the ways in which nurses can help women improve their health during and after the menopause.

## Introduction

The menopause means the cessation of menstruation, but the term is often used to refer to the period of female climacteric. Menstruation and ovulation become less frequent and eventually stop as oestrogen production declines and the endometrium becomes atrophic. In the UK, the average age of menopause is 51 years and although it commonly occurs between the ages of 45 and 56 years, it may occur as late as 57 (McKinlay *et al* 1992). With the onset of menopausal symptoms and the known association between oestrogen, bone loss and subsequent fracture, it is appropriate

that women should be informed about the changes that occur. Hormone replacement therapy (HRT) alleviates symptoms of the menopause and prevents bone loss associated with a lack of oestrogen after the menopause. Research on the safety of HRT is conflicting, with some studies showing beneficial effect on the cardiovascular system (Grodstein and Stampfer 1995, O'Keefe *et al* 1997), and others an adverse effect (Hully *et al* 1998, WGWHI 2002). Women are rightly cautious to ensure that any drug they use is safe and appropriate for them. Nurses are ideally placed to advise, inform and assist women in making decisions about their health during and following the menopause. Health promotion is an essential part of any nurse's role and there are opportunities for nurses of all disciplines to encourage health promotion, even in areas far removed from gynaecology or women's health. In whatever setting nurses work, women may seek advice about their menopausal symptoms and nurses should ensure that any advice they give is underpinned with evidence-based information (NMC 2002).

The menopause is an event, not a phase, but women talk about 'the change' or the 'menopausal phase' to include the time when periods begin to change and symptoms start to occur. Over the past five to eight years the media has become increasingly interested in the menopause and there has been a sharp rise in the number of products available to assist women through it. Women hope that by living a healthy life they may avoid the inconvenience of menopausal symptoms as well as the more serious consequences that some experience.

HRT has developed in new ways, giving women an option to alleviate symptoms and prevent some of the long-term effects of menopause. Women

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## In brief

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### Summary

The menopause is a significant event in the lives of most women. Some have positive experiences while others may have difficulty managing their symptoms and adjusting to the changes that result. This article discusses the physiology, symptoms and treatment of the effects of menopause. Nurses are ideally placed to advise, inform and assist women in making decisions about their health during and following the menopause.

### Key words

- Hormone replacement therapy
- Menopause
- Women's health

These key words are based on subject headings from the British Nursing Index. This article has been subject to double-blind review.



**Box 1. Hormone changes during the menstrual cycle**

Change in hormone concentration	
Oestradiol (E2)	↓
Oestrone (E1)	↓
Ratio of E2: E1	reverses
Follicle-stimulating hormone	↑
Luteinizing hormone	↑

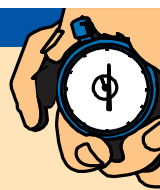
(McKinlay *et al* 1992)

want to know what symptoms to expect and what they can do to help protect their long-term health in a safe manner. Many want to take responsibility for their health and make their own decisions about whether or not to use HRT and other therapies. Nurses can help to promote self-care by:

- Understanding the changes that occur during menopause.
- Being up to date on current research into HRT treatments.
- Providing accurate and relevant information to support women in making decisions.

**TIME OUT 1**

Review the physiology of the menstrual cycle and make short notes on each of the three phases of the cycle using a textbook and Box 1.



**Normal physiology**

During menstruation low levels of oestrogen and progesterone are released into the bloodstream. The hypothalamus controls the secretion of these

hormones through the release of luteinizing hormone-releasing hormones (LHRH), which then stimulates the pituitary gland to produce follicle-stimulating hormone (FSH). This in turn stimulates the ovaries to produce oestradiol, which causes the endometrium (womb lining) to proliferate or thicken. As circulating oestradiol increases, FSH and luteinizing hormone (LH) levels fall until around day 14 of the cycle. LH then peaks and ovulation generally occurs shortly afterwards. If fertilisation does not take place, oestrogen and progesterone levels fall and the endometrium is shed and menstruation occurs. The falling levels of oestrogen and progesterone are detected by the hypothalamus and the cycle starts again. The hormonal changes that occur during the normal menstrual cycle are shown in Box 1.

