



## **Women's Experience of Working through the Menopause**

**Amanda Griffiths, Sara MacLennan & Yin Yee Vida Wong**

*A Report for*  
**The British Occupational Health Research Foundation**  
**2010**

**BOHRF**

# CONTENTS

TERMS OF REFERENCE .....	4
ACKNOWLEDGEMENTS .....	4
AUTHORS .....	5
INSTITUTE OF WORK, HEALTH & ORGANISATIONS .....	5
1. EXECUTIVE SUMMARY .....	6
2. INTRODUCTION & BACKGROUND .....	8
3. OVERVIEW OF RESEARCH DESIGN .....	9
4. REVIEW OF PUBLISHED LITERATURE .....	10
4.1 The menopause and its reported effects on health and well-being .....	10
4.2 Work and the menopause .....	11
4.3 Disclosure .....	12
4.4 Treatments for the menopause.....	12
4.5 Summary .....	13
5. INTERVIEW STUDY .....	14
5.1 Interview design.....	14
5.2 Data collection .....	14
5.3 Measurement of menopausal status .....	14
5.4 Participants .....	15
5.5 Transcription.....	15
5.6 Data analysis .....	15
5.7 Inter-rater reliability .....	15
5.8 Interview study: Results - Themes.....	15
5.8.2 Cognitive and emotional response (attributed to others).....	17
5.8.3 Behavioural responses (women).....	18
5.8.3.1 <i>Specific strategies related to work and working life</i> .....	18
5.8.3.2 <i>Disclosure of menopausal status</i> .....	18
5.8.3.3 <i>Generic coping strategies</i> .....	19
5.8.4 Behavioural responses (by others).....	19
5.8.4.2 <i>Informational support</i> .....	20
5.8.4.3 <i>Instrumental social support</i> .....	20
6. QUESTIONNAIRE STUDY .....	22
6.1 Sampling.....	22
6.2 Data collection: Web-based survey .....	22
6.3 Questionnaire items.....	23
6.3.1 Menopausal status (6 items).....	23
6.3.2 Attitudes towards the menopause (10 items) .....	23
6.3.3 Use of HRT and alternative treatments (11 items) .....	24
6.3.4 Symptom experience and its impact on work and life (20 items).....	24
6.3.5 Experience of hot flushes at work (6 items) .....	24
6.3.6 Types of support (6 items) .....	24
6.3.7 Coping strategies specific to the menopause (19 items) .....	25
6.3.8 General coping styles (16 items) .....	25
6.3.9 Physical activity (7 items) .....	25
6.3.10 Disclosure to line managers and reasons for this decision (4 items).....	25
6.3.11 Physical, organisational and psychosocial adjustments (10 items).....	25
6.4 Piloting the questionnaire .....	26
6.5 Results I – Characteristics of participants.....	26
6.5.1 Description of sample .....	26
6.5.2 Menopausal status .....	26
6.5.3 Education.....	27
6.5.4 Significant health problems diagnosed by doctor .....	28
6.5.5 Level of physical activity .....	29
6.5.6 Children living at home.....	30
6.5.7 Caring for an elderly or disabled parent/person .....	30
6.5.8 General coping styles .....	31
6.5.9 Job satisfaction .....	31
6.6 Results II – Characteristics of the work environment .....	32
6.6.1 Gender of line manager .....	32
6.6.2 Age of line manager .....	32
6.6.3 Gender balance in the immediate working environment.....	33
6.6.4 Sharing office/work space/working environment.....	33
6.6.4 Temperature control.....	34

6.6.5 Ability to negotiate working hours/working practices.....	34
6.6.6 Ease of taking time off for medical treatment for the menopause.....	35
6.6.7 Provision of toilets in the workplace.....	35
6.6.8 Satisfaction with the state of cleanliness of toilets .....	36
6.6.9 Rest Area in the Workplace.....	36
6.6.10 Accessibility of cold drinking water in the workplace.....	37
6.7 Results III – The menopause and working life .....	38
6.7.1 Attitudes towards the menopause.....	38
6.7.2 Menopausal symptoms.....	40
6.7.3 Perceived impact of symptoms on work.....	41
6.7.4 Job performance .....	42
6.7.5 Others’ perceptions of competence .....	43
6.7.6 Overall impact of menopause on life and work .....	43
6.7.7 Physical, organisational and psychosocial adjustments at work.....	44
6.7.8 Experience of hot flushes at work.....	45
6.8 Results IV – Support outside and at work .....	46
6.8.1 Satisfaction with support.....	46
6.8.2 Disclosure to line managers and reasons for this decision .....	47
6.8.3 Absence from work.....	47
6.9 Results V – Coping with the menopause .....	48
6.9.1 Hormone replacement therapy.....	48
6.9.2 Alternative or complementary treatments.....	49
6.9.3 Other coping strategies.....	50
7. SUMMARY AND CONCLUSIONS .....	52
7.1 Overview.....	52
7.2 Management awareness .....	53
7.3 Flexibility.....	53
7.4 Formal and informal sources of support at work.....	53
7.5 Temperature of work environment.....	53
7.6 Next steps .....	54
8. REFERENCES.....	55

## **TERMS OF REFERENCE**

The authors of this report were commissioned by the British Occupational Health Research Foundation (BOHRF) to explore women's experience of working through the menopause. In particular, the research aims were to:

- Review the scientific literature on work, health and ageing with specific reference to the menopause
- Explore women's experience of working through the menopause
- Provide recommendations for employers, for women and for those who advise them

## **ACKNOWLEDGEMENTS**

We would like to acknowledge the financial support of the British Occupational Health Research Foundation (BOHRF) and particularly to thank:

- Brian Kazer, Chief Executive, BOHRF, for his continued support and advice
- All the women who took time to share their experiences with us, both at interview and in response to our electronic questionnaire
- The enthusiastic contacts who facilitated the research in each of our participating organisations
- Peter Bowen-Simpkins, Consultant Obstetrician and Gynaecologist
- Sean Kehoe, Consultant Obstetrician and Gynaecologist
- Liz Campbell, Director, Wellbeing of Women
- Sayeed Khan, Occupational Physician
- Tom Cox CBE, Institute of Work, Health & Organisations, University of Nottingham
- Angela Lindley, Institute of Work, Health & Organisations, University of Nottingham
- Alec Knight, Institute of Work, Health & Organisations, University of Nottingham

*The views expressed in this report are the authors' and do not necessarily reflect those of any other person or organisation.*

## AUTHORS

**Professor Amanda Griffiths** *PhD MSc PGCE CPsychol AcSS AFBPsS*, of the Institute of Work, Health & Organisations, University of Nottingham, is a Chartered Occupational Psychologist, Chartered Health Psychologist, and Health Professions Council registered Psychologist. Her research concerns the design, organisation and management of work, and its relationship with health and performance. Recent projects focus on the ageing population and workforce, the management of long-term health conditions, and the delivery of effective hospital services for older patients with mental health problems.

**Dr Sara MacLennan** *PhD CPsychol AFBPsS FRSH*, formerly at the Institute of Work, Health & Organisations, University of Nottingham, is a Senior Lecturer in the Academic Urology Unit, University of Aberdeen and Director of Operations for UCAN, a urological cancer charity. She is a Chartered Health Psychologist. Her research interests include managing illness at work and work-related reproductive health.

**Yee Yin Vida Wong** *BSS MPhil* was formerly a Research Associate at the Institute of Work, Health & Organisations. She has been employed on projects on work and health funded by the Health & Safety Executive, the Engineering Employers' Federation and the European Agency for Health & Safety at Work.

## INSTITUTE OF WORK, HEALTH & ORGANISATIONS

The Institute of Work, Health & Organisations at the University of Nottingham, is a *World Health Organisation Collaborative Centre in Occupational Health*, and the only such centre in the world staffed solely by applied psychologists. Based within the School of Community Health Sciences, its staff of Chartered Occupational, Health, Clinical and Forensic Psychologists apply a scientific, scholarly and practical approach to their work. They aim to make a significant impact on scientific debate, on government policy and on real-world practice.

The Institute receives significant financial support for its research from government, industry, charities, research councils and the European Commission. It publishes the results of its research in scientific journals as well as in substantial reports for government and industry, and in articles for professional and practitioner publications. In addition to research activities, staff serve on advisory committees at organisational, national and international levels, provide consultancy services, act as expert witnesses and are regularly consulted by the media about their areas of research expertise. They work closely with professional and practitioner communities, in both private and public sectors, to turn the knowledge they develop into practical applications.

The Institute's research drives its teaching – innovative postgraduate and post-qualification courses that aim to equip students with the knowledge and skills to 'make a difference' – to maximise the health and performance of people, organisations and communities. Information about the Institute, its research activities and its portfolio of postgraduate courses, can be found at: [www.nottingham.ac.uk/iwho](http://www.nottingham.ac.uk/iwho).

Institute of Work, Health & Organisations  
International House  
Jubilee Campus  
Wollaton Road  
Nottingham, NG8 1BB

# 1. EXECUTIVE SUMMARY

Women comprise approximately half (47 percent) of the UK's workforce. Of those employed people aged over 50, forty-five percent are women, representing 3.5 million workers (Office of National Statistics, 2010). Thus, many of today's women workers are, or will be, working through a rarely discussed stage of life: the menopause.

Menopause is part of the natural ageing process for women, which refers to the point in time when menstruation has ceased for 12 consecutive months. This occurs naturally between the ages of 45 and 55; in the UK the average age of menopause is 52. During the period before the menopause (peri-menopause) these changes lead to menstrual irregularities. Symptoms associated with the menopause include hot flushes, palpitations, night sweats and sleep disturbance, fatigue, poor concentration, irritability, mood disturbance, skin irritation and dryness. Overall, this period of hormonal change and associated symptoms can last from four to eight years.

The aims of this exploratory study were (i) to examine the range of experiences reported by women with regard to the menopause and work, and (ii) to harvest their views on changes that could be made to their work and working environment that would improve the experience for them and for future generations of working women. The overarching aim was to provide recommendations and guidance for women, their employers and healthcare professionals. The research was undertaken in three stages: a review of the published literature, individual interviews with women, and a questionnaire survey.

The published literature revealed extensive research into the nature of the menopause and its effects on mid-life women's general health. However, little research has explored the effects of the menopause on work, the impact of work on symptoms, the strategies women use to cope at work, or what employing organisations could do to support them when problems arise. Interviews with 61 women aged 45-55 years revealed that the menopause and its associated symptoms can represent a major challenge for working women, but one that they are reluctant to discuss openly. Factors that arose in both the published literature and interviews informed the design of a questionnaire survey which was distributed electronically to women working in managerial and administrative roles, aged 45-55, from ten organisations included in the following sectors defined by the UK Standard Industrial Classification of Economic Activities: professional, scientific and technical activities; education; transportation and storage; finance and business; information and communication; wholesale and retail trade; public administration and defence, compulsory social security. Response rates in the organisations were estimated at between 5 percent and 43 percent. Completed questionnaires were received from 912 women.

It is clear from the results of this research that although for some women the menopause presented few problems, many found they were little prepared for its arrival, and even less equipped to manage its symptoms at work. Nearly half of the women found it somewhat/ or fairly difficult to cope with work during menopausal transition, an equal proportion of women did not find it difficult at all and only five percent reported it to be very or extremely difficult. However, menopausal symptoms can pose significant and embarrassing problems for some women, leaving them feeling less confident and at odds with their desired professional image. Of those who had difficulties, the major impact of the symptoms they attributed to the menopause on work were: (i) poor concentration; (ii) tiredness; (iii) poor memory; (iv) feeling low/depressed; and (v) lowered confidence. Hot flushes at work were a major source of distress for many women. The features of work that made symptoms more difficult to cope with were (i) working in hot and poorly ventilated environments, (ii) formal meetings, and (iii) high visibility work such as formal presentations. Almost half of respondents felt their job performance had been negatively affected by their menopausal symptoms, and of those that did not, a third felt their performance would have been affected had they not made additional efforts to overcome their difficulties. Some women said they worked extremely hard to overcome their perceived shortcomings. Although no objective measures of performance or competence were included in this research, nearly a fifth of women thought that the menopause had a negative impact on their managers and colleagues' perceptions of their competence at work, and felt anxious about these perceived performance deficits.

Women had developed many strategies for coping with problematic menopausal symptoms at work that they believed to be helpful: (i) adjustments to their immediate work

environment (e.g. obtaining fans or opening windows); (ii) adjustments to work routines (e.g. changing work hours, taking breaks, taking days off, not working voluntary overtime and adopting flexible working practices); (iii) active coping strategies, (disclosure, requesting formal adjustments, trying to control emotions, using positive reinterpretations and humour); (iv) compensatory strategies such as writing notes, lists and making greater use of technology; and (v) avoidance or withdrawal from challenging situations or tasks. In addition, they adopted more general strategies such as altering their diet, trying to sleep longer at weekends, doing more exercise, wearing layers of clothing, seeking out more information about the menopause, and making time for themselves and changes to their appearance as a result of an increasingly negative self image. The clear majority of women had never tried hormone replacement therapy (HRT). Of those that had, the majority reported that work was one of the main reasons they had decided to try it, and said it had helped. Many women had tried 'complementary' approaches and also thought them to be helpful.

The majority of the women in this study felt they needed further advice and support. Results showed that some women received considerable understanding and help from their colleagues and managers and it was greatly valued. They believed it enabled them to continue working well and productively. However, such practices vary enormously. In many settings, there was very little awareness of the menopause as a potential occupational health issue; it was a 'taboo' topic. In such circumstances, women typically suffer in silence, dare not speak openly about their difficulties, and consequently cannot receive the understanding and support they need. Many of the participants in this research were embarrassed to disclose their problems or feared that their managers would be embarrassed if they raised the subject, particularly if those managers were younger than them or were male. Where women had taken time off work to deal with their symptoms, only half of them disclosed the real reason for absence to their line managers. With any longstanding health-related condition, informed, sympathetic and appropriate support from line management is crucial in order to provide employees with the support they need. It is widely thought that such support encourages employee loyalty and facilitates continued participation in the labour force. This study has made it clear that the menopause presents an occupational health issue for some women, and for a significant period of time. The research has also revealed that women feel greater awareness and support from employers and managers would be helpful. Women also discussed social support given to them outside work from family, friends and healthcare professionals. Emotional, informational and practical support were all valued. Some mentioned they would have liked to receive more from professional sources (for example from GPs), particularly during the initial diagnosis of (and adjustment to) the menopause.

Taking an overview of the results, it is clear that the years leading up to and after the menopause can be demanding and stressful for some women. Women of this age also often have multiple roles: nearly half of respondents in this study reported having children still living at home, and one in five were acting as carer for an elderly or disabled relative or person. Four overarching issues emerged as areas for possible improvements at work: (i) greater awareness of managers about the menopause as a possible occupational health issue for women; (ii) increased flexibility of working hours and working arrangements; (iii) better access to informal and formal sources of support; and (v) improvements in workplace temperature and ventilation.

Organisations varied greatly in their willingness to be involved in this research. Whilst some immediately became engaged and saw its significance, others did not appear to consider this a topic worthy of serious consideration. Knowledge about the menopause was limited and there was often an apparent reluctance to probe a potentially sensitive area. However, it subsequently became clear when interviewing women that the vast majority were delighted that this hitherto 'taboo' matter was being scientifically explored, and that information and guidance might become available for future generations of women.

## 2. INTRODUCTION & BACKGROUND

There is increasing concern to improve the health of people of working age. In her review of the health of people of working age, *'Working for a Healthier Tomorrow'*, Dame Carol Black noted that keeping people well and in work has many benefits: not least, protecting individuals and their families against financial hardship and promoting a better quality of life (Department of Work and Pensions and Department of Health, 2008a). Employers, communities and the taxpayer all bear the costs of working-age ill-health which is estimated to cost around £100 billion every year. Evidence suggests that once out of work on a long term basis, the risks to mental health, physical health and social exclusion increase. In principle, providing that it is 'good' work, work has been shown to be largely protective for health (Waddell & Burton, 2006). In its response to Dame Carol Black's report, *'Improving Health and Work: Changing Lives'*, the British Government stated that it wished to see increasing recognition among employers that they should support people with health conditions to remain in or return to work (Department of Work and Pensions and Department of Health, 2008b). It identifies improving work and workplaces as a key area for action.

In parallel with this concern for the health of working age people, increased life expectancy and lower birth rates have resulted in declining numbers of younger people entering paid employment and thus decreasing dependency ratios (the number of working people per retired person). An ageing population and shortfalls in pension provision have made extending working life a priority for individuals and government policy (Griffiths 1997). More people will be working later than has been traditional in recent decades. Nonetheless, the work-related health of older workers in general, and older women workers in particular, has often been ignored or understated (Daley, 2002; Doyal, 2002; Griffiths, Knight & Mohd Mahudin, 2009; Kirby, 1998; Trades Union Congress, 2002). Women comprise approximately half (45 percent) of all employed people over the age of 50 in the UK (Office of National Statistics, 2010). This represents over 3.5 million women.

An earlier study conducted on behalf of the British Association for Women in Policing (Griffiths, Cox, Griffiths & Wong, 2008) revealed that the menopause represented a major challenge for some women's health but was not widely regarded as legitimate occupational health concern. Anecdotal evidence from other sources and from discussions between the first author and women in the UK revealed that many were 'suffering in silence'. Others, because of the difficulties they faced managing their symptoms, had considered working part-time or giving up work. Some had left the labour force entirely. A few had experienced disciplinary proceedings as a result of behaviour or poor performance that they believed was directly related to menopausal symptoms. For some, disciplinary proceedings were the trigger for disclosure: until then they had dared not admit to their employers the nature of their difficulties.

It was clear to the authors of this report that a systematic and large scale exploration of women's experience of working through the menopause was warranted, and we are grateful to the British Occupational Health Research Foundation who kindly agreed to fund this important study. It was not always easy to persuade organisations that this was a topic worthy of serious consideration. Awareness of the menopause as a potential occupational health issue is low, and there is often a reluctance to probe a potentially sensitive area. However, it subsequently became very clear when interviewing women, that the vast majority were delighted that this hitherto often 'taboo' matter was being scientifically explored.



### **3. OVERVIEW OF RESEARCH DESIGN**

This research was undertaken in four stages:

- a review of the published literature
- semi-structured interviews with 61 menopausal women
- a questionnaire survey (responses from 912 women)
- data analysis, summary and conclusions

In order to explore what is already known about women's experience of working through the menopause, the project began with a search and review of the relevant published literature.