From around the age of 35 years, the natural cycle becomes less predictable and ovulation may not occur in every cycle (McKinlay *et al* 1992). Oestrogen levels fall and, as a result of the negative feedback system of the pituitary and hypothalamus glands, more FSH is released in an attempt to stimulate ovarian function. When oestrogen levels fall too low to stimulate endometrial growth, bleeding stops altogether and the menopause occurs.

**Follicle stimulating hormone** Hormonal changes begin before a woman is aware of an alteration in her menstrual pattern. Fluctuations of FSH and LH occur throughout the peri-menopause, eventually peaking two to three years after periods stop, and remaining high for the next 20 years or so (unless HRT is taken). FSH levels fluctuate widely during the time leading up to the last menstrual period and afterwards (Teede and Burger 1998).

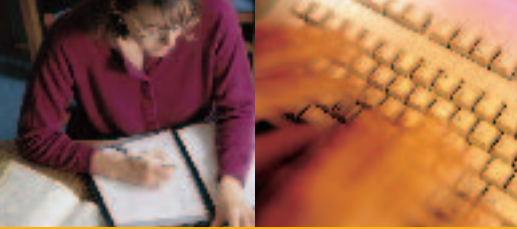
**Oestradiol/oestrone** In the pre-menopausal woman, oestradiol and oestrone are present, with oestradiol being the dominant hormone. The ovaries secrete both these hormones, but oestrone is also available through the conversion in fatty tissue of the hormone androstenedione, which is secreted by the adrenal glands. Oestrone is biologically less active than oestradiol. After the menopause, the ratio of oestradiol to oestrone changes, with oestrone becoming the dominant hormone. There may be periods of transient excess oestrogen, with raised FSH levels (Teede and Burger 1998).

**The onset of menopause**

Menopause means the last menstrual bleed and as such cannot be diagnosed until it has occurred. The World Health Organization's (1994) definition is outlined in Table 1. The phase of time either side of the last period is the climacteric and it is during this time that many women experience physical and psychological symptoms.

**Table 1. The World Health Organization's definition (WHO 1994)**

<b>Peri-menopause</b>	The time leading up to menopause with endocrinological, biological and clinical features of approaching menopause, ending one year after the last menstrual bleed.
<b>Menopause</b>	Permanent cessation of menstruation resulting from the loss of ovarian follicular activity.
<b>Post-menopause</b>	The time following the date of last menstrual bleed, which cannot be determined until 12 months of spontaneous amenorrhoea has been observed.

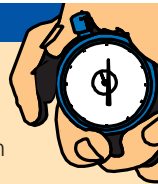


When women talk about going through the menopause, they may refer to months or even years of physical and emotional symptoms. In the UK, the majority of women experience the menopause at around the age of 51 years, although it is common for it to occur as early as 45 or as late as 57 years (McKinlay *et al* 1992). However, menopause can also occur at an early age in some women. In the UK, menopause before the age of 40 is usually known as premature menopause (Rees and Purdie 2002). Premature menopause may occur at any age and often no cause is found; however, causes may include:

- Surgery – bilateral oophorectomy results in immediate menopause. Hysterectomy may lead to earlier menopause, although the evidence for this is inconclusive (Ravn *et al* 1995, Siddle *et al* 1987).
- Genetic factors – chromosomal abnormalities (Devi and Benn 1999).
- Autoimmune disease (Anasti 1998).
- Radiotherapy and chemotherapy (Howell *et al* 1998, Seeley and Ashton 2000).
- Infection, although this is a rare cause (Morrison *et al* 1991).

**TIME OUT 2**

Make a list of the symptoms you associate with the menopause. Choose three of these symptoms and discuss with a colleague how each of these symptoms would affect your life at home and at work if you experienced them.



**Short-term effects** Around three quarters of women in the UK are thought to experience troublesome symptoms, including hot flushes and night sweats around the time of the menopause (Barlow *et al* 1991). Some women also experience psychological symptoms, such as poor concentration and depressed mood. Symptoms may start before a change in periods is noticed and may fluctuate in frequency and severity as hormonal changes occur. Symptoms such as night sweats may disturb sleep and lead to other symptoms, such as poor concentration, poor memory and tiredness. Typical menopausal symptoms are summarised in Table 2. Menopausal symptoms affect women in different ways and are influenced by other factors that occur at the same time. For example:

- Family pressures – ageing parents, troublesome teenagers.
- Stress.
- Relationship difficulties.
- Work pressures.
- Ill health.

**Intermediate effects** Symptoms that commonly arise after the menopause include bladder symptoms,

**Table 2. Typical menopausal symptoms (McKinlay *et al* 1992)**

<b>Short-term symptoms</b>	Hot flushes Night sweats Psychological upset, for example, poor memory and concentration, tiredness, mood swings Formication (a tactile hallucination or illusion that insects are crawling on the body or under the skin)
<b>Intermediate symptoms</b>	Vaginal dryness Dyspareunia (painful or difficult intercourse) Bladder symptoms, for example, frequency of micturition, urgency, mild stress incontinence
<b>Long-term symptoms</b>	Osteoporosis Cardiovascular disease

such as urgency, frequency and dysuria, which develop as a result of urogenital atrophy. The vagina changes shape, becoming shorter and flatter, with decreased vaginal secretion and a susceptibility to infection. Blood flow decreases and the epithelium becomes thinner and more transparent. Vaginal dryness can lead to vaginal discomfort, irritation and dyspareunia. Physical changes in hair, skin and nails become noticeable after the menopause. This is thought to be linked to a decline in collagen levels (Rees and Purdie 2002). Menopausal symptoms are self-limiting, that is they often subside spontaneously, but may also have a profound effect on a woman's wellbeing and quality of life (Ringa 2000).

**Osteoporosis**

Bone is living tissue that is continually being remodelled, broken down and rebuilt by osteoblasts. During childhood growth, osteoblasts enable the skeleton to increase in density and strength, with peak bone mass achieved by the late 20s to early 30s. Peak bone mass is influenced by a combination of factors, including race, heredity, diet, exercise, alcohol consumption, smoking and hormones (Kanis *et al* 1994).

The balance between breakdown and formation remains stable until around the age of 35, when bone loss increases as part of the natural ageing process (Cooper 1993). After menopause, as oestrogen levels decline, bone turnover is increased and the reformation of bone decreased – the end result is skeletal loss, leading to osteoporosis. Osteoporosis is a condition of the skeleton in which bone strength is compromised, predisposing women to increased risk of fracture (NIH Consensus Statement 2000). In the UK, one woman in three and one man in 12 over the age of 50 years will suffer a fragility fracture due to osteoporosis (Torgerson *et al* 2001) (Box 2). The most common fracture sites are the femoral neck (hip), forearm and spine (Kanis *et al* 1994).



### Box 2. Factors that increase the risk of fragility fractures

- Age – the risk of fracture increases with age
- Low levels of oestrogen due to primary hypogonadism, premature menopause or prolonged anorexia nervosa
- Testosterone deficiency in men
- Long-term use of oral corticosteroid therapy (three months or more)
- Low body mass index (less than 19kg/m<sup>2</sup>)
- Maternal history of hip fracture
- Smoking
- History of previous fragility fracture

(Kanis *et al* 1994)

As well as declining oestrogen levels after the menopause, other factors also influence the degree of bone loss. Other risk factors include alcohol abuse, immobility, hyperthyroidism and conditions associated with malabsorption of food, such as coeliac disease (Kanis *et al* 1994).

Measurements of bone mineral density (BMD) with a dual energy X-ray absorptiometry (DXA) scan, usually of the hip and spine, can assess risk for osteoporosis. This test is advocated for those who are considered to have high risk factors for fracture and where assessment would influence management (RCP 1999). Quantitative ultrasound (QUS) of the heel is another way of identifying risk of future osteoporotic fracture and may be a useful tool. QUS is not recommended as the sole diagnostic tool, as it does not measure bone mineral density directly (NOS 2001).

### Cardiovascular disease

The term 'cardiovascular disease' is used to describe diseases of the heart and associated blood vessels. Myocardial infarction and stroke are the primary clinical end points. Cardiovascular disease is unusual before the menopause, but becomes the most common cause of death in women after the age of 60 (Stevenson 1996). After a natural menopause, women are three to four times more likely to suffer atherosclerosis (Stevenson 1996). Epidemiological studies show that women who experience a surgical menopause have an increased risk of coronary heart disease compared with women of the same age who have functioning ovaries (Colditz *et al* 1997). The use of HRT for prevention of heart disease is controversial, as recent studies have shown an increased risk of heart disease and strokes with combined oestrogen/progestogen use (Hully *et al* 1998, WGWHI 2002). Discussion is ongoing as to

the full implications of these studies, as the cohorts included were not considered by some to be 'typical' women (Stevenson and Whitehead 2002).