The results of this review, together with findings from an earlier study with women police officers (Griffiths, Cox, Griffiths & Wong, 2008) identified likely questions to be explored in interviews with women aged 45-55 from various organisations. This allowed the further exploration of issues from the published literature, and the identification of relevant factors that had not yet appeared in published domains and were general between, and specific to, various occupational groups. Interviews explored matters related to the perceived effects of the menopause on work, and the perceived effects of work on menopausal symptoms.

Information gathered at interview stage was analysed to reveal major themes relevant to women's experience of working through the menopause. These were incorporated into an electronic questionnaire, together with demographic questions, and some standard measures about health and coping strategies. In addition, respondents were asked about suggested adjustments to work that would make life easier for them during menopausal transition. This was piloted with a group of menopausal women in order to check their understanding of the items was as intended, and was subject to review by various experts and stakeholders (e.g. from occupational medicine, gynaecology, trades unions, human resources, and health promotion). The questionnaire was distributed electronically to women in administrative and management roles in ten organisations.

Responses to the questionnaires were analysed to address the key objectives of the report: to explore the range of women's experience of working through the menopause, and to provide recommendations for employers, for women and for those who advise them.

## 4. REVIEW OF PUBLISHED LITERATURE

A review process was conducted to identify the main published bodies of scientific literature relevant to the menopause and work. The search for peer-reviewed journal papers was carried out in Web of Knowledge, PsyARTICLES and Google Scholar. Search terms used singly or in combination included menopause, menopausal transition, climacteric, peri-menopause, work, workplace, job, employment, working, job performance, work performance, disclosure, working women, midlife women, hot flushes, social support, coping, physical activity, physical exercise, attitudes, knowledge, information, hormone replacement therapy (HRT), complementary and alternative medicine.

Grey literature was also included in the search, in addition to peer-reviewed journal papers. The term 'grey literature' refers to non peer-reviewed literature or to documentary material that is not commercially published (Mathews, 2004). Government agencies, universities, corporations, research centres, associations and societies, and professional organisations are the conventional publishers for this type of material. Technical reports, government documents, working papers, fact sheets and white papers are some examples. The search of grey literature for the present study was mainly performed in Google using similar search terms for peer-reviewed journal papers listed above.

In general, significant publications that addressed the issue of the menopause and work were few in number, and are summarised in the section below.

### 4.1 The menopause and its reported effects on health and well-being

Menopause is part of the natural ageing process for women, which refers to the point in time when menstruation has ceased for 12 consecutive months. This occurs naturally between the ages of 45 and 55; in the UK the average age of menopause is 52. During the period before the menopause (peri-menopause) these changes lead to menstrual irregularities (irregularity of the length of the period, the time between periods and the level of flow). Those that may have implications for working life include hot flushes (sudden increases in body temperature), palpitations, night sweats and sleep disturbance, fatigue, poor concentration, irritability, mood disturbance, skin irritation and dryness. (Fisher, 1994; Ussher, 1998). Certain of these symptoms may continue for some time after the menopause (post-menopause). Some report improvements in health after the menopause (Social Issues Research Centre, 2002). Overall, this period of hormonal change and associated symptoms can last from four to eight years. In summary, for some women, the experience of symptoms associated with the menopause represents a significant proportion of their later working life.

The risk of osteoporosis (where bones lose elasticity and become brittle) increases after menopause. Levels of high density lipoproteins decrease, low density lipoproteins increase, arteries lose elasticity and more weight is distributed in the waist area. These changes are all associated with an increase in the risk of cardiovascular disease, which overtakes other diseases as the single leading cause of mortality in postmenopausal women (Sarrel, 1991; Office for National Statistics, 2005). Other changes include stress incontinence (resulting from decreased pelvic muscle tone). As the period of hormonal deficiency lengthens, the physical consequences of the menopause become more marked (Sarrel, 1991).

Premature or induced menopause occurs when the ovaries are surgically removed (in this case, the onset of associated symptoms may be more rapid) or have been damaged by radiation, drugs or infection. Other causes of premature menopause include disorders such as thyroid disease or diabetes mellitus. A straightforward hysterectomy, where only the uterus is removed, should not affect the production of hormones and thus does not induce menopause.

Individual characteristics may increase the risk of reported decreases in psychological health during the menopausal years. For example, the research literature suggests that women with low self-esteem report more difficulty coping with menopausal changes (Reynolds, 2002) and suffer most psychological distress at this stage (Bates Gaston,

1991). A study using prospective annual assessments of women's mood state during the menopausal transition concluded that the magnitude of negative mood was significantly predicted by baseline reporting of premenstrual complaints, and by negative attitudes to both menopause and ageing (Dennerstein, Lehert, Burger, & Dudley, 1999). More generally, anxieties about ageing and health, and lower life satisfaction have been reported to be concomitants of more difficult transition through the menopause, and the importance of including social changes identified (Greer, 1991). It should be noted that some of the health-related problems traditionally identified with the menopause, or attributed to it by women (memory, for example), may not be the direct result of hormonal imbalances but rather, or also, be associated with ageing, stress or fatigue.

The menopause typically occurs at 'stressful' and challenging times in women's lives. They may also be managing chronic health conditions, the risk of which increases with age. The domestic pressures on older working women have received limited research attention and are usually ignored in studies measuring the impact of work on health. Women, whether in paid employment or not, usually bear the greater share of domestic responsibilities, child care and care of disabled, chronically ill or elderly partners or parents (Bird & Fremont, 1991; Kapadia, 1996; Lombardi, 1997; Walstedt, 2001). Multiple roles may result in greater physical strain and poorer mental health. These traditional patterns of domestic responsibility are most apparent in older cohorts (Lloyd, 1999).

## **4.2 Work and the menopause**

A review of the literature on work-related stress and age (Griffiths, Knight & Mohd Mahudin, 2009) concluded that older women were more likely to report work-related stress than men. The picture is a complex one since women may be differentially prepared to report stress than men, and to have a different physiological response to stress than men (Frankenhauser, 1991). Further, women tend to work in different occupations from men, and are more likely to be in low status and demanding jobs that offer little opportunity for control: working conditions long associated with the report of stress and associated poor health outcomes (Cox, Griffiths & Rial Gonzales, 2000; Doyal and Payne, 2006; European Agency for Safety and Health at Work, 2002; Östlin et al, 2006; Messing, 1998; Messing et al, 2003). One study suggested that women who reported stressful jobs were those most likely to experience an earlier menopause (Cassou et al, 2007), and another that women perceived stressful working conditions to be associated with a worsening of menopausal symptoms (Paul, 2003). A further study reported that levels of stress hormones in working postmenopausal women were lower if they were taking HRT than those in women of similar age not taking HRT (Deane, Chummun & Prashad, 2002). The latter authors suggested that hormone replacement might be influential in reducing the stress response.

Despite women representing nearly half of the working population, the menopause is very rarely seen as a 'health and safety' or 'occupational health' issue. Research exploring psychological, physiological, social and cultural aspects of women's experience of the menopause at work and its impact on work and working life is scarce (Bowles, 1986; Kishi, Kitahara, Masuchi, & Kasai, 2002; Lee, 2000; Paul, 2003). Existing studies are weakened by design limitations and by the failure to account for factors that might confound the relationship between women's health and work, such as socio-economic status, educational level or social support networks. For example, it has been suggested that women with more educational qualifications demonstrate more positive attitudes toward the menopause than those with fewer educational qualifications and that this may have implications for differences in their psychological well-being during the transition (Greer, 1991; Jennings, Mazaik, & McKinlay, 1984).

It is necessary to explore both the ways in which work might affect the report of menopausal symptoms and the ways in which menopausal symptoms might affect working life, whilst recognising that women's experience of menopausal transition varies greatly. The limited extant literature suggests that some women do find menopausal symptoms problematic at work. Two-thirds of the women in the Yale Mid-Life Study in the United States perceived their symptoms to have a moderate to severe impact on their capacity to function at work and some had even stopped working as a result (Sarrel, 1991). The most frequently cited symptom causing problems was sleep disturbance. In High and Marcellino's (1994) study of post-menopausal women in the United States, one third of participants believed their job performance had been adversely affected by their symptoms; irritability and mood changes in particular were associated with perceived poorer performance. In comparing different job roles, the study further concluded that

'non-managerial' women reported more symptoms and greater detriments in job performance than did women of managerial status. This is consistent with the wider research literature that suggests age-related performance declines are less likely for professional groups than for those of lower status in organisations (Czaja, 2001). Similarly, perceived negative impact of symptoms on work was reported by low income, low status working women in the United States (Im & Meleis, 2001). Symptoms described as problematic were depression and tiredness. Nonetheless, a study examining supervisors' evaluations of menopausal women's job performance (Salazar & Paravic, 2005) concluded the majority of the women were seen by their supervisors as performing well at work.

As well as symptoms affecting work, work can impact on symptom experience. In the UK, the Trade Union Congress (TUC) survey of 500 health and safety representatives reported the most commonly cited symptoms attributed to the menopause that were made worse by work were hot flushes, headaches and tiredness (Paul, 2003). Problems with workplace temperature and poor ventilation were believed to make symptoms worse. The importance of such physical work conditions has also been reported by women in other studies (Hunter & Liao, 1995; Reynolds, 1999). In addition, it has been suggested that certain work situations, such as working with male colleagues, could potentially increase the level of embarrassment and discomfort during hot flushes (Reynolds, 1999).

### **4.3 Disclosure**

Discussing or publicly acknowledging health concerns and illness, or confiding in others at work is usually described as 'disclosure' or 'self-disclosure' in the scientific literature. Women have reported acknowledging the menopause at work as threatening and embarrassing, particularly as it is not widely recognised as a legitimate issue for concern. Women often feel that they cannot discuss their symptoms with supervisors or colleagues, particularly if these co-workers are men or younger women (Fisher, 1994). Women can experience considerable difficulty discussing the menopause, and may encounter criticism, ridicule and hostility from colleagues and managers (High & Marcellino, 1994; Paul, 2003). The issue of disclosure is important, as with any chronic health-related condition, in that employers and line managers can only be sympathetic to employees' needs and make suitable work adjustments if they are aware of a problem. Women are more inclined to disclose if they regard colleagues as supportive or empathetic, and particularly to women of the same age (Reynolds, 1999).

### **4.4 Treatments for the menopause**

Whilst many women believe that the menopause is a natural stage of a woman's life and should not be 'medicalised', others prefer to seek relief from symptoms they find particularly troublesome. Hormone replacement therapy (HRT) was introduced in the 1970s to address symptoms of the peri-menopause and menopause and can ease some of the reported symptoms as well as reduce the risk of certain diseases. However, there have been concerns expressed over whether the overall benefits outweigh reported risks. There is a large and constantly updating body of published literature on this topic which is not directly relevant to the current report and therefore will not be discussed further here. However, widespread negative media coverage is thought to have led to a decrease in the take-up of HRT and an increase in rate of discontinuation (Shrader & Ragucci, 2006; Hunter & Rendall, 2007).

It is thought that the inconclusiveness of the risks and benefits of HRT has in part led to an increasing interest in complementary and alternative medicine (CAM) for symptom relief during the menopause. CAM is neither in the curriculum of medical schools nor widely available from general practitioners (McMillian & Mark, 2004). It is a multi-treatment approach which ranges from lifestyle management, to dietary supplements, oestrogen-like botanical products, or acupuncture. Empirical evidence to date regarding the effectiveness of such approaches is limited.

## **4.5 Summary**

There has been extensive research into the nature of the menopause and its effects on mid-life women's general health, but despite large numbers of older women workers, there has been limited exploration of its effects on work and work performance, and little understanding of the impact of work on symptoms. Very little research has explored the strategies women use in their working lives to cope with this major health event, whether certain aspects of work affect their experience of this transition, and what their employing organisations could do to support them when problems arise.

## **5. INTERVIEW STUDY**

### **5.1 Interview design**

A semi-structured interview was designed to provide a standard framework within which various areas of possible concern could be explored. The interview guide (questions and prompts) was developed on the basis of: (i) information gathered from the review of the literature; (ii) preliminary findings from a previous small-scale study (Griffiths, Cox, Griffiths & Wong, 2008); and (iii) discussions among the research team and a group of experts and stakeholders. Each interview consisted of a standard set of questions relating to menopausal symptoms, general health and well-being, coping, support mechanisms and work characteristics. Work characteristics included items on: (i) work organisation; (ii) the psychosocial environment; (iii) disclosure; (iv) the impact of menopause on health and work performance; (v) the impact of work and the work environment on menopausal symptoms; and (vi) women's suggestions about helpful sources of support.

### **5.2 Data collection**

The interviews were conducted face-to-face by all three members of the research team, but primarily by YYVW following training by AG and SM. Prompts were introduced if needed to cover relevant areas not already discussed with the participant. Participants were asked for examples to support responses where appropriate.

Interviews took place in participants' workplaces in a private location, at a time to suit the participant. Participants were fully informed of the nature of the interview and its purpose and assured that their responses would be stored and used anonymously. Their permission was sought to record the interview. Assurances were given that the data collected would be used for research purposes only. All were given the opportunity to withdraw from the research but none did.

Throughout the interview process, YYVW was mentored, and emergent themes discussed among the research team. Interviews took, on average, between 45–60 minutes each. Those women who reported few problems relating to the menopause engaged for a shorter period of time (30–45 minutes) than those who reported more symptoms or problems (60–90 minutes).

At the end of the interview session, each participant was asked to complete a short questionnaire with demographic details (age, education level, job title, industry, number of children and ethnicity) and a standard set of items relating to the measurement of menopausal status.

### **5.3 Measurement of menopausal status**

Women's menopausal status was defined by criteria developed by the New England Research Institute on the basis of the extensive work of McKinlay and members of the statistical group (personal communication between YYVW and McKinlay). This approach to the measurement of menopausal status was chosen because it was non-invasive, enabled categorisation of menopausal status using relatively few questions, and was quick to complete. This measure has been adopted by a number of large-scale epidemiological studies throughout the world, including the British 1946 birth cohort study and the Study of Women's Health Across the Nation (SWAN) in the United States.

Women were asked about their menstrual pattern and hormone use during the last 12 months, as well as their history of surgical procedures (hysterectomy and oophorectomy). Based on their responses, participants were classified into one of the six categories: (i) pre-menopause (have not reported menstrual irregularity or have had menstruation in the last 3 months); (ii) peri-menopause (menstrual irregularity or no menstruation between 3 and 12 months); (iii) natural menopause (amenorrhoea in the past 12 months); (iv) surgical menopause (have had either hysterectomy or oophorectomy); (v) hormone use (reported hormone use in the last 12 months without surgical procedure); and (vi) undefined ('don't know' or missing responses to any of the questions).

## **5.4 Participants**

Interviewees were recruited from organisations in the following sectors: finance and business; education; transport, storage and communication; and public administration and defence. Specifically the sample was drawn from policing, administration, education, and journalism and radio production.

The majority of women in Western societies experience the menopause between the ages of 45-55 (average age 51). Although some reach menopause before the age of 45 years, the numbers are small. In each organisation, women aged between 45 and 55 who believed they were going through menopausal transition were targeted for inclusion the interview stage of the project. A 'project champion', or key stakeholder in each organisation assisted with the recruitment of participants, and worked with the research team to ensure the final sample were as representative as possible of the target group of women in that organisation.

A total of 61 semi-structured interviews were conducted and recorded: 14 from policing, 15 from administration, 9 from journalism and radio production, and 23 from education. The average age of the sample was 51. Analyses revealed that 22 of the women were categorised as peri-menopause, 12 as hormone use, 10 as natural menopause, 8 as surgical menopause, 2 as pre-menopause, and 7 as undefined.

Over half reported having a male line manager; a minority reported having more than one line manager. Nearly half of the participants had completed university studies. The majority of the women had children (80 percent) and were British (84 percent).

## **5.5 Transcription**

A sample of 14 interviews was transcribed verbatim by the researcher (YYVW) in order to assist the initial stages of analysis. The remainder (47) were then transcribed in note form, with pertinent points noted. Interview transcripts were cross-checked for accuracy and meaning by the research team. All names and personally identifiable information were removed.

## **5.6 Data analysis**

Analysis of the interview transcripts was conducted using a structured method of qualitative data analysis (Ritchie & Spencer, 1994). This method, framework analysis, employs a number of distinct but interconnected stages in a systematic process. The five key stages are familiarisation, identifying a thematic framework, indexing, charting, and mapping and interpretation. The analysis focused on the identification of the main issues and themes, which not only described each individual participant's input but also those that were also common across participants. A coding scheme was developed which is described below in the Results section.

## **5.7 Inter-rater reliability**

An inter-rater reliability analysis was carried out to ensure transparency and reliability in the coding process (Thompson, McCaughan, Cullum, Sheldon, & Raynor, 2004). YYVW selected one quote from each identified theme for SM to code independently. The codings of YYVW and SM were compared using Cohen's kappa (Cohen, 1960). The Kappa value was 0.66, indicating a substantial agreement between the two coders (Landis and Koch, 1977).

## **5.8 Interview study: Results - Themes**

Four overarching themes emerged from the framework analysis to form a model representing how individuals managed the experience of menopause from onset of

symptoms and/or diagnosis of menopausal status. These themes related to: (i) cognitive and emotional responses to the menopause; and (ii) behaviour related to the menopause. Within each of these categories, themes could relate to both: (iii) women themselves; and (iv) others such as line managers or healthcare professionals. For example, cognitive and emotional responses on women's part included knowledge about and preparation for the menopause, whereas cognitive and emotional responses attributed to others might include managers' perceived attitudes to the menopause. Behaviour on women's part included coping strategies they themselves used to deal with menopause, whereas behaviour on the part of others included various types of support offered (or not offered). These types of support potentially included emotional, informational and instrumental help. These themes are discussed in more detail below.

### **5.8.1 Cognitive and emotional responses (women)**

When asked to discuss the impact that the menopause had had on their lives, women reported that they had experienced certain thoughts (cognitive responses) and feelings (emotional responses) in the initial period. Often, given that the diagnosis of menopause is a process that can take some time, there was a period during which they reported experiencing feelings of uncertainty as to whether they were experiencing menopause/age-related problems or something else. This was related to discussion of whether the menopause was a natural stage of life or a medical problem and the extent to which it was viewed as something to put up with, to accept, or a challenge that could be dealt with. A definite diagnosis was often experienced with feelings of relief that symptoms were menopause-driven rather than caused by an as-yet unidentified disease process.

The end of fertility, and menstruation in particular, were flagged by some as a positive aspect of the menopause and women reported feeling increased confidence or feelings of relief that they were not experiencing severe symptoms. For others, it presented challenges and was viewed as a sign of becoming older, feeling less attractive, not 'feeling oneself' and worrying about appearance. Some women felt that menopause was a very unpleasant experience that they could not wait to get through. Others reported that they were more concerned about other health problems they were experiencing.