### TIME OUT 3

Consider what you know about HRT. Make a list of the facts you have learnt in your professional capacity and another list of things you have learnt (or heard) through other means, such as relatives, friends and through the media. Describe the ways in which women may receive information about HRT and make some suggestions on how this could be improved.



### Hormone replacement therapy

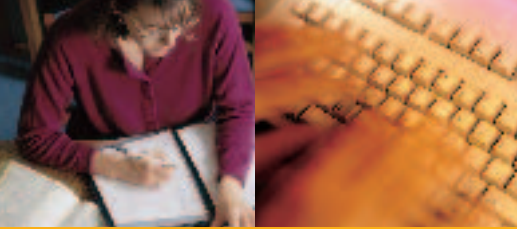
**Indications for HRT** There are several groups of women for whom HRT might be indicated:

- Women who are experiencing short-term symptoms of the menopause, including hot flushes, sweats or genitourinary symptoms such as vaginal dryness.
- Those who have had an early menopause (under the age of 45 years).
- Those at high risk of osteoporotic fracture, who have been identified by risk factors and ideally densitometry.

**Benefits** HRT relieves vasomotor symptoms such as hot flushes and night sweats, as long as an adequate dose of oestrogen is used (MacLennan *et al* 2001). Psychological symptoms of menopause, such as lack of concentration, poor memory and depressed mood, may be alleviated by oestrogen treatment. However, as the cause of these symptoms may not always be hormone related, an improvement may not be guaranteed. Symptoms of urogenital atrophy, like vaginal irritation, dryness and itching, are improved by the use of systemic HRT and local application to the vaginal area (Cardozo *et al* 1998). Bone mass is improved and the risk of osteoporotic fracture is reduced by using oestrogen (WGWHI 2002). Recent studies have also shown a reduction in the risk of colonic cancer with oestrogen therapy (WGWHI 2002).

**Contraindications** Very few women cannot tolerate HRT, however, a number of contraindications need to be considered (Rymer 2000):

- Active or recent thromboembolic disease.
- Severe active liver disease.
- Pregnancy.
- Otosclerosis – a progressive disease of the inner ear.
- History of an oestrogen-dependent tumour, for example, in the breast or endometrium.
- Undiagnosed vaginal bleeding – bleeding more than one year after the menopause.

**Table 3. Extra cases of breast cancer per 1,000 women treated with HRT**

	Two years' use	Five years' use	Ten years' use
Unopposed oestrogen	0.7	2	5
Combined HRT	2	8	22

(CGHFBC 1997, Magnusson *et al* 1999)

Women with contraindications might still receive HRT under the care of a specialist clinic, if the benefits outweigh the potential risks. It may be preferable to refer women with the following conditions to a specialist clinic (Rees and Purdie 2002):

- Endometriosis.
- Fibroids.
- Diabetes.
- Gall bladder disease.
- Epilepsy.

**Associated risks** Risks associated with HRT are rare, but you should warn women about them. In the first year of use, the risk of venous thrombosis increases slightly. The risk for women not using HRT is estimated to be one per 10,000 women and this increases to three per 10,000 in women using oestrogen therapy (Lowe *et al* 2000). When women are prescribed HRT, they should be advised to look for signs of redness, tenderness and swelling in the calves, while being reassured that such a risk is small.

There is an increased risk of endometrial cancer with the use of unopposed oestrogen therapy, that is without a combined progestogen phase of treatment (Weiderpass *et al* 1999). Women with a uterus should use combined oestrogen and progestogen therapy to prevent this form of cancer. An adequate dose of progestogen, for at least 12 days a month, should be included in the HRT regimen. In practice, this is usually included in commercially available HRT combinations.

The risk of breast cancer is slightly increased with long-term use of oestrogen therapy (Bush *et al* 2001). The risk appears to be dependent on the duration of use, not the dose, although there seems to be a slight difference between oestrogen-only and combined therapy use, with some studies showing an increased risk with combined oestrogen and progestogen use (Table 3).