Underlying these comments were the dimensions of knowledge and awareness. Women frequently discussed the extent to which they felt unprepared for the experience of menopause, uncertain about the physical and emotional changes they were undergoing. They discussed their need for further information from key others such as general practitioners, friends, and work colleagues.

Differing views of the menopause emerged regarding the extent to which it was a 'private' matter or one that might be shared with others. Some women felt the menopause to be a 'taboo' subject and one that could not be discussed with others. Others felt it to be a natural life event and one that they had willingly discussed with friends and family. Some commented on the fact that it had affected their relationships with key others in their life.

There were differences between the women in terms of the emotional impact of the menopause. Some, as mentioned above, viewed it as a positive experience through which they had gained in confidence. For others, the menopause and the symptoms, particularly hot flushes, were experienced as embarrassing, a source of anxiety and as a sign of 'losing control'. Some women reported feeling particularly anxious about experiencing hot flushes in public, when at work and in situations where they were the centre of attention such as meetings or presentations. They were concerned about potential impact on their competence and professionalism at work. Some reported that they found work harder to manage as a result of the menopause. For others, work and working life was felt to be a positive experience and the daily routine of work, the contact with colleagues and the gains they experienced in confidence all helped distract them and manage the menopause. Some expressed worries about physical aspects of the working environment such as temperature, uniforms, access to cold drinking water and so forth, all of which could modify the experience of hot flushes. Examples are provided below:

*"The panic attack and the dizziness. I think...makes one question whether anything serious going on. It took a while for me to convince myself that it was tied up with menopause...I now know that they are all menopause driven, so I have stopped worrying about them" (Age 51)*



*"I am not worried that I am heading towards the menopause...No periods - that will be fantastic!" (Age 46)*

*"I read a book and a lot of the symptoms that you experience are also symptoms people get as they get older anyway. So it's very difficult sometimes to separate out the symptoms" (Age 44)*

*"It doesn't happen, but if I was in a meeting...something like that, I think it would be difficult ... I think if you were visibly sweating, makes it more embarrassing really" (Age 47)*

*"My office is very warm, very hot, and I suspect that maybe has even masked the fact that I have got hot flushes because it's a stuffy room with no access to window directly...As my personal working environment I think it's too stuffy and too hot" (Age 48)*

### **5.8.2 Cognitive and emotional response (attributed to others)**

In addition to commenting on their own thoughts and feelings regarding the menopause, women discussed how they felt others viewed the menopause. This was particularly in relation to key others in the work environment, for example colleagues and line managers.

Several participants reported that they felt younger colleagues and line managers, both male and female, were not very aware of or interested in the menopause. Some exceptions were noted and these mainly related to older male colleagues with a wife or partner who had experienced the menopause. Awareness was often linked to discussions of sympathy and understanding. Some felt male colleagues or managers would feel embarrassed by any discussion of the menopause. In addition to knowledge and awareness of others at work, some women expressed concerns that others may perceive them to be less competent or confident as a result of the menopause and that they may be perceived to be less professional.

*"I think it would be a little bit difficult to speak to somebody that has not actually experienced it or his partner hasn't experienced it.....I think it's because they have not experienced it, they probably wouldn't even understand some of the symptoms that we actually go through. I mean, obviously at some point females will go through it, but not having gone through it themselves I don't think they understand it" (Age 49)*

*"Yes, I probably would actually (ask for changes). Yes. Although I think it would be a difficult thing to ask for...well partly because I have to go and ask a man about it and also because it's one of those things that people, men in particular, don't consider you should make a fuss about ... You know it's the sort of 'it happens, get on with it' attitude" (Age 52)*

*"I am lucky because he (line manager) is quite understanding and obviously his wife has been through it and so he understands the problems that you can have. I think if I had perhaps a younger line manager it would be more of a problem" (Age 54)*

*"I would actually be very worried that people would think that my work performance was not up to scratch, which it isn't. I am not performing as well as I used to, I am sure. I would be worried about that and I would think that somebody might pick up on it, might criticise me for it. I sort of think to myself 'I am not getting any younger'. Would they think that maybe they ought to have somebody a bit more on the ball and young? So, you know, it's quite an anxiety" (Age 54)*

*"They would be embarrassed if you told them (men) what was wrong. They don't want to know, do they, about ladies' problems, women's problems?" (Age 53)*

### 5.8.3 Behavioural responses (women)

Behavioural responses include the strategies that individuals women put in to place to help them deal with the challenges presented by their menopausal symptoms. These could be general strategies or specific strategies related to work and working life.

#### 5.8.3.1 Specific strategies related to work and working life

Women reported several strategies that they found useful in dealing with the onset of menopause and minimising its impact on work and working life. These included: (i) adjustments to the physical environment, for example, using fans or opening windows; (ii) adjustments to work routines, for example changing work hours, taking more breaks, not working voluntary long hours, working longer hours in some cases, taking days off or leaving early and adopting flexible working practices; (iii) active coping strategies, for example self-disclosure, seeking social support at work, trying to control emotions, positive reinterpretation and having a sense of humour at work, requesting formal adjustments and taking precautionary measures such as always having a change of clothes at work; (iv) compensatory strategies such as writing notes, lists and making greater use of technology than previously; and (v) avoidance or withdrawal from challenging situations or tasks, or denial - ignoring symptoms of the menopause and choosing to 'carry on regardless'.

*"I just say I am working at home and then I crash out during the day and then I probably work in the evening. You know, work extra time to catch up" (Age 55)*

*"If I get a flush I will put the fan on and I open the window slightly" (Age 53)*

*"Some people would say 'Are you alright?'. 'Well just ignore me. A senior moment', I call it, 'A senior moment'. And they laugh and I laugh..." (Age 48)*

*"I carry a little pad around with me all the time and I write everything down and then I have a little post-it note that I stick on things to remind me" (Age 54)*

*"It certainly affects my confidence from the point of view of speaking at meetings because I am not as fluent...that concerns me. I don't want to, you know, suddenly not have the word that I need so I am perhaps sort of withdrawing a little bit" (Age 48)*

#### 5.8.3.2 Disclosure of menopausal status

One specific coping strategy of particular importance is disclosure. In order for employers to provide the appropriate support they need to be aware of the challenges that the individual is facing. However, from women's point of view, disclosure is not always a straightforward issue.

Some women were happy to disclose their menopausal status to colleagues and their line managers. For others, it was done on a 'need to know' basis: for example, if they needed specific adjustments such as a fan or desk near an opening window. A further group of women reported that menopause was a private experience and that they would not want to discuss with colleagues or line managers. Various reasons were given for discomfort about disclosing their menopausal status. These included the age and gender of the other person, the relationship the individual had with the other person, the perceived trustworthiness of the other person, feelings of personal embarrassment, and fears that the other person might become embarrassed, and whether or not they felt comfortable drawing attention to the fact that they felt their performance had been affected by the menopause.

*"I asked for a fan and new blinds...I said because of the bright sunlight and facing west. I actually couldn't see my computer screen and I was finding it extremely hot and it was exacerbating the menopause" (Age 50)*

*"I prefer to not have to do it (tell anybody about the menopause) because I see it as my business not anybody else's" (Age 46)*

*"If it got that bad, yes I would. I would go and ask if my desk could be moved ... but as I said I am near the window anyway so I just open the window about half an inch and I get a nice breeze and I am fine" (Age 53)*

*"Until you get to know somebody, it's difficult sometimes to talk about something that is fairly intimate" (Age 46)*

### 5.8.3.3 Generic coping strategies

In addition to discussing the particular strategies that they had found useful to employ when at work, women mentioned more generic strategies that they found helpful in dealing with the menopause. These included altering their diet, changing sleep patterns (e.g. sleeping longer at weekends), doing more exercise, wearing layers of clothing that allowed them better control over body temperature, seeking out more information about the menopause, HRT and coping strategies (e.g. from the literature, the web, GP or other healthcare professionals), maintaining a sense of humour, avoidance (some reported trying not to think about the experience or trying not to notice the various symptoms), making time for themselves and 'treats' such as manicures or massages, and making changes to their appearance as a result of feeling uncomfortable about their personal appearance or having a negative self image.

For a small number of women, making changes in their routines in order to cope with the experience of menopause presented additional challenges. These included feeling guilty about spending money on themselves, feeling misunderstood by others, feeling sad that they could no longer wear certain types of clothes, and feeling frustrated that they took a long time to achieve certain tasks as a direct result of the particular coping strategy employed.

*"I try to eat properly and get as much sleep as I can and get some exercise and look after myself" (Age 53)*

*"I did a little bit of reading. You know I pick up leaflets. I am very interested in nutrition so I kind of approach the menopause from that point of view, you know, what I should be eating" (Age 48)*

*"I did go on to HRT. It took it took a couple of months and the symptoms certainly got a lot better until about 10 months ago...so I went back to the doctor to say it's really wasn't working so they increased my dose" (Age 52)*

*"Obviously I had been expecting it coming but I had a plan to not notice it. I thought that was the best way" (Age 51)*

*"I am trying to lose weight. I had my haircut a few weeks ago when I was off. I haven't got any makeup on today but I try and make myself put some makeup on...just to make myself feel a bit better, but it's hard you know. I learnt to play the saxophone. I find that very therapeutic" (Age 45)*

### 5.8.4 Behavioural responses (by others)

This theme that emerged in discussions with women included the various types of support that others offered to help them deal with the challenges presented by the menopause: emotional, informational and practical. This included an appraisal as to the appropriateness and helpfulness of the support offered. The sources of such support were family, friends, colleagues, managers and healthcare professionals. Some participants mentioned they had received limited support from professional sources and would like to receive more, particularly during the initial diagnosis of and adjustment to the menopause.

#### 5.8.4.1 Emotional support

Women frequently reported that emotional support (sympathy, understanding and tolerance towards the symptoms they were experiencing) was particularly important for them.

*"I am very fortunate. I have a very supportive husband and also two sons who don't really understand it but have tried to ...They spoke to people and they try to understand" (Age 52)*

*"His wife (line manager's wife) is the same age as me, so she is going through similar thing so he is very understanding about it" (Age 48)*

*"(It would be nice to have) some level of understanding (in the organisation) that we aren't old bloody robots, and non-work things have an effect on us" (Age 50)*

*"(My GP says) it's just 'one of those things to put up with' - that sort of attitude. I am not saying all doctors are like that but mine certainly is" (Age 49)*

#### 5.8.4.2 Informational support

Women discussed the types of information that they had received and found helpful, and their source. It was particularly relevant to discussions about how prepared they felt about the arrival of the menopause and how to cope with it.

*"She (Occupational Health Advisor) is a natural remedy person herself. Because she is of similar age, she has been very helpful to talk to. She did suggest maybe going for counselling, sometimes that can help and things like this" (: Age 53)*

*"Yes (I knew about the menopause before symptoms started)...because there were people around me going through the menopause. So you hear from them" (Age 53)*

*"He (GP) didn't tell me much...He said I was having an early menopause. But he didn't tell me what to expect really" (Age 48)*

*"I mean it wouldn't be that hard for them (organisation) to produce leaflets. You have leaflets on everything in this organisation..." (Age 54)*

#### 5.8.4.3 Practical support

The third type of support that was mentioned in the interviews was practical. This mainly related to tangible help, services and treatment that women had received, the extent to which they valued it and thought that it effective, and whether they wished they had been offered more or less such support. This included discussions about HRT and whether they felt they had received adequate information to make informed decisions.

*"They (colleagues) were very kind and were very helpful. They make sure I sit in front of the window now in a meeting" (Age 50)*

*"I actually did start off as that (flexible working). He (line manager) would have liked to change it when I explained that, you know, I need this at the moment...I can't be told to come into work at seven o'clock because I can't always do it and he is fine" (Age 48)*

*"I mentioned it to the HR department...that I was feeling unwell and anxious and was not quite sure whether that was more likely the cause of changing job than the menopause...They did offer me counselling" (Age 53)*

*"You hear lots about dealing with pregnant women and making sure they are comfortable and safe in their environment so perhaps the same sort of initiative needs to be looked at for menopausal women" (Age 50)*

*"We (my GP and I) had a long discussion about HRT. She said my symptoms were very extreme and would probably get worse before they got better...She gave me websites. She suggested I went and read all the information about HRT because you know there are recognised dangers" (Age 52)*

## 6. QUESTIONNAIRE STUDY

### 6.1 Sampling

Ten organisations took part in this second stage of the research project, three of which had also participated in the earlier interview stage. According to the UK Standard Industrial Classification of Economic Activities (Office for National Statistics, 2007), these organisations represented the following sectors: professional, scientific and technical activities; information and communication; education; transportation and storage; wholesale and retail trade; and public administration and defence; and compulsory social security. With the exception of one multi-national organisation, all organisations were UK-based. Each organisation identified a point of contact to liaise with the Research Team, publicise the research, and arrange the distribution of questionnaires to women between the ages of 45 and 55. All women were engaged in white-collar, non-manual work in their respective organisations, with access to personal computers and the web as part of their normal working activity.<sup>1</sup>

### 6.2 Data collection: Web-based survey

The questionnaire survey was designed using Snap Survey Software, Version 9 (<http://www.snapsurveys.com>), a Windows-based programme for web-based survey design and management. In order to reduce the number and complexity of questions, adaptive questioning was used; certain questions were only be displayed according to responses to preceding questions (e.g. questions about the reasons for HRT discontinuation would only be displayed if women had previously indicated they had used HRT). On average, respondents were invited to complete 16 screens. Respondents were not obliged to answer every question and therefore a completeness check was not applicable. Participants were able to review or change their responses by clicking a 'Back' button. No incentives were offered. The questionnaire was distributed electronically between August 2008 and March 2009.

The survey was stored securely on the host research organisation's server. A URL link to the survey was generated for each organisation and included in the invitation that outlined the nature and purposes of the study. Anonymity, confidentiality and the voluntary nature of the exercise were emphasised. Participants were informed that by completing the questionnaire, they were consenting to the data being stored electronically and used solely for research purposes. With the exception of one organisation, the invitation was either sent via an existing email distribution list or publicised through organisations' electronic communications (intranet) or both. Table 1 illustrates the method of distribution in each organisation.

Organisation	Method of Distribution
A	email distribution list
B	email distribution list
C	email distribution list and electronic communications
D	email distribution list
E	link distributed to women attending Women's Health Week
F	electronic communications
G	electronic communications
H	electronic communications
I	email distribution list and electronic communications
J	electronic communications

---

<sup>1</sup> Menopausal women engaged in manual, often low paid work, are not represented in this report. Anecdotal evidence suggests that these women, who traditionally work (i) in environments that are less comfortable than managerial and administrative staff, and (ii) under conditions that afford them less control and flexibility. These women may experience considerable discomfort managing the symptoms of menopause while working. The authors believe they should be the focus of a separate study with appropriate methodology.

Data from completed questionnaires were returned directly and anonymously to the research team's mailbox, and exported to SPSS via Snap Survey Software for subsequent analysis.

It is not possible with web-based survey to ascertain precise distribution. However each organisation estimated the number of women in the target group whom they believed would receive the invitation. This figure varied from 94 to 10,500. Overall, it is likely the invitations were received by approximately 11,000 women although it is not possible to estimate the number of women who actually read the invitation. The response rate for women in each of the ten organisations was estimated as varying between 5 percent and 43 percent. In total, 1247 responses were received.

### **6.3 Questionnaire items**

The items in the questionnaire were based on the content of the interviews and on the literature survey. Details are provided in the section below, and included:

- Menopausal status
- Attitudes towards the menopause
- Use of HRT and alternative treatments
- Symptom experience and its impact on work and non-work life
- Experience of hot flushes at work
- Types of support received from health professionals and significant others in and outside of work
- Coping strategies specific to the menopause
- General coping preferences/styles
- Physical activity levels
- Disclosure to line managers and reasons for this decision
- Physical, organisational and psychosocial adjustments at work that made or could make working life easier during the menopause

The questionnaire also sought a variety of demographics (e.g. age, education level) and occupational details (e.g. gender and age of line manager, balance of men and women in the immediate work environment).

#### **6.3.1 Menopausal status (6 items)**

Menopausal status was defined by a six-item scale developed by the New England Research Institute, which is based on the extensive work of Sonja McKinlay and members of the Statistical group (S. McKinlay, personal communication, March 7, 2006; Brambilla, McKinlay, & Johannes, 1994). The scale has been adopted in a number of large-scale epidemiological studies (e.g. the British 1946 birth cohort study and the Study of Women's Health across the Nation (SWAN) in the United States) and is short and relatively straightforward to use.

The scale's items concern menstrual pattern and hormone use during the last 12 months and history of gynaecological surgery (hysterectomy or oophorectomy). Women were classified into one of 6 categories: (i) pre-menopause (menstrual regularity or menstruation in the last 3 months); (ii) peri-menopause (menstrual irregularity or no menstruation in the last 3 months); (iii) natural menopause (amenorrhoea in the past 12 months); (iv) surgical menopause (either hysterectomy or oophorectomy); (v) hormone use (reported hormone use in the last 12 months without surgical procedure); and (vi) undefined ('don't know' or missing responses to any of the questions).

#### **6.3.2 Attitudes towards the menopause (10 items)**

Ten statements were presented that explored women's attitudes towards the menopause, how prepared they felt when the menopausal symptoms began, how knowledgeable they felt about the menopause at the time of completing the questionnaire and the perceived impact of the menopause on their work and working life. Examples are 'It's a relief not to think about periods and contraception anymore', 'I feel the menopause has negatively affected my manager's and colleagues' views of my competence at work'. Participants were asked to indicate the extent to which they agreed with each statement using a five-

point Likert scale (strongly disagree, disagree, neither agree nor disagree, agree, strongly agree). An option of 'not applicable' was available for women who felt the statement(s) did not apply to them. For example, 'It's a relief not to think about periods and contraception anymore' was not applicable to peri-menopausal women who were likely to be menstruating and therefore still fertile.

### **6.3.3 Use of HRT and alternative treatments (11 items)**

Participants who indicated they had used HRT in the previous 12 months were directed to a different set of questions from those who had not used HRT. The former were directed to items enquiring as to whether work was a factor in their decision to use HRT (yes/yes but it was not the only reason/no) and as to whether they felt HRT had made a positive difference to their perceived ability to cope with work (yes/yes but side effects can be a problem/no difference/no). Women who had not used HRT in the previous 12 months, were asked whether they had ever tried HRT (yes/no) and if so the reason(s) for discontinuation (e.g. personal experience of side effects, worries regarding reported side effects).

Both groups were asked about their attitudes towards HRT (positive/neutral/negative), whether they had tried alternative treatments (yes/no) and if they had tried alternative treatments, the perceived efficacy of those treatments in symptom management (yes/no).