No studies have been conducted specifically on women who take HRT for many years for an early menopause, but experts postulate that it is the total lifetime exposure to oestrogen that is important (Rees and Purdie 2002). These women would have been exposed to oestrogen naturally if the ovaries had functioned normally. The increased risk is thought to begin after the so-called normal age of menopause, not before (Rees and Purdie 2002). This is reassuring for women who start HRT at a

young age and need to take it for many years because of a premature menopause.

A small increased absolute risk of heart disease and stroke was demonstrated in the Women's Health Initiative Study (WGWHI 2002), although it also showed benefits for hip fracture and bowel cancer. The findings relate to one particular type of HRT only and further studies are awaited. The metabolic effects of different types of HRT are varied and may influence the cardiovascular effects, for example lipid effects, coronary artery tone effects and antioxidant action (Stevenson and Whitehead 2002).

HRT should be prescribed on an individual basis, depending on a needs and risk assessment of the woman. While a woman is using HRT, the balance of benefit and risk may change, as she develops new medical conditions or in association with long-term use. The benefits may change as her medical and personal circumstances alter, for example, her symptoms may subside spontaneously and, therefore, the need for HRT is lessened and the benefits reduced.

**Side effects** Minor side effects are common in the first few weeks of treatment and women should be advised to persevere with HRT during this period. After this settling-in period, side effects can be minimised by adjusting the dose, type or route of HRT. Such side effects may include breast tenderness, nausea and leg cramps. Symptoms similar to those experienced in pre-menstrual tension may be related to the progestogen component of HRT, for example, headaches, irritability and bloatedness. These can often be resolved by changing the type, dose or route of progestogen.

**Practical aspects** For most women, HRT therapy comprises oestrogen and progestogen. Women who have had a hysterectomy may use oestrogen on its own. Women with an intact uterus use a combination regimen of oestrogen and progestogen. This prevents endometrial hyperplasia (or thickening of the uterus lining), which can occur with oestrogen-only therapy (Grady *et al* 1995). Oestrogen therapy relieves hot flushes and sweats, improves vaginal dryness and may help with other symptoms around the time of the menopause (Rees and Purdie 2002). Oestrogen therapy also has a positive effect on bone density, delaying the skeletal loss that occurs at and after the menopause, for as long as the HRT is taken (Eddy *et al* 1998).

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Table 4. Routes of administration for HRT

Oestrogen	Progestogen
Tablet Patch Vaginal (systemic and local) Implant Intranasal Gel	Tablet Patch (with oestrogen) Vaginal Intrauterine (licence pending)

**HRT regimens** Oestrogen is given on a daily continuous basis, without a break. Progestogen is given in one of three ways:

- Cyclical – usually results in a monthly bleed. This is used for women who are still having some natural periods, or are within one year of them stopping.
- Tricyclical – usually results in bleeds every three months. This regimen is used for women whose periods have not yet stopped completely.
- Continuous – this is a 'no-bleed' therapy (some irregular bleeding initially), for women who have not had a natural period for at least 12 months, that is they are post-menopausal.

HRT can also be given as a gonadomimetic, for example, tibolone – a synthetic hormone that has oestrogenic, progestogenic and androgenic properties. There are a variety of different routes for giving HRT (Table 4).

Before initiating HRT, the prescribing doctor may request some of the following investigations:

- Blood pressure – it is common practice to record blood pressure as a baseline measurement and also in ongoing monitoring. HRT does not, however, affect blood pressure (PEPI Trial 1995).
- Weight – is a useful baseline measurement. Being overweight will not preclude the use of HRT,

although weight management advice should be provided.

- Pelvic examination – is not routinely performed before treatment, but it is clinically indicated in women with a history of fibroids, ovarian cysts, pelvic pain, abnormal vaginal bleeding, endometriosis, prolapse or urinary leakage (Page and Glasier 2000).
- Breast examination – is not routinely indicated, but may be clinically indicated before the use of HRT in women with symptomatic disease, or a personal or family history of breast cancer.

Other investigations that may be performed are listed in Table 5.

**Treatments for osteoporosis**

Following a medical assessment of risk factors and measurement of bone density (if required), past and current medical history need to be considered before a treatment decision can be made. Many different treatments are available to prevent and reduce the symptoms of osteoporosis.

**Bisphosphonates** These are non-hormonal drugs, which are licensed to prevent and treat osteoporosis. There are three bisphosphonates currently in use: alendronate sodium (Fosamax); cyclical etidronate

Table 5. Investigations that may be performed around the time of the menopause

<b>Follicle-stimulating hormone levels</b>	This is not helpful for diagnosis in most women, but can be useful in women with early menopause (serial tests), or women with hysterectomy and ovarian conservation, where there may be early menopausal symptoms.
<b>Thyroid function</b>	When flushes do not improve on HRT or if thyroid disease is suspected on clinical examination.
<b>Lipid profile</b>	Women with a family history of coronary heart disease, or with other strong risk factors for heart disease, such as hypertension, obesity or smoking.
<b>Thrombophilia screen</b>	Women with a personal or family history of venous thrombosis.
<b>Bone densitometry</b>	Women considered at high risk of osteoporotic fracture.
<b>Endometrial assessment</b>	Women with abnormal vaginal bleeding (ultrasound or biopsy).



(Didronel); and risedronate sodium (Actonel). Randomised controlled trials have shown that alendronate and risedronate reduce the risk of spinal fractures by 50 per cent within one year of starting treatments (Black *et al* 1996, Pols *et al* 1999, Reginster *et al* 2000). Reduced risk of hip fracture is demonstrated in people with a low bone-density, providing a useful way of identifying patients who would benefit most from bisphosphonate treatment. Cyclical etidronate has been available for longer than alendronate and risedronate and there is evidence that it reduces spinal and other fractures (Van Staa *et al* 1998, Watts *et al* 1990). **HRT** Studies have demonstrated that HRT reduces the risk of hip and spine fractures by about one third (WGWHI 2002). HRT may be the treatment choice for menopausal women who need bone protection, especially those who have an early natural menopause or removal of their ovaries before they reach the age of 45 years. Other groups for whom HRT is recommended include women with Turner's syndrome, diseases of the pituitary gland and women with amenorrhoea because of anorexia nervosa or over-exercise (Rymer *et al* 2003).

**Selective estrogen receptor modulators (SERMs)** SERMs have a similar beneficial effect on bone remodelling, while exerting a neutral or possibly beneficial effect on the endometrium and breast respectively (Bryant *et al* 1996). At present, one SERM – raloxifene (Evista) – is licensed for the prevention and treatment of spinal osteoporosis in postmenopausal women. A significant reduction in spinal fractures has been demonstrated after one year of treatment (Powles *et al* 1996). A side effect of raloxifene is hot flushes, which makes it unsuitable for women during the early menopausal years.

**Calcium and vitamin D** Calcium and vitamin D can be given as a supplement at doses of 1200mg and 800iu respectively to older, frail women and reduces the risk of non-spinal fractures including hip fracture (Chapuy *et al* 1992). It is not yet clear whether the bone benefits are due to vitamin D, calcium or a combination of both. To improve bone health in women across the population, all women should be encouraged to obtain adequate calcium (700mg daily) and vitamin D from a well-balanced and varied diet and sensible exposure to sunlight.

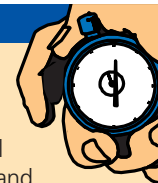
**Exercise** Some exercise has been shown to have a positive influence on bone density (Kerr *et al* 1996, Kohrt *et al* 1997), although these effects have not always been sustained. It seems wise to advocate regular exercise, which will also benefit the cardiovascular system and may enhance general wellbeing. Women should aim for 20 minutes of weight-bearing exercise at least three times a week. For older women and those with osteoporosis

or other medical conditions, limiting mobility should aim to reduce the risk of falling by improving balance, muscle strength and co-ordination with more moderate exercises, for example, t'ai chi.

**Other treatments** Less commonly used treatments to reduce the risk of osteoporotic fractures, such as calcitonin, calcitriol and pamidronate, may be considered by specialist clinics. Other options being researched for the treatment of osteoporosis include parathyroid hormone and its effect on osteoblast activity, ipriflavone (a synthetic version of the naturally occurring isoflavone plant oestrogens), and growth hormones (Christodoulou and Cooper 2003).

#### TIME OUT 4

Visit a local health food shop and make a list of some of the products marketed specifically for improvement of menopausal symptoms. Choose one or two and consider how they are advertised, how much they cost and what evidence they claim to have for their use.