### **6.3.4 Symptom experience and its impact on work and life (20 items)**

A list of 18 symptoms (e.g. hot flushes, night sweats), commonly reported in the literature and by the current sample during interview stage, was presented. Participants were asked to indicate the extent to which they were currently bothered by each of the symptom in general (not at all/a little/quite a bit/extremely) and whether the symptoms were causing them problems at work (causing me problems at work/not causing me problems at work).

In addition, there were two questions assessing the overall impact of menopause on work and life. Women were asked to indicate how difficult it was for them to manage life in general (not at all/somewhat difficult/fairly difficult/very difficult/extremely difficult) and work in particular (not at all/ somewhat difficult/fairly difficult/very difficult/extremely difficult).

### **6.3.5 Experience of hot flushes at work (6 items)**

Participants who reported experiencing hot flushes at the time of completing the questionnaire were diverted to a section on hot flushes. The items were adapted from Reynolds (2002), and Hunter and Liao (1995) and included number of years since onset (chronicity), frequency over a 24-hour period, frequency during a normal working day/shift, level of distress when flushes occurred at work (ten-point response scale from 'not distressed at all' to 'very much indeed') and the level of interference with work (ten-point response scale from 'not a problem at all' to 'very much indeed').

In addition, 12 work situations were presented (e.g. working in hot/unventilated spaces, doing high visibility work such as presentations) and women were asked to indicate whether hot flushes made coping with those situations more difficult (yes/no). An option of 'not applicable' was available for those participants who did not encounter a given situation in their job. The list was adapted from Reynolds' (1999) 10 work situations, which were frequently described by her sample as having an impact on flush distress. Some work situations were reworded, ambiguous work situations were dropped, and additional work situations (identified at interview stage) were incorporated.

### **6.3.6 Types of support (6 items)**

Six sources of support (GP, specialist/menopause clinic, line manager, colleagues, formal support at work such occupational health service/welfare/HR/personnel, family and friends) and three types of support (awareness, understanding and sympathy, information and advice, practical support) were presented in a tabular format. For each source of support, participants were asked if they were satisfied with the type of support received



from that source (if any). An option of 'not applicable' was available for women who had not asked for support (e.g. had not consulted GP), if no such support was available (e.g. there was no occupational health advisor in the organisation) or the source was not aware of the women's situation (e.g. women had not told their line manager about their menopausal symptoms).

### **6.3.7 Coping strategies specific to the menopause (19 items)**

A list of menopause specific coping strategies identified at interview stage was presented (e.g. writing notes/making lists, joking about it/trying to look on the bright side of things). Women were asked to indicate how helpful these various strategies were if they had tried them (not very helpful, helpful, very helpful).

### **6.3.8 General coping styles (16 items)**

The Coping Strategies Inventory Short Form (CSI-SF) was selected to assess respondents' general coping preferences or styles. The original scale contained 72 items (Tobin, Holroyd, Reynolds, & Wigal, 1989). A shortened version (16-item) was later developed with demonstrated face validity, internal reliability and fit indices (Addison et al., 2007). The CSI-SF divided coping into engagement coping and disengagement coping. For each category, coping was further conceptualised as being emotion or problem focused. This gave rise to four possible coping styles: emotion-focused engagement, emotion-focused disengagement, problem-focused engagement, and problem-focused disengagement.

Participants were given a list of general coping strategies and were asked to indicate the extent to which they engaged in each of them when handling or coping with stress using a five-point Likert scale (never/seldom/sometimes/often/almost always). Summation of relevant items generated scores for first tier (engagement and disengagement) and second tier subscales (emotion-focused engagement, emotion-focused disengagement, problem-focused engagement, and problem-focused disengagement).

### **6.3.9 Physical activity (7 items)**

The General Practice Physical Activity Questionnaire (GPPAQ) measured participants' current level of physical activity (UK Department of Health, 2006). The GPPAQ was designed to use with adults in the general population. This questionnaire is short, easy to complete, and concerns the amount of physical activity involved both in and outside of work. Based on their responses, participants may be classified into one of four categories: (i) inactive (sedentary job and no physical exercise or cycling); (ii) moderately inactive (sedentary job with some but less than 1 hour of physical exercise and/or cycling per week OR standing job and no physical exercise or cycling); (iii) moderately active (sedentary job and 1-2.9 hours physical exercise and/or cycling per week OR standing job and some but less than 1 hour physical exercise and/or cycling per week OR physical job and no physical exercise or cycling); and (iv) active (sedentary job and 3 hours or more physical exercise and/or cycling per week OR standing job and 1-2.9 hours physical exercise and/or cycling per week OR physical job and some but less than 1 hour physical exercise and/or cycling per week or heavy manual job).

### **6.3.10 Disclosure to line managers and reasons for this decision (4 items)**

Participants were asked whether they had disclosed to their line manager the fact that they were experiencing symptoms of the menopause (yes/no/not applicable) and the reason(s) for non-disclosure (e.g. because it's private/personal, because my line manager is a man). In addition, women were asked whether they had taken a day off work because of the menopause (yes/no/not applicable: do not have bothersome menopausal symptoms) and whether they had told their line manager the real reason for their absence (yes/no).

### **6.3.11 Physical, organisational and psychosocial adjustments (10 items)**

Participants were given a list of 10 possible physical, organisational and psychosocial adjustments at work (e.g. flexible working hours, greater awareness among managers of the menopause as a possible occupational health issue). These work characteristics were identified by women at interview stage as useful or potentially useful in helping them or other women to cope better with work during menopausal transition. They were asked to select the five most important adjustments that their organisation had done/could do to support women going through the menopause.

## **6.4 Piloting the questionnaire**

The research team reviewed the questionnaire with experts in epidemiology, gynaecology, health promotion, human resources, occupational medicine, occupational health nursing, organisational psychology, mental health policy, statistics, corporate planning and development, and members of trade unions. Their comments were incorporated where appropriate. The usability and technical functionality of the survey was then tested before it was put online.

The questionnaire was subsequently reviewed on-line by seven menopausal women identified through personal contact. Discussions were held with each to determine their understanding of the questionnaire items and to resolve any ambiguities or frustrations that may have arisen during completion. This procedure also enables a check to be made on the time required for completion.

## **6.5 Results I – Characteristics of participants**

### **6.5.1 Description of sample**

The response rate for women in the ten organisations was estimated between 5 percent and 43 percent. In total, 1247 responses were received from the participating organisations. Of them, 335 were excluded from further analysis because 102 women were pre-menopausal, 223 were undefined<sup>2</sup>, seven reported going through the menopause prematurely<sup>3</sup>, and three were not in the target age range, which left a final sample of 912.

The age of the final sample ranged from 45 to 55, with an average age of 50. The sample was predominantly white (95 percent).

The following provides further description of the sample in terms of menopausal status, education level, significant health problems (reported as diagnosed by doctor), level of physical activity, caring responsibilities outside work and job satisfaction.

### **6.5.2 Menopausal status**

Women (n=912) were categorised into the following groups: peri-menopause<sup>4</sup> (43 percent), natural menopause<sup>5</sup> (30 percent), surgical menopause (8 percent) and hormone use<sup>6</sup> (18 percent).

---

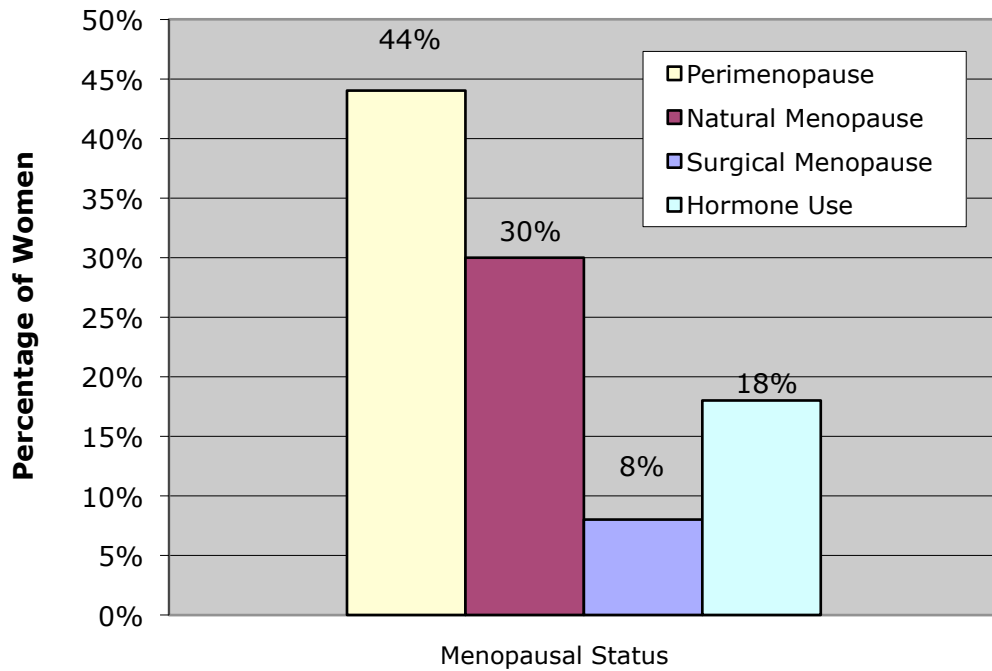
<sup>2</sup> This group's menopausal status could not be ascertained for one of three reasons: (i) menstruation ceased due to reasons other than menopause; (ii) women did not know the answers to certain questions; or (iii) missing responses

<sup>3</sup> Menopause (premature): this group reported going through the menopause before the age of 40

<sup>4</sup> Peri-menopause: this group reported menstrual irregularity or amenorrhoea in the last 3 months

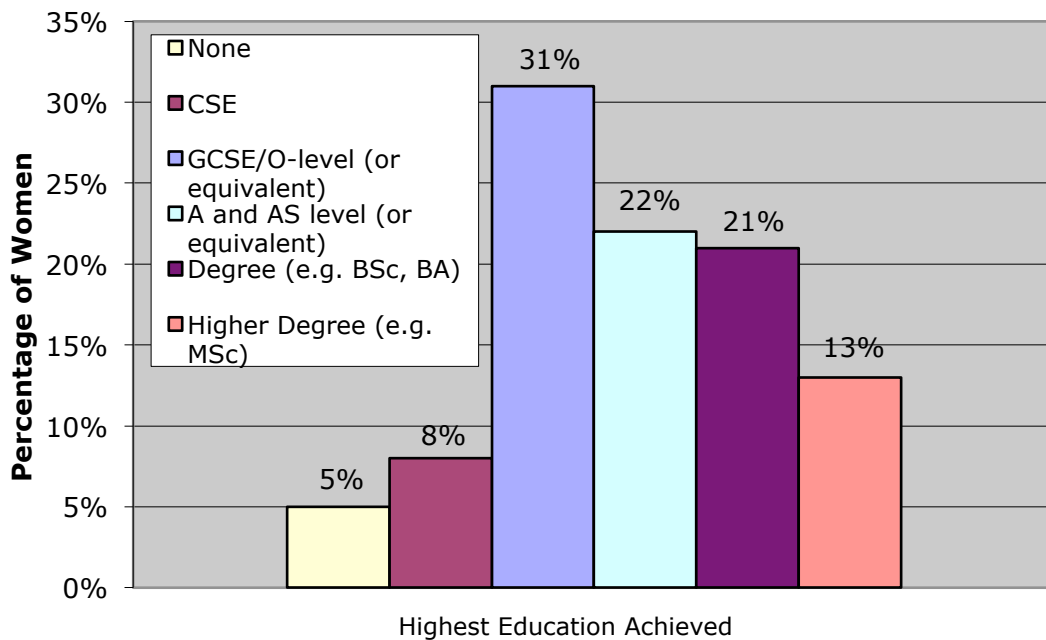
<sup>5</sup> Menopause (natural): this group reported amenorrhoea in the past 12 months

<sup>6</sup> Hormone use: this group reported hormone use in the last 12 months without ever having had gynaecological surgery



### 6.5.3 Education

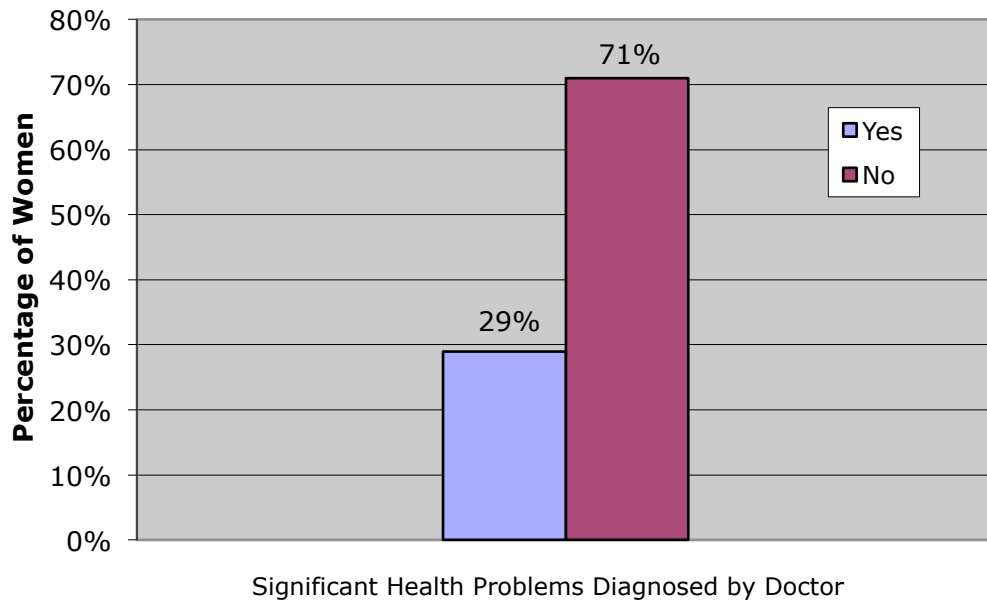
In all, 61 percent of the sample reported to have completed secondary education, 34 percent to have received a university education or postgraduate education and 5 percent to not have any formal educational qualifications.



#### 6.5.4 Significant health problems diagnosed by doctor

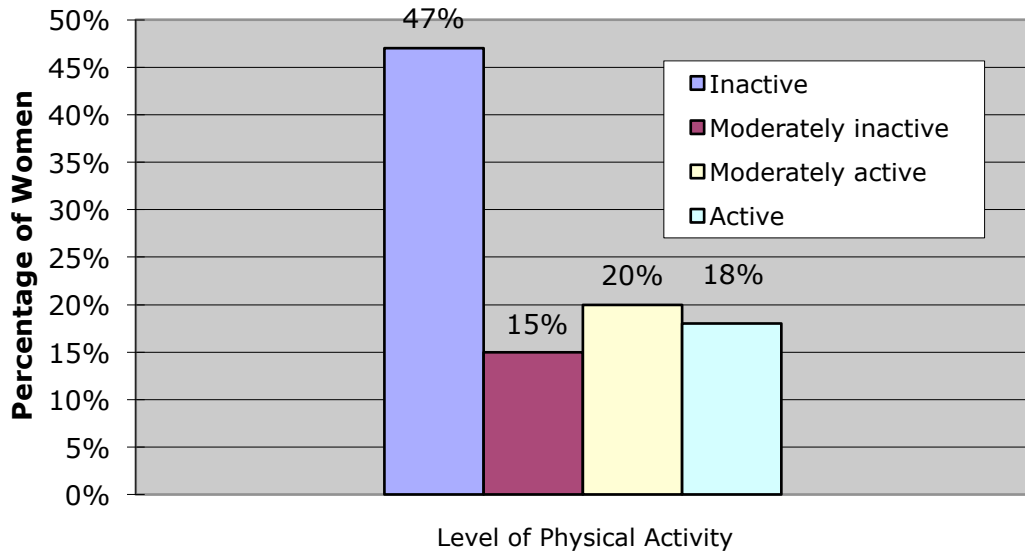
Over a quarter of the sample (29 percent) indicated they had significant health problems that had been diagnosed by a medical practitioner.

Of this group, 69 percent reported one significant health problem, 26 percent reported two to three significant health problems and 6 percent reported four or more. The three most frequently mentioned significant health problems were: high blood pressure (reported by 20 percent of this group), hypothyroidism (reported by 16 percent of this group) and arthritis (reported by 12 percent of this group).



### 6.5.5 Level of physical activity

The current level of physical activity reported by the sample was measured using the General Practice Physical Activity Questionnaire (GPPAQ). Over half of women (62 percent) reported themselves as inactive<sup>7</sup>/moderately inactive<sup>8</sup> and 38 percent as moderately active<sup>9</sup>/active<sup>10</sup>.