#### Complementary therapies

Many women are reluctant to use HRT, at least initially, and seek alternative or complementary therapies to help relieve their menopausal symptoms (Tiran 2002). Research into the use of complementary therapies for menopausal problems is growing, but at the moment much of the evidence is anecdotal. This does not necessarily negate their use, but health professionals recommending the use of such therapies should first consider the medical evidence for their use. Nurses should refer women to reputable practitioners, rather than try to make treatment suggestions that are outside their clinical competence. Women should be encouraged to ask the practitioner the following questions (RCN 2003):

- What are his or her qualifications?
- What training did he or she do, and for how long?
- How many years has he or she been in practice?
- Is he or she registered with a recognised professional organisation?
- Will the nurse inform the patient's GP of any treatment given?
- How much will it cost?

**Herbal remedies** It is important that nurses are aware of the safety issues relating to herbal therapies, especially possible interactions with conventional medicines. Herbal remedies should be used with caution in women with a contraindication to oestrogen, as some herbs act in a similar way to oestrogen, for example, black cohosh, agnus castus and wild yam.

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Tiran D (2002) Non-hormonal methods for coping with menopausal

**Homeopathy** A homeopath will assess each individual's constitution using an holistic approach, rather than focusing solely on the symptoms to be treated (Tiran 2002). Research into homeopathy for menopausal symptoms has largely been non-randomised or has used small sample sizes, but the treatment appears safe, with few side effects and some apparent benefit for hot flushes (Thompson 2002).

**Acupuncture** This complementary therapy has been used to reduce hot flushes and is thought to work on the principle of balancing the hormonal system (Kronenberg and Fugh-Berman 2002).

**Phytoestrogens** These are non-steroidal, plant-derived compounds that possess 'weak' oestrogenic effects, which may offer benefits for menopausal women, such as reducing hot flushes and providing some protection against breast cancer and osteoporosis (Cassidy 1996). It has been suggested that the high consumption of dietary phytoestrogens in Asian populations is associated with a low incidence of hormone-related disease (Odens 1994).

Phytoestrogens are found in soy products and plants such as red clover. There are various types, but those commonly used are lignans and isoflavones. Results from randomised trials are conflicting (Burke *et al* 2003, Ernst 2002), but the frequency of the phytoestrogen dose rather than the overall single dose per day may be significant (Washburn *et al* 1999).

**Natural progesterone** Creams are not available on NHS prescription, but natural progesterone can be obtained by direct mail order, usually with a private prescription. Improvement in vasomotor symptoms was evident in one randomised trial, but further trials are required (Leonetti *et al* 1999, Wren *et al* 2003). Women should not use these creams as an alternative to progestogen in their HRT regimen, as this has not been shown to be an effective regimen (DTB 2001, Rees and Purdie 2002).

Other complementary therapies have less supportive evidence that they directly improve menopausal symptoms, but because they help to improve general wellbeing, may help women through an otherwise difficult time:

- Aromatherapy.
- Reflexology.
- Yoga.
- Stress reduction.

### Nursing roles

It would not be appropriate to expect all nurses to offer a comprehensive menopause clinic service. However, many community nurses are involved in decision-making about HRT. Female patients on many hospital wards may also require information, especially those who may have had or are undergoing breast surgery or hysterectomy, or are experiencing

difficulty managing their menopause symptoms.

It is outside the remit of this article to consider in detail why women may or may not decide to use HRT. Unlike many other areas of health, the advice about HRT may not always be clear-cut; it will be appropriate for some women and not for others. There are many issues involved, not simply the decision as to whether or not it is medically indicated, but also other influences, including cultural aspects, level of education, perceived risk of using hormones and personal values. For example, how proactive a woman is in looking after her health, her attitude towards menopause, and the influence of others, including friends and family, and the opinion of medical and nursing staff (Marmoreo *et al* 1998). Rothert *et al* (1990) stated that there are three main factors involved in making a decision about HRT. These are:

- Base rate risk.
- Perceived risk.
- Personal values.

In helping women to make decisions about HRT, you can inform them of the base rate risk, for example, of breast cancer, and assist them with an assessment of their personal, or perceived risk. Two women may have the same base rate risk, but will perceive or accept the risk differently. Health professionals may help to quantify risk, but the women themselves will decide how much risk they perceive or are prepared to accept. Fear of cancer is a main reason for not using HRT, even in women in whom the benefit would be great (Hope and Rees 1995). Personal values describe what is important to an individual, and should be considered when advising women about HRT. All decisions should be consistent with the woman's personal values if she is to be confident with the decision she has made (Rothert *et al* 1990).

Nurses are also involved in baseline investigations of patients and ongoing monitoring of treatment. It may take several visits for a woman to settle into an HRT treatment regimen, but once a regimen has been established, she should return for regular follow-up visits. These may be to see the GP or the practice nurse. Regular assessments of blood pressure, weight, symptom control and bleeding should be included, as well as allowing the woman time to ask questions or discuss any anxieties she may have. Each visit is an opportunity to re-evaluate the need for treatment and consider the safety of continuing with it. It also provides an opportunity to discuss other health issues and to encourage health promotion. All nurses can offer health information and education on the areas outlined in Box 3.

Some nurses may work in a more specialised capacity, offering independent consultations, monitoring and changing treatment regimens, and


**Box 3. Areas for health information and education**

- Breast awareness
- Attendance for breast and cervical screening
- Smoking cessation initiatives
- Continence issues
- Cardiovascular risk factors
- Dietary issues, including weight control
- Osteoporosis

inserting hormone implants and intrauterine devices. These nurses are likely to have had wide clinical experience and formal study relating to this area of women's health.

**Conclusion**

The menopause, for some, marks the end of an era, an opportunity to reassess health and lifestyle for the future. Many women appreciate an opportunity to discuss issues relating to the menopause that

are personal to them (Roberts and Sibbald 2000). It has been suggested that all women should be given an opportunity to have a one-to-one personal consultation at around the age of 50 to discuss menopausal health issues (Pennell Report 1998). Many women experience the menopause in a positive and trouble-free way. Those that experience symptoms may opt for medical intervention or choose to cope without. Women who are at risk of diseases such as osteoporosis may consider medical therapies as well as making changes to their lifestyle and diet. Nurses are well placed to provide information and support to women at this time, but they also need support and education to ensure that their clinical practice is of a high standard and is evidence-based .

**TIME OUT 5**

Now that you have completed the article, you might like to write a practice profile. Guidelines to help you are on page 55.

**Useful websites and resources**

- [www.menopausematters.co.uk](http://www.menopausematters.co.uk)
- [www.menopause.org](http://www.menopause.org)
- [www.hormone.org](http://www.hormone.org)
- Amarant Trust, Sycamore House, 5 Sycamore Street, London EC1Y 0SR. Helpline: 01293 413000. Quarterly newsletter. Recorded helplines
- British Homeopathic Association, Hahnemann House, 29 Park Street West, Luton LU1 3BE. Tel: 0870 444 3950. [www.truhomeopathy.org](http://www.truhomeopathy.org)
- British Menopause Society, 4-6 Eaton Place, Marlow, Buckinghamshire SL7 2QA. Tel: 01628 890199. Website: [www.the-bms.org](http://www.the-bms.org). Multidisciplinary professional organisation for health professionals working in the menopause field.
- Council for Complementary and Alternative Medicine, Park House, 206-208 Latimer Road, London W10 6RE (post only).
- Daisy Network (previously known as Daisy Chain) PO Box 183, Rossendale BB4 6WZ (post only). Website: [www.daisynetwork.org.uk](http://www.daisynetwork.org.uk). Support group for women with premature menopause
- Institute for Complementary Medicine, PO Box 194, London SE16 7QZ. Tel: 020 7237 5165. Website: [www.icmedicine.co.uk](http://www.icmedicine.co.uk)
- Menopause Nurse Network c/o Sharon Beales, Menopause Unit, Northwick Park Hospital, Watford Road, Harrow, Middlesex HA1 3UJ. Offers network and support for nurses
- National Osteoporosis Society, Camerton, Bath BA2 0PJ. Tel: 01761 471771. Helpline: 0845 4500230. Website: [www.nos.org.uk](http://www.nos.org.uk)
- Women's Health Concern, PO Box 2126, Marlow, Buckinghamshire SL7 2RY. Tel: 01628 483612. Website: [www.womens-health-concern.org](http://www.womens-health-concern.org)
- Women's Nutritional Advisory Service, PO Box 268, Lewes, East Sussex BN7 1QN. Tel: 01273 487366. Website: [www.wnas.org.uk](http://www.wnas.org.uk)

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