<sup>7</sup> Inactive: this group reported being in a sedentary job and having no physical exercise

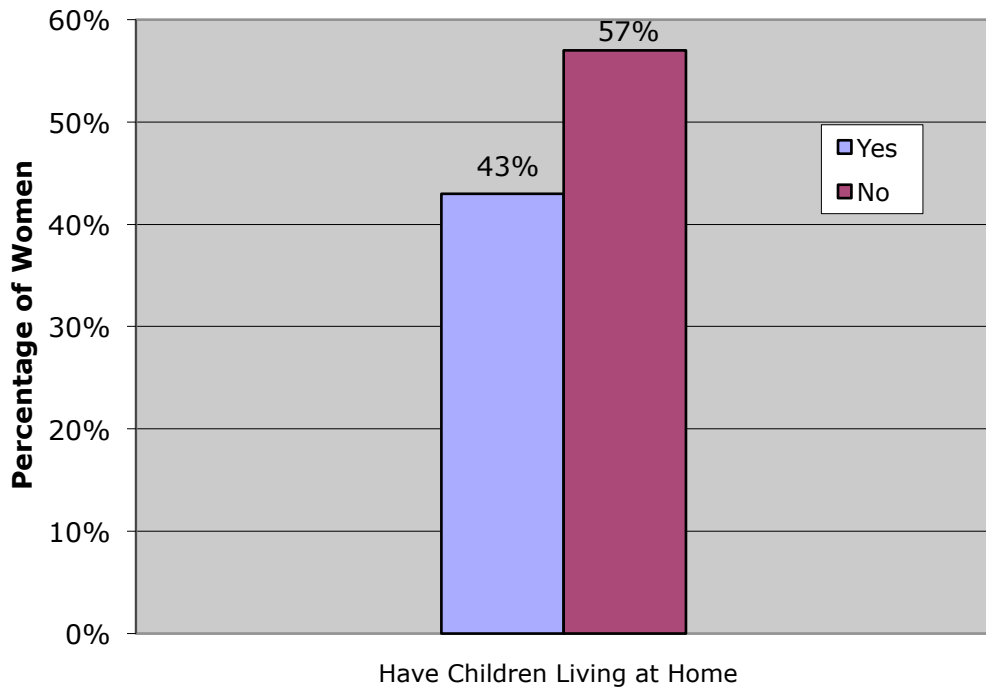
<sup>8</sup> Moderately inactive: this group reported being in a sedentary job and having some but < 1 hour physical exercise per week OR being in a standing job and having no physical exercise

<sup>9</sup> Moderately active: this group reported being in a sedentary job and 1-2.9 hours physical exercise per week OR being in a standing job and having some but < 1 hour physical exercise per week OR being in a physical job and having no physical exercise

<sup>10</sup> Active: this group reported being in a sedentary job and  $\geq$  3 hours physical exercise per week OR being in a standing job and 1-2.9 hours physical exercise per week OR being in a physical job and some but < 1 hour physical exercise OR being in a heavy manual job

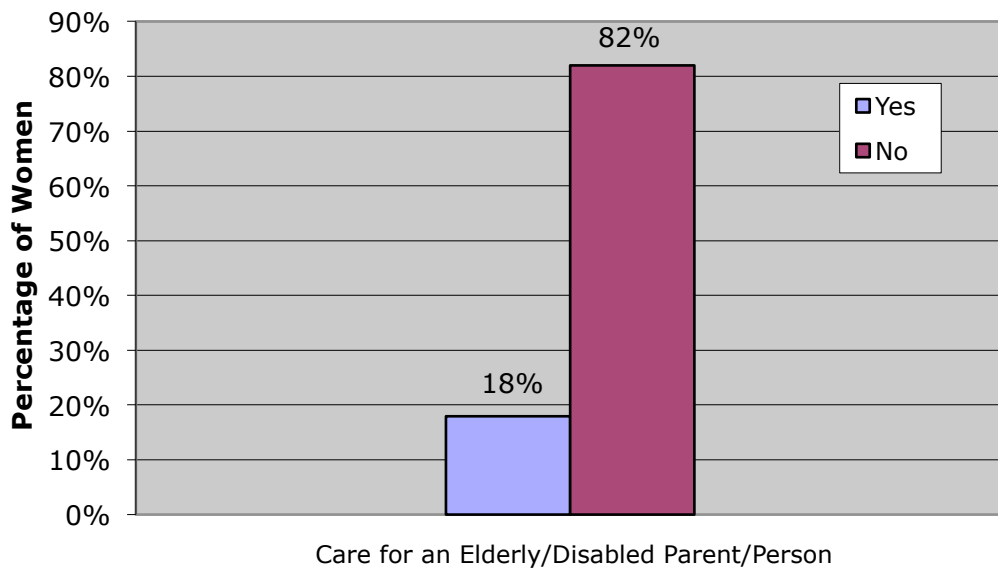
### 6.5.6 Children living at home

Just under half of the sample (43 percent) reported having children living at home.



### 6.5.7 Caring for an elderly or disabled parent/person

Almost a fifth of women (18 percent) reported having caring responsibilities for an elderly or disabled parent/person.



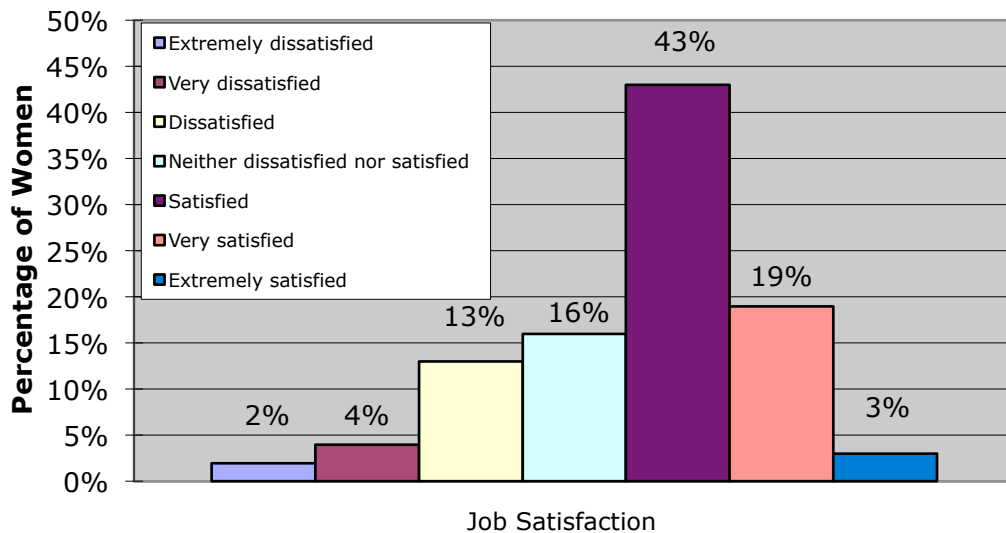
### 6.5.8 General coping styles

The table below shows the sample's average scores on various general coping styles. Women used slightly more engagement coping strategies (25.38) than disengagement coping strategies (22.23). Problem-focused engagement, an engagement coping strategy, received the highest average score (13.36) whereas problem-focused disengagement, a disengagement coping strategy, received the lowest score (9.88).

General Coping Styles	Average Score
Engagement Coping	25.38
Problem-Focused Engagement	13.36
Emotion-Focused Engagement	12.03
Disengagement Coping	22.33
Problem-Focused Disengagement	9.88
Emotion-Focused Disengagement	12.41

### 6.5.9 Job satisfaction

Women were asked in general how satisfied they felt about their job. The majority (75 percent) were satisfied/very satisfied/extremely satisfied with their job.

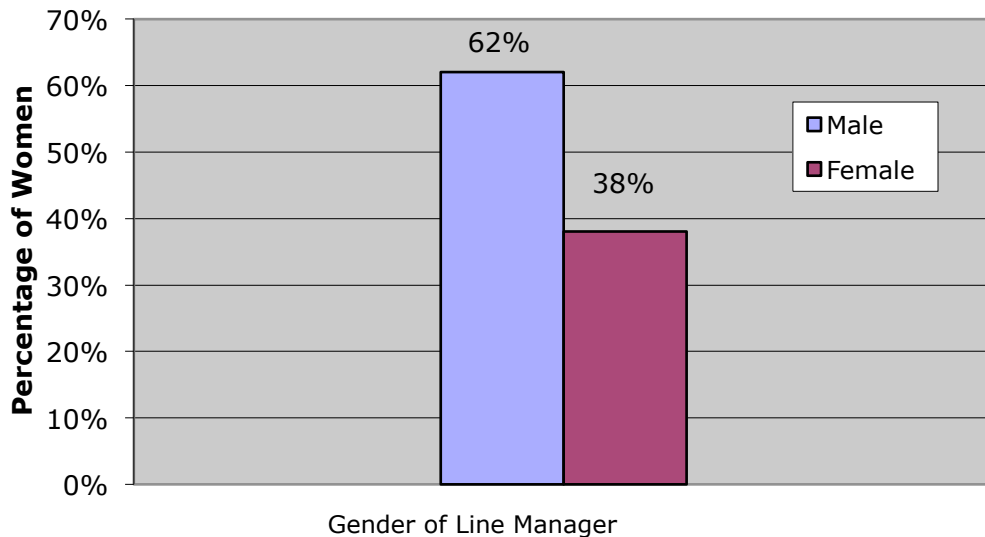


## 6.6 Results II – Characteristics of the work environment

Women were asked to describe their work and working environment: the age and gender of their line manager; the gender balance in their immediate working environment; the extent to which they were able to negotiate working hours/working practices and to take time off for medical treatment for the menopause; and the physical work environment and facilities.

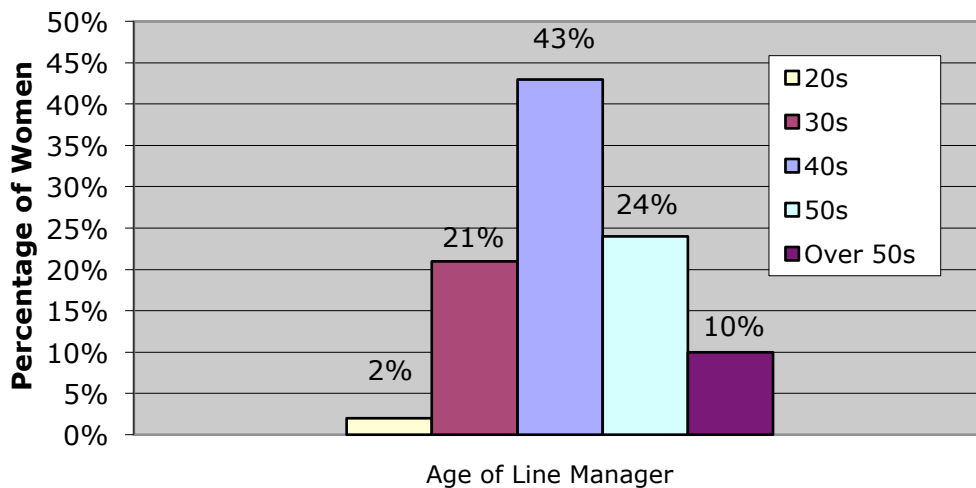
### 6.6.1 Gender of line manager

Over half of the sample (62 percent) of the women in this sample reported having a male line manager, and 38 percent a female line manager.



### 6.6.2 Age of line manager

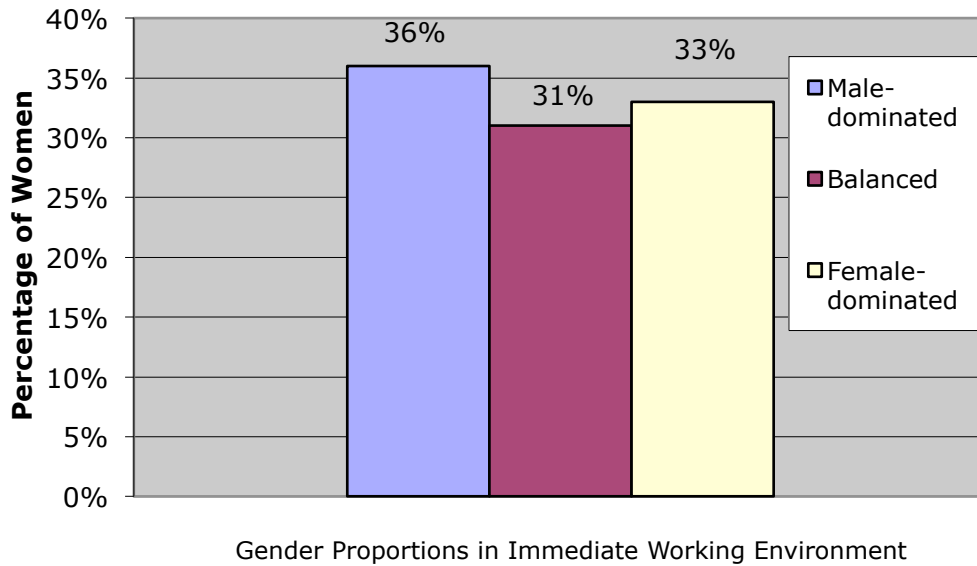
The majority of line managers (63 percent) were in their 40s or younger.





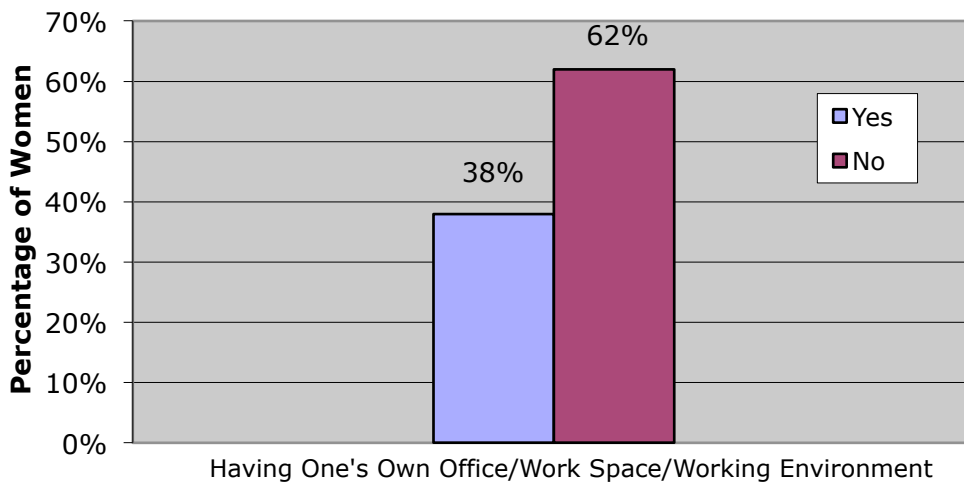
### 6.6.3 Gender balance in the immediate working environment

Over one third of the women (36 percent) described their immediate working environment (e.g. unit/section/department) as male-dominated, 33 percent as female dominated, and 31 percent as balanced.



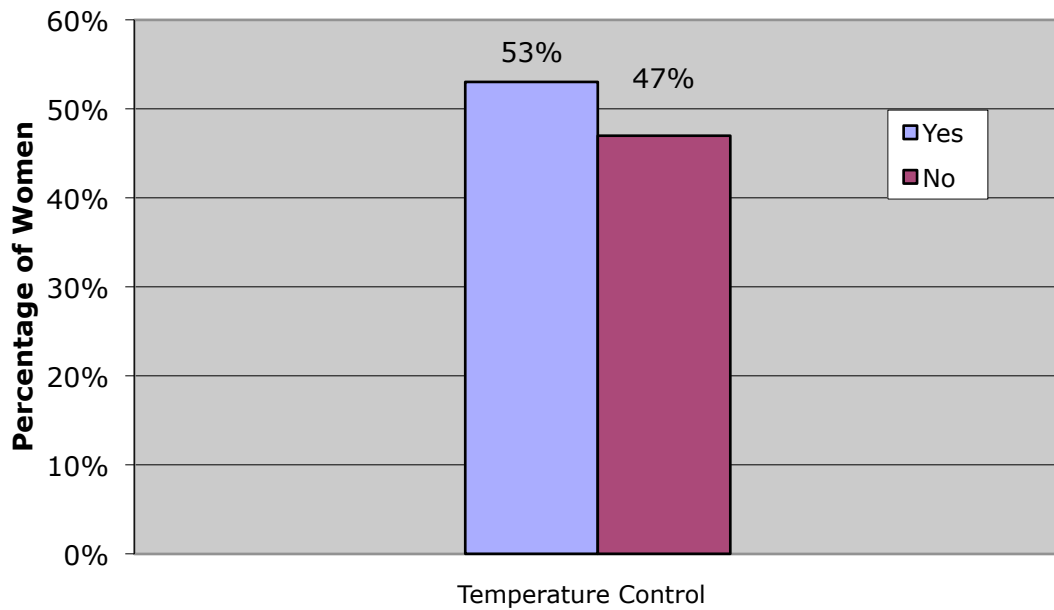
### 6.6.4 Sharing office/work space/working environment

The majority of women (62 percent) reported working in a shared office/work space/working environment.



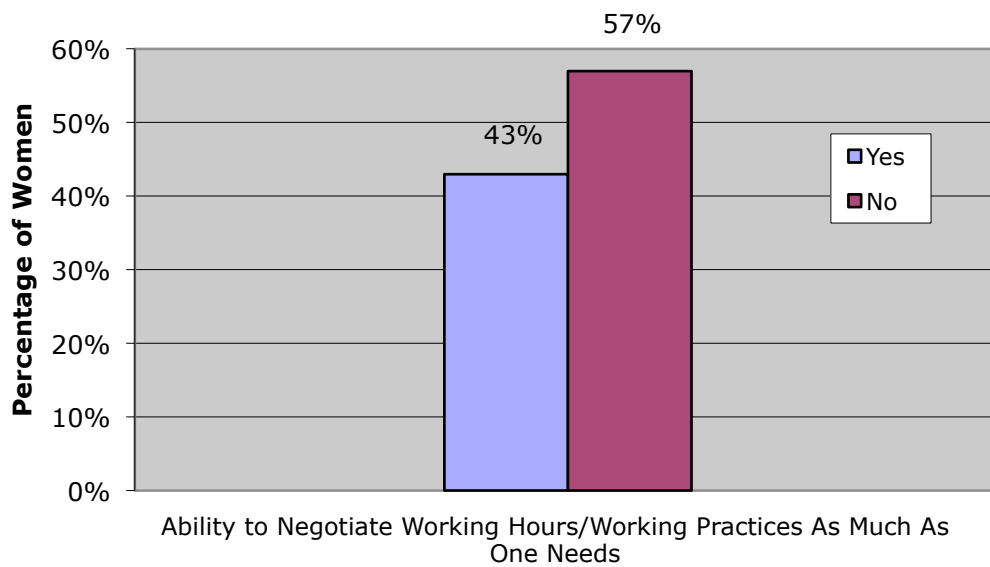
#### 6.6.4 Temperature control

Over half of the sample (53 percent) reported having temperature control in their usual working environment.



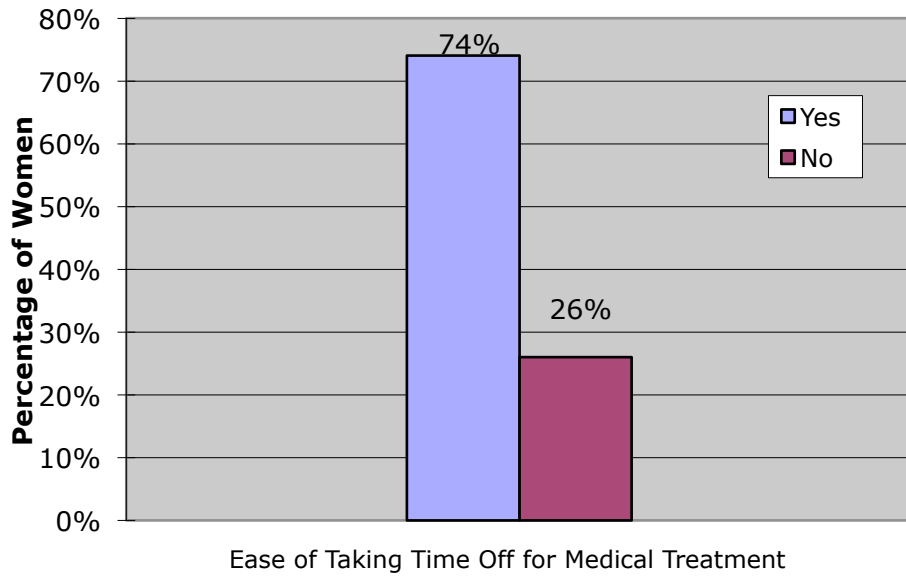
#### 6.6.5 Ability to negotiate working hours/working practices

Just under half of the sample (43 percent) reported that they were able to negotiate their working hours or working practices as much as they needed in order to deal with their menopausal symptoms.



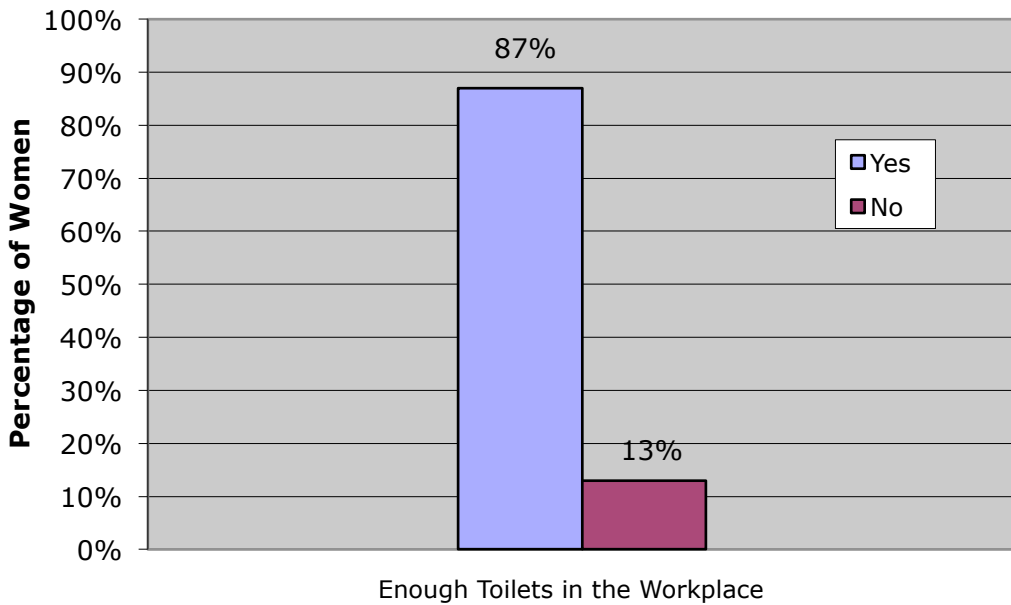
### 6.6.6 Ease of taking time off for medical treatment for the menopause

The majority of the sample (74 percent) reported it was easy for them to take time off for medical treatment for the menopause if needed.



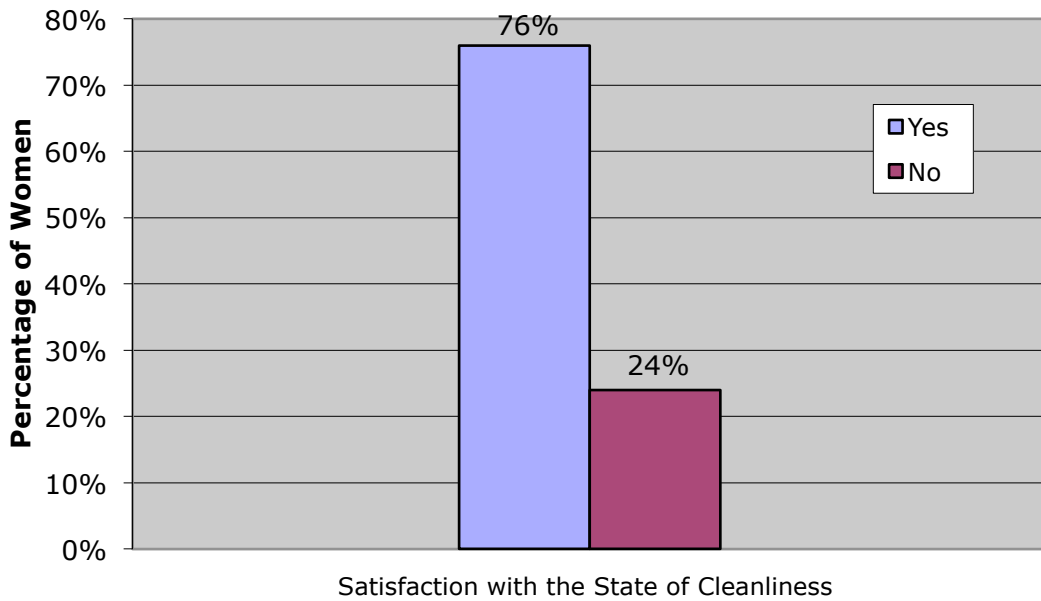
### 6.6.7 Provision of toilets in the workplace

The substantial majority (87 percent) of the sample considered the number of toilets in their workplace as sufficient.



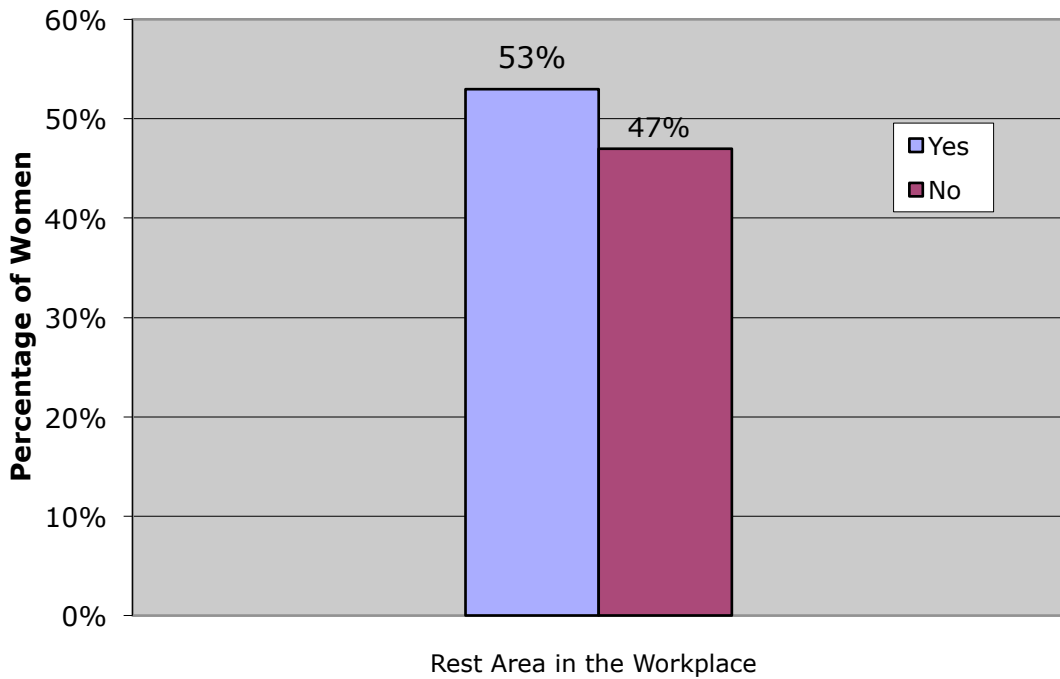
### 6.6.8 Satisfaction with the state of cleanliness of toilets

The majority of the sample (76 percent) was satisfied with the state of cleanliness of toilets in their workplace.



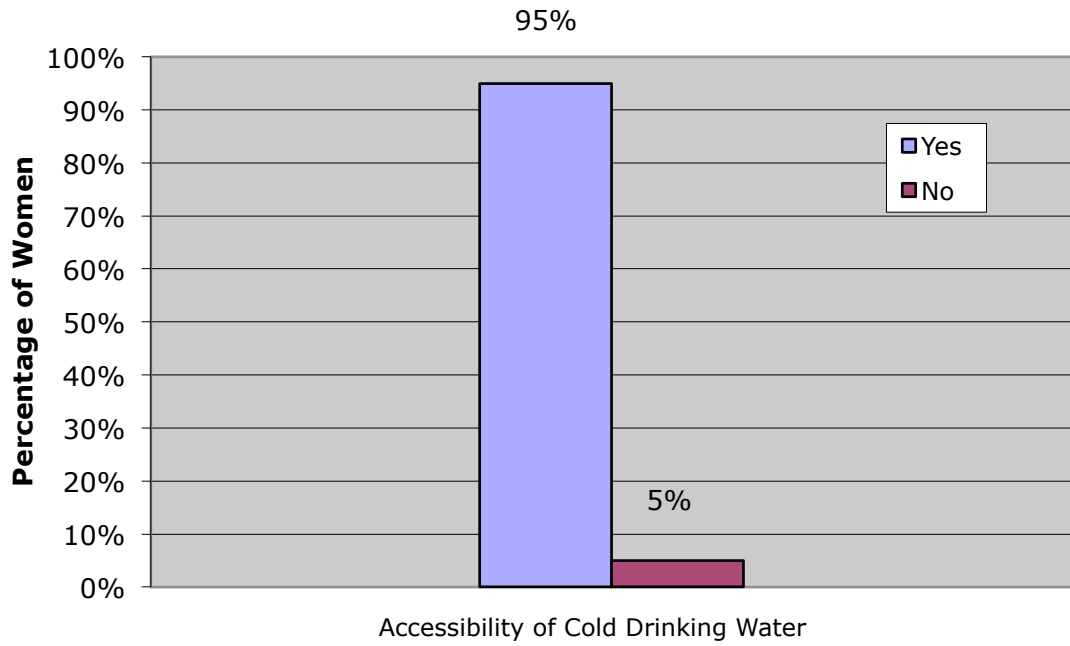
### 6.6.9 Rest Area in the Workplace

Just over half of the sample (53 percent) reported having no access to a rest or relaxation area in the workplace.



### 6.6.10 Accessibility of cold drinking water in the workplace

Almost all women (95 percent) reported having cold drinking water readily available in their workplace.



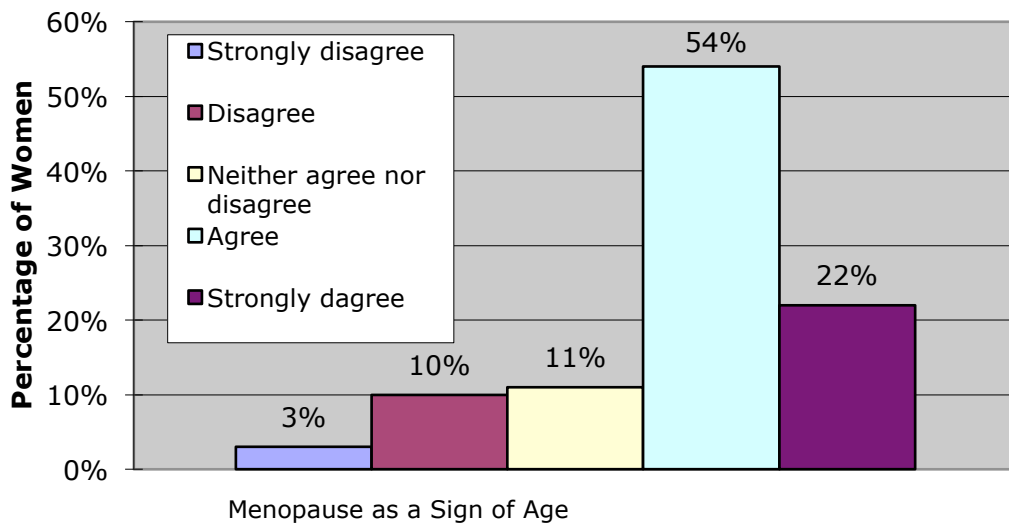
## 6.7 Results III – The menopause and working life

Women were asked about their attitudes towards the menopause. They were also asked to report symptoms they were bothered by at the time of completing the questionnaire, the perceived impact of symptoms on work performance, their attributions about their co-workers' perceptions of their competence at work, and what their employing organisations had done/could do to make things better at work with regard to menopausal transition. They were also asked about their experience of hot flushes at work.

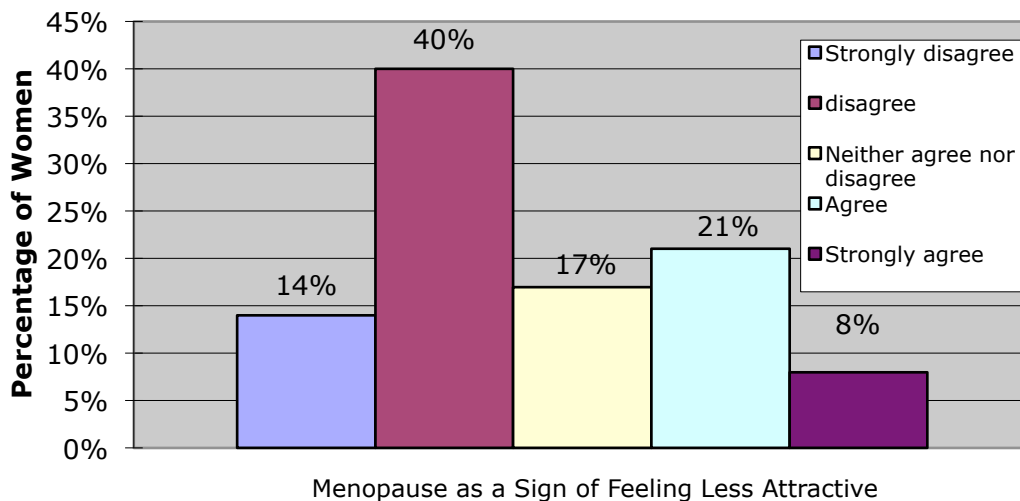
### 6.7.1 Attitudes towards the menopause

The majority of the women (84 percent) agreed or strongly agreed that the menopause was a natural life stage, not a 'medical disorder'.

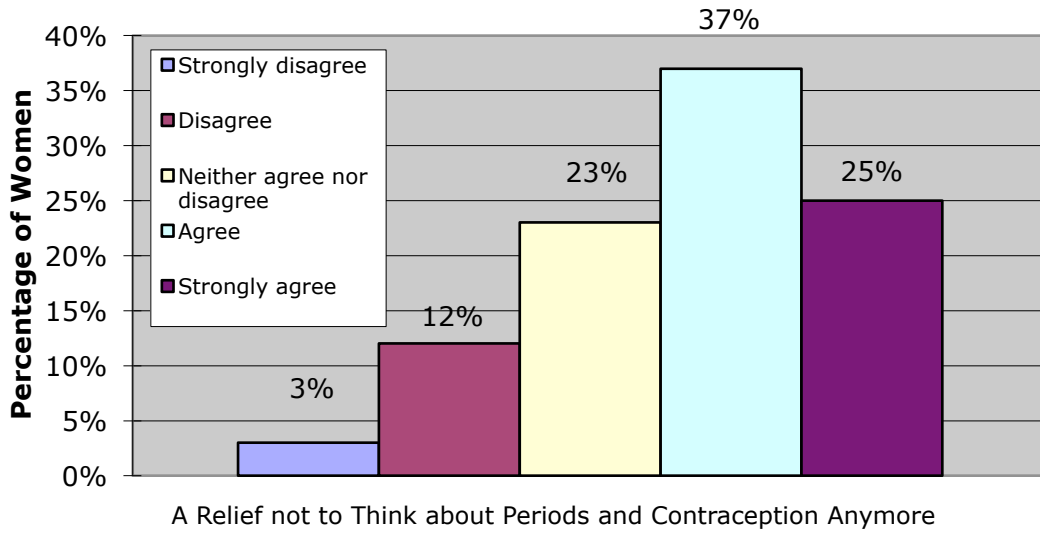
Over two thirds of the sample (76 percent) agreed or strongly agreed that the menopause was 'a sign of age'.



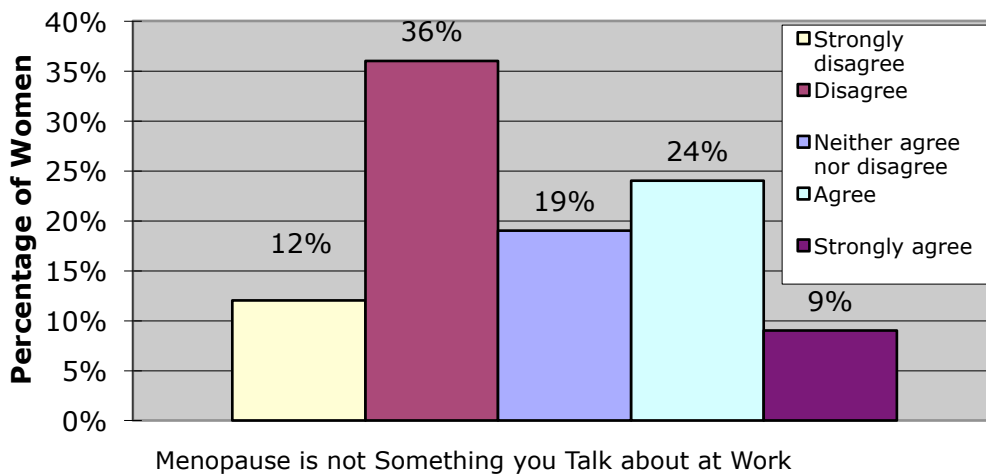
Overall, 29 percent of the sample felt menopause was a sign of feeling less attractive.



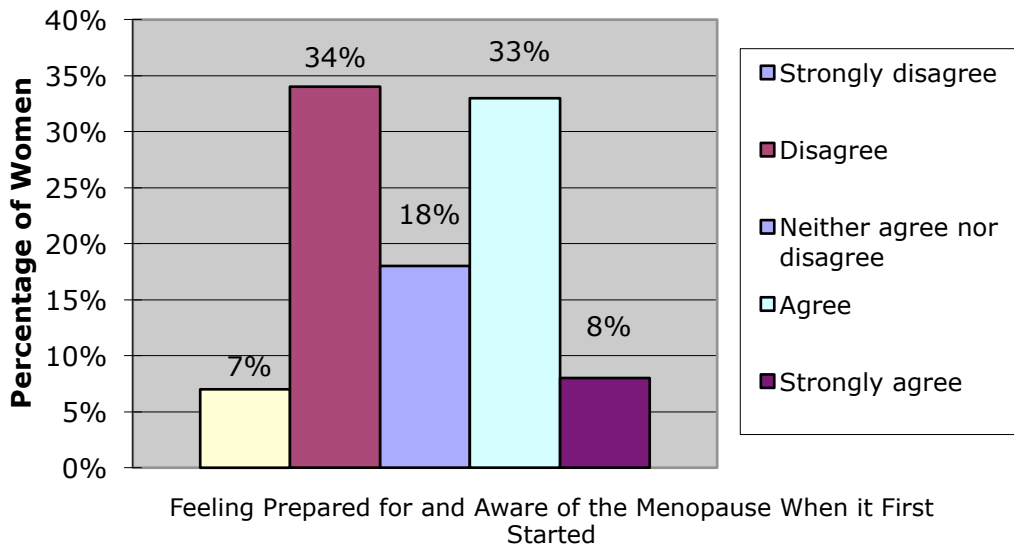
Over half of the sample (62 percent) felt it was a relief not to think about periods and contraception anymore.



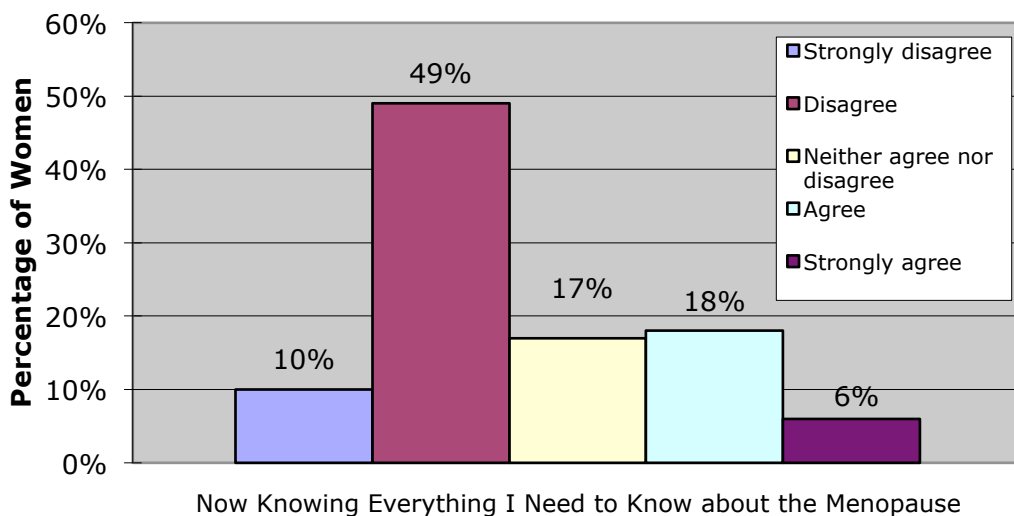
Just over a third of the sample (33 percent) agreed/strongly agreed menopause was not something one talked about at work.



While 41 percent of the sample felt they were prepared for and aware of the menopause when it first started, the same proportion of women (41 percent) reported otherwise.



Over half of the sample (59 percent) disagreed/strongly disagreed they now knew everything they needed to know about the menopause.



### 6.7.2 Menopausal symptoms

Women were asked to indicate from a list of 19 symptoms the extent to which they were bothered by them (not at all/a little/quite a bit/extremely) at the time of completing the questionnaire. The list below presents these symptoms, with the most 'bothersome' at the top. The main factors that emerged (as rated by over half of the sample as quite a bit/extremely bothered by it) were sleep disturbances (reported by 56 percent of the sample as quite a bit/extremely bothered by it) and tiredness (reported by 53 percent of the sample as quite a bit/extremely bothered by it).

- Sleep disturbances – 56 percent
- Tiredness – 53 percent
- Night sweats - 43 percent
- Poor memory – 42 percent



- Joint and muscular aches and discomfort – 41 percent
- Hot flushes – 40 percent
- Feeling low/depressed – 39 percent
- Irritability – 38 percent
- Weight gain – 38 percent
- Mood swings – 35 percent
- Poor concentration – 35 percent
- Frequent visits to the toilet – 33 percent
- Lowered confidence – 32 percent
- Changes in skin – 27 percent
- Tearfulness – 25 percent
- Clumsiness – 24 percent
- Heavy periods/flooding – 24 percent
- Anxiety/ panic attacks – 21 percent
- Palpitations/ irregular or racing heart – 20 percent

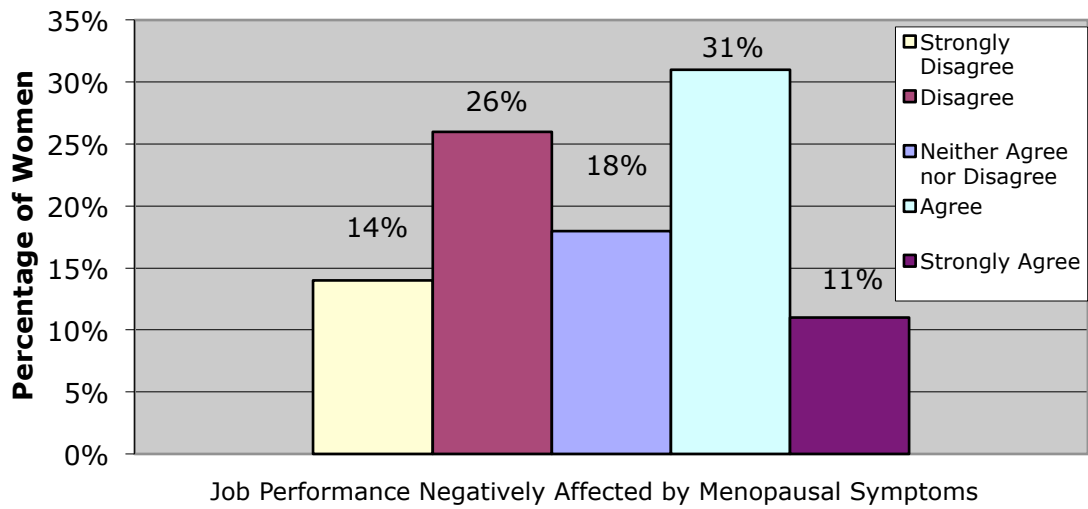
### **6.7.3 Perceived impact of symptoms on work**

Women were also asked to indicate which symptoms from the list were causing them problems at work. The following list presents these symptoms, with the most interfering symptoms at the top. The three most problematic symptoms (as cited by over half of the sample) were poor concentration (reported by 51 percent of the sample), tiredness (reported by 50 percent of the sample) and poor memory (reported by 50 percent of the sample).

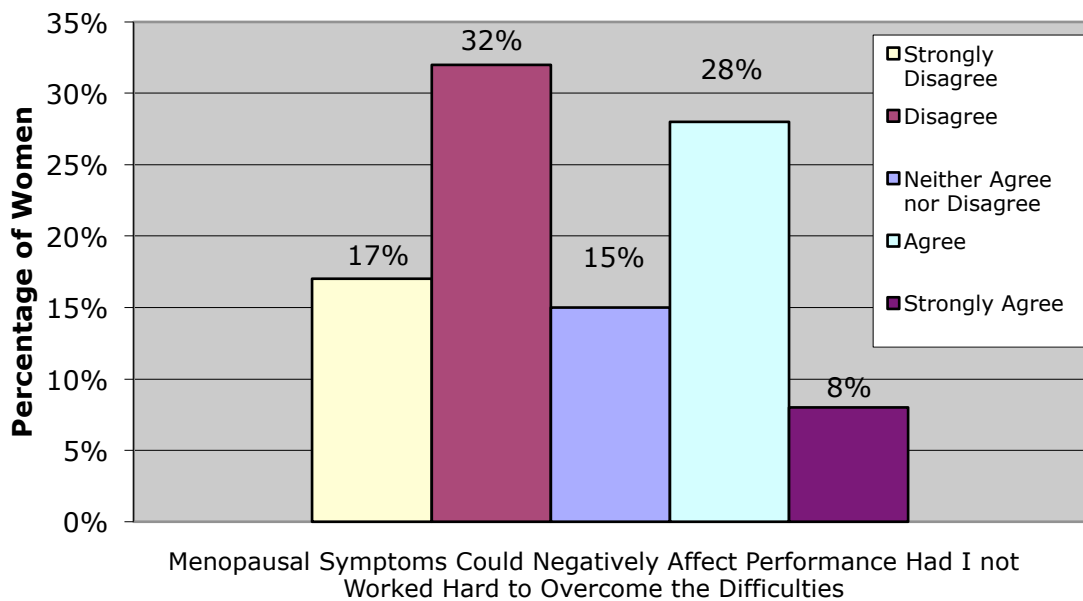
- Poor concentration – 51 percent
- Tiredness – 50 percent
- Poor memory – 50 percent
- Feeling low/depressed – 42 percent
- Lowered confidence – 39 percent
- Sleep disturbances – 37 percent
- Irritability – 36 percent
- Hot flushes – 35 percent
- Joint and muscular aches and discomfort – 31 percent
- Mood swings – 29 percent
- Anxiety/panic attacks – 25 percent
- Tearfulness – 24 percent
- Frequent visits to the toilet – 23 percent
- Heavy periods/flooding – 22 percent
- Clumsiness – 17 percent
- Palpitations/irregular or racing heart – 15 percent
- Weight gain – 11 percent
- Night sweats – 8 percent
- Changes in skin – 7 percent

### 6.7.4 Job performance

In all, 42 percent of the sample agree/strongly agreed their (perceived) job performance had been negatively affected by their menopausal symptoms.

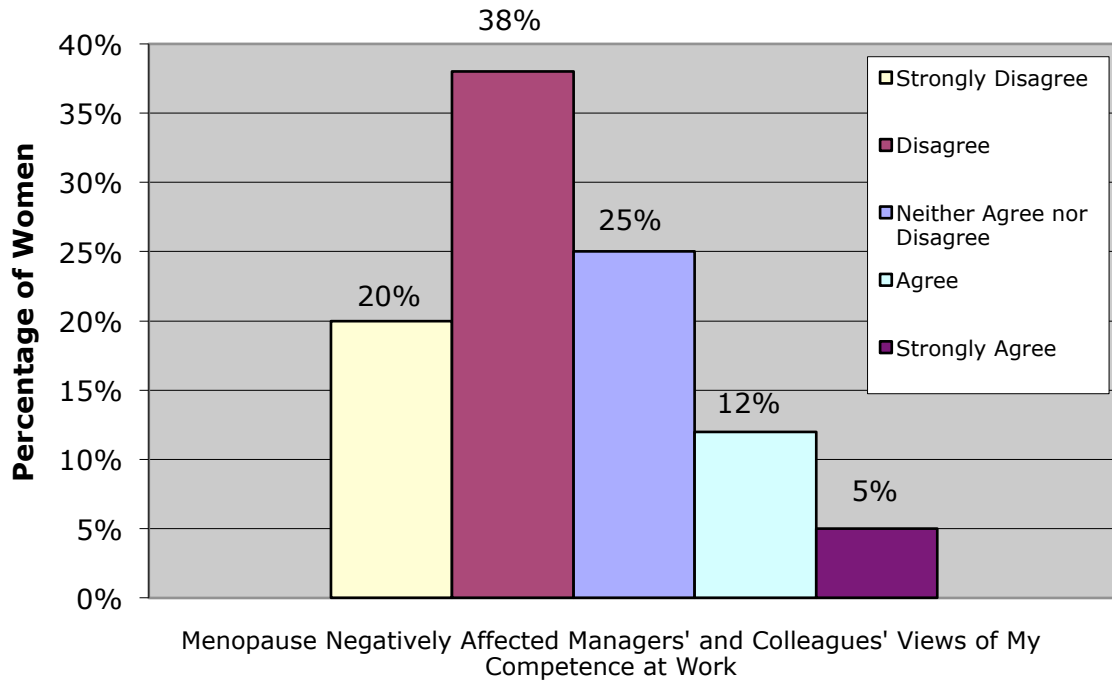


Of those who said their performance had not been negatively affected by their menopausal symptoms, 36 percent thought it would have been affected had they not put in additional effort to overcome their difficulties.



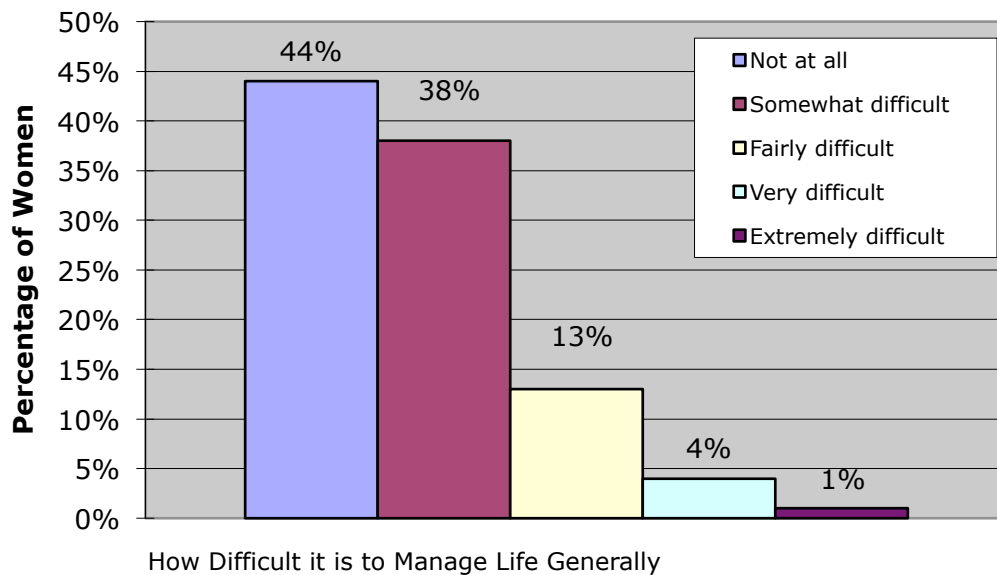
### 6.7.5 Others' perceptions of competence

In all, 17 percent of women agreed/strongly agreed that they perceived the menopause to have had a negative impact on their managers' and colleagues' perceptions of their competence at work.

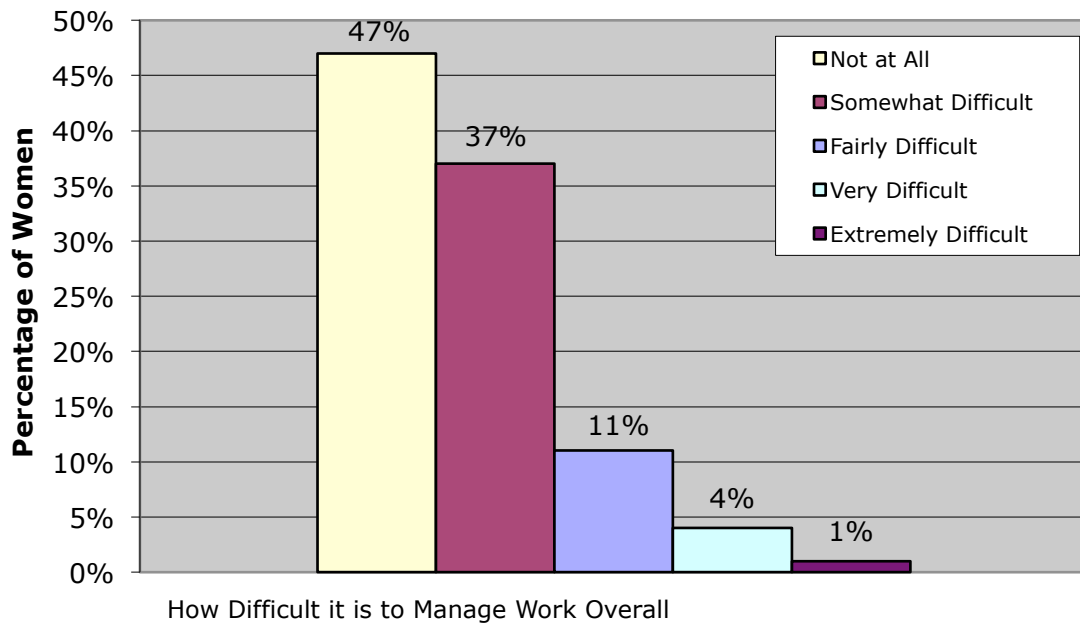


### 6.7.6 Overall impact of menopause on life and work

Women were asked how difficult it was to manage life generally during menopausal transition, just over half of the sample (51 percent) reported it as somewhat/fairly difficult, 5 percent as very/extremely difficult and 44 percent as not difficult.



When asked how difficult it was overall to manage work during menopausal transition, 48 percent of the sample reported it as somewhat/fairly difficult, 5 percent as very/extremely difficult and 47 percent as not difficult.



### 6.7.7 Physical, organisational and psychosocial adjustments at work

Women who indicated it was difficult overall to manage work were asked to choose, from a list of physical, organisational and psychosocial adjustments at work, the five most important adjustments that their organisation did/could do to make things better for women going through the menopause. The list below presents these adjustments in order of reported helpfulness. The five adjustments that emerged were greater awareness of the menopause as a possible occupational health issue among managers (rated by 75 percent of this group as helpful), flexible working hours (rated by 63 percent of this group as helpful), formal information/advice from employer about the menopause and how to cope at work (rated by 58 percent of this group as helpful), better ventilation/fan/air conditioning/temperature in usual work environment (rated by 55 percent of this group as helpful) and informal support for women going through the menopause (rated by 52 percent of this group as helpful).

- Greater awareness among managers of the menopause as a possible occupational health issue – 75 percent
- Flexible working hours – 63 percent
- Formal information/advice about the menopause and how to cope at work from my employer (e.g. occupational health service, HR, personnel, diversity adviser) – 58 percent
- Better ventilation/fan/air conditioning/temperature in my usual work environment – 55 percent
- Informal support for women going through the menopause (e.g. women's network groups and/or contact number) – 52 percent
- Allowing working at home – 49 percent
- A rest area (i.e. a place to sit/relax) – 40 percent
- Cold drinking water readily available – 39 percent

- Adequate access to toilets – 32 percent
- Facilitating a change from full-time to part-time work – 19 percent

### 6.7.8 Experience of hot flushes at work

Women who were experiencing hot flushes at the time of completing the questionnaire were asked about their experience of hot flushes at work.

The number of years since the onset of hot flushes for this group of women was four. The usual numbers of hot flushes experienced over a 24-hour period and during a normal working day/shift were eight and four respectively.

Average Number of Years of Experiencing Hot Flushes	4
Average Number of Hot Flushes (over 24-hour period)	8
Average Number of Hot Flushes (during a normal working day/shift)	4

Average Number of Years of Experiencing Hot Flushes and Average Number of Hot Flushes Daily and During a Normal Working Day/Shift

Women were asked to rate their level of distress as they were experiencing hot flushes and the extent to which they found their hot flush interfering with their work on a 10-point response scale. The average scores for flush distress and flush interference were 3.47 and 2.95 respectively.

Flush Distress (average score)	3.76
Flush Interference (average score)	3.21

Average Scores of Flush Distress and Flush Interference

Women were asked to comment on which work situations made coping with hot flushes more difficult. The following list presents the work situations in order of difficulty. The three difficult work situations that emerged were working in hot/unventilated environment (rated by 71 percent of this group), formal meetings (rated by 63 percent of this group) and high visibility work situations such as presentations (rated by 48 percent of this group).

- Working in hot/unventilated environment – 75 percent
- Formal meetings – 67 percent
- Doing high visibility work (e.g. presentations) – 48 percent
- Learning new things/procedures – 46 percent
- Task requiring attention to fine detail – 39 percent
- Working in a shared office – 38 percent
- Working to a deadline – 35 percent
- Working with new people – 31 percent

- Working with younger male colleagues – 25 percent
- Working with older male colleagues – 21 percent
- Working with younger female colleagues – 15 percent
- Working with older female colleagues – 3 percent

## 6.8 Results IV – Support outside and at work

This section reports on women’s satisfaction with the support received at work and outside work and on the issue of disclosure to line management

### 6.8.1 Satisfaction with support

This section reports on women’s satisfaction with the support they received concerning their experience of the menopause, both at work and outside work. It describes three types of support: emotional, informational and practical. Emotional support refers to the provision of sympathy and understanding; informational support concerns advice, suggestions, and information that women can use in coping with the menopause; practical support refers to the provision of tangible aid, services and treatment. It also presents responses to questions on disclosure to line management and the reasons for disclosure.

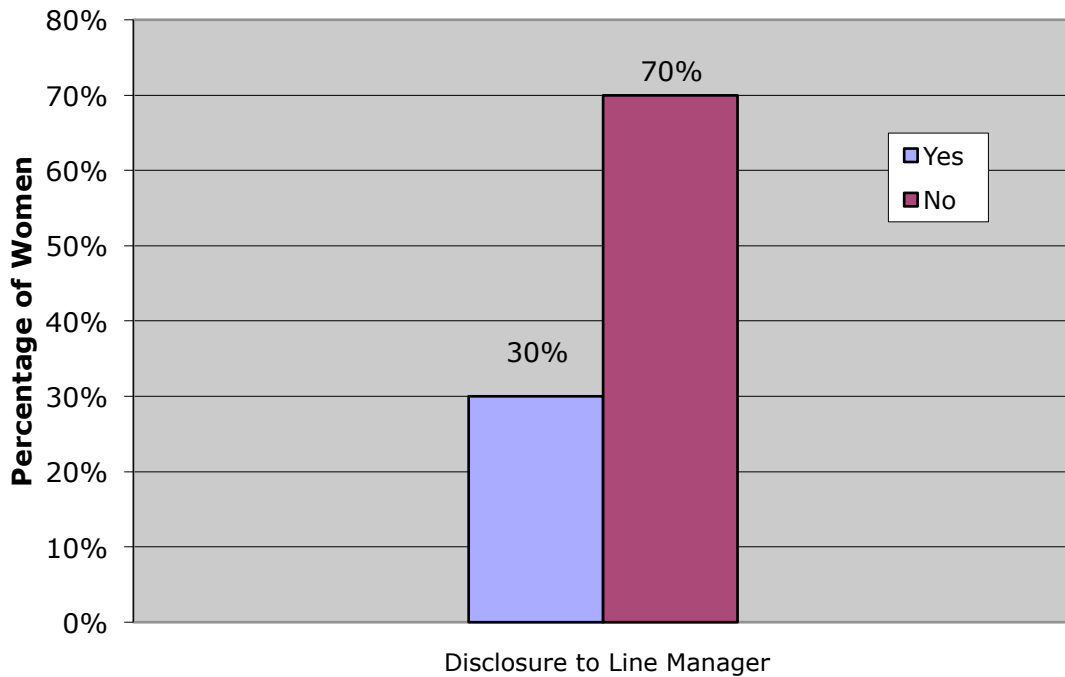
Women were asked whether they were satisfied with the support they received from various sources: family and friends, GPs, specialists/consultants/menopause clinic, line manager, formal support functions at work (e.g. occupational health) and colleagues. Women who had not discussed the menopause with their GP or who had not visited a specialist menopause clinic or consultant could not rate their satisfaction with that potential source of support and thus were excluded from this analysis. Similarly, women who had not discussed their experience with their family and friends could also not report their views of that experience. Caution needs to be taken when interpreting percentages in the table below (representing the proportion of women who had expressed an opinion who were satisfied with support from various sources) as the number of respondents varied between groups and in some cases the number of responses was small. For example, few women reported experience of specialist menopause clinic or consultants compared to consultations with GPs (81 vs 471). The majority of women commented on satisfaction with support from family and friends (629). At work, 123 women reported on support from their line manager, 83 on sources of formal support such as occupational health, and 299 on support from colleagues.

It can be seen from the table that outside of work, the majority of women were satisfied with emotional support from family and friends, and informational support from GPs and specialists. It is notable that formal support at work was not highly rated by many women, although emotional support from line managers and colleagues was valued.

	Emotional	Informational	Practical
<i>Support received outside work</i>			
Family & Friends	80 %	26 %	30 %
GP	48 %	67 %	35 %
Specialist	47 %	63 %	38 %
<i>Support received at work</i>			
Line manager	75 %	5 %	33 %
Formal support	28 %	40 %	18 %
Colleagues	85 %	20 %	30 %

### 6.8.2 Disclosure to line managers and reasons for this decision

The majority of the sample (70 percent) had not told their line manager about their symptoms.



The following list presents the reasons for non-disclosure in order of frequencies. The three reasons that topped the list were: 'because it's private/personal' (rated by 62 percent of this group), 'because it has no effect on work' (rated by 43 percent of this group) and 'because my line manager is a man' (rated by 41 percent of this group).

- Because it's private/personal – 62 percent
- Because it has no effect on work – 43 percent
- Because my line manager is a man – 41 percent
- Because it's embarrassing – 32 percent
- Because I don't know my line manager well enough – 29 percent
- Because my line manager is younger – 15 percent
- Because my line manager is older – 2 percent
- Because my line manager is a woman – 1 percent

### 6.8.3 Absence from work

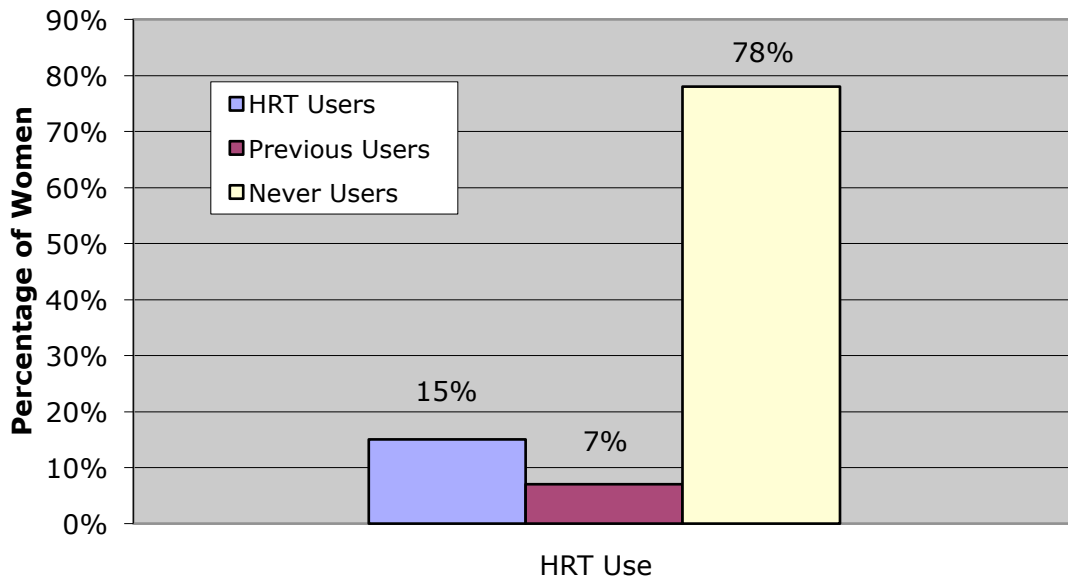
In all, 106 (12 percent) women had taken a day off work because of their menopausal symptoms. Of them, nearly half (45) had told their line manager the real reason for their absence.

## 6.9 Results V – Coping with the menopause

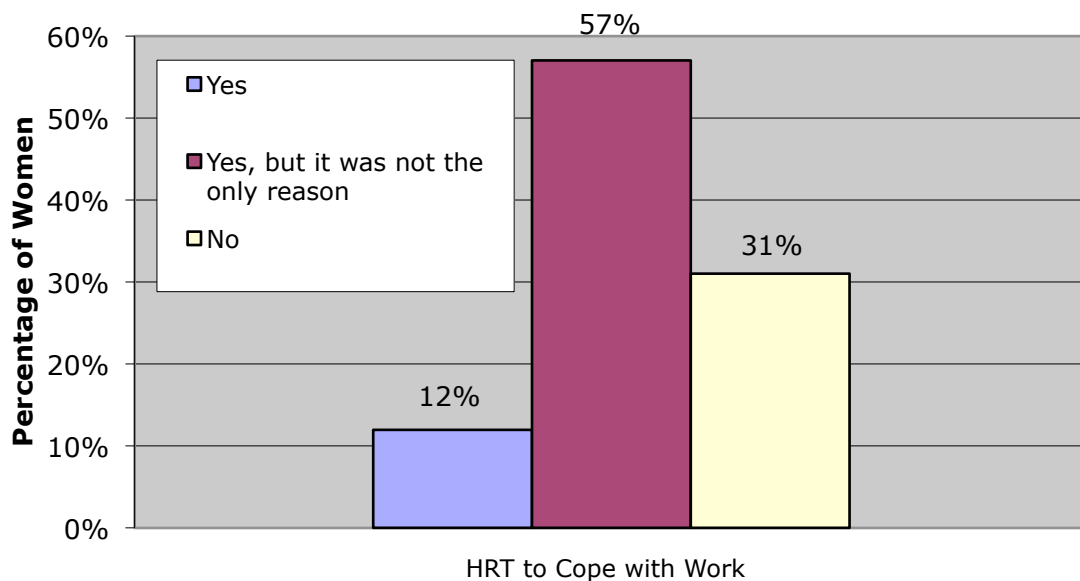
The section presents the results of questions on the coping strategies women used to deal with the menopause and their attitudes towards those strategies.

### 6.9.1 Hormone replacement therapy

The majority reported never having used HRT (78 percent). Of the remaining 22 percent, some had used it in the past 12 months and some previous to that.



Of those who reported HRT use in the previous 12 months, 69 percent indicated work was the major reason, or one of the reasons why they started HRT. Of them, 91 percent reported HRT as being effective in helping them to manage work, though 25 percent mentioned the associated side effects could be problematic.



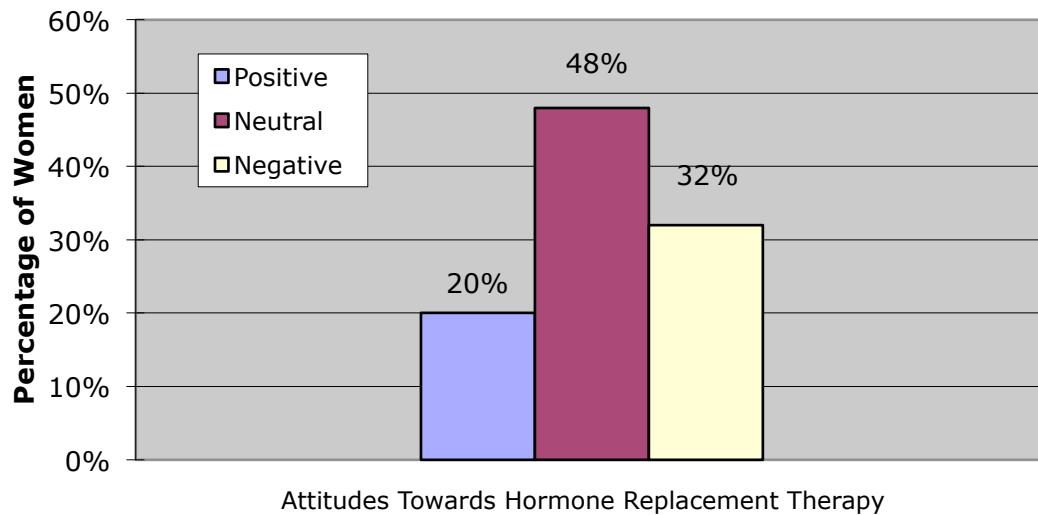
Previous HRT users were asked for their reason(s) for HRT discontinuation. The main reason that emerged was 'personal experiences of side effects' (mentioned by 47 percent



of this group). Less than a third (29 percent) cited worries regarding reported side effects and a few (8 percent) cited 'not needing it anymore'.

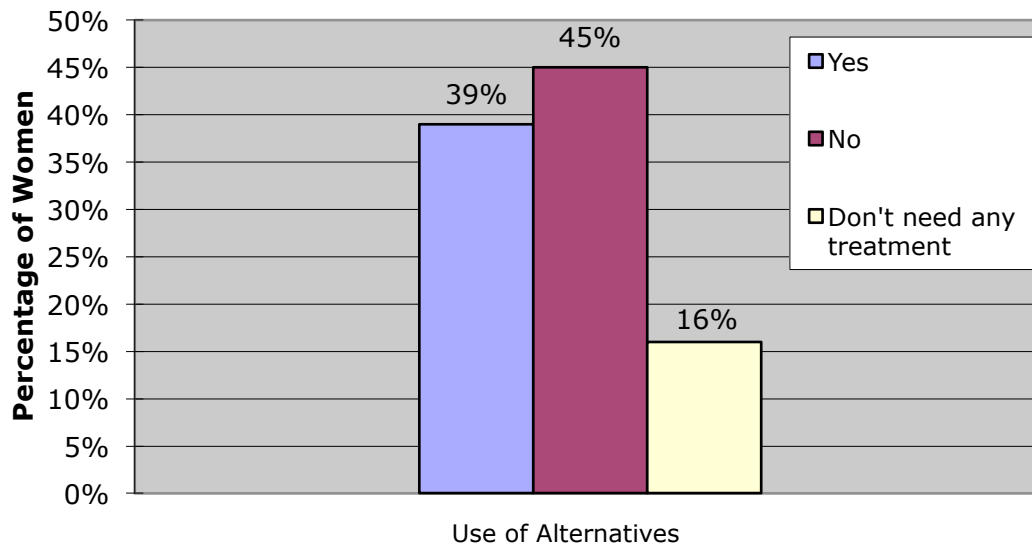
- Personal experiences of side effects – 47 percent
- Worries regarding reported side effects – 29 percent
- Not needing it anymore – 8 percent

Women's attitudes towards HRT were examined. In all, 48 percent of the sample was neutral about HRT, 32 percent were negative and 20 percent were positive.

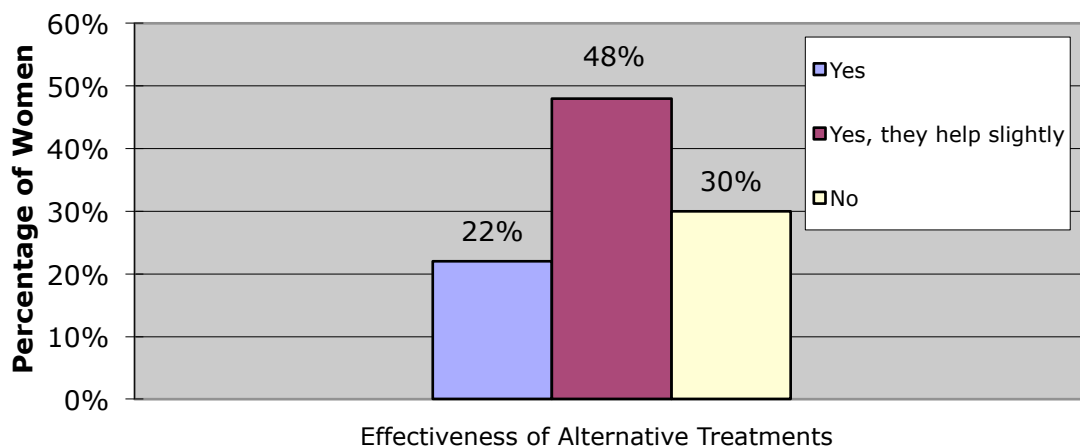


### 6.9.2 Alternative or complementary treatments

In terms of use of alternative or complementary medicine, 45 percent of the sample had never tried such an approach, 39 percent had tried and 16 percent said they did not need any treatment.



Of those who had tried alternative treatments, 70 percent of them thought they were helpful or slightly helpful in symptom management.



### 6.9.3 Other coping strategies

Women were asked to indicate from a list of coping strategies identified at the interview stage the helpfulness of those strategies (not helpful/helpful/very helpful). The following list presents the strategies in order of reported helpfulness. Many of the strategies were reported by a substantial proportion of the sample as helpful/very helpful. Those that were rated by over 90 percent of the sample as helpful/very helpful were: doing something to cool down (reported by 95 percent of the sample as helpful/very helpful), talking to women who are going through/have gone through the menopause (rated by 94 percent of the sample as helpful/very helpful), wearing appropriate clothing (rated by 93 percent of the sample as helpful/very helpful), making time for self and treats (rated by 93 percent of the sample as helpful/very helpful) and joking about it/trying to look on the bright side of things (reported by 92 percent of the sample as helpful/very helpful).

- Doing something to cool down (e.g. put the fan on, have a drink, open window, go outside) – 95 percent
- Talking to women who are going through/have gone through the menopause – 94 percent

- Wearing appropriate clothing (e.g. layers) – 93 percent
- Making time for self and treats – 93 percent
- Joking about it/trying to look on the bright side of things – 92 percent
- Getting more information about the menopause (from the internet, women's magazines, books, leaflets) – 92 percent
- Talking to someone about how I am feeling – 90 percent
- Writing notes/making lists – 88 percent
- Double checking my work – 88 percent
- Exercising – 87 percent
- Choosing to do tasks I can manage at the time (e.g. when tired/when concentration is poor) – 86 percent
- Getting more sleep – 86 percent
- Immersing myself in non-work activities/interests – 79 percent
- Changing diet – 78 percent
- Ignoring it/distracting myself – 75 percent
- Adjustments made by employer to my work environment (e.g. heating, fan, water cooler) – 65 percent
- Avoiding interactions with others – 66 percent
- Changing my working hours (e.g. flexible hours/fewer hours) – 56 percent
- Taking time off – 55 percent

## 7. SUMMARY AND CONCLUSIONS

### 7.1 Overview

The menopause is a significant life event that affects all women. Despite the fact that women represent almost half of the labour force and over 3.5 million women are aged 50 and over, the menopause is seldom recognised as a potential challenge for them at work.

It is clear from the results of this research that many women found they are little prepared for its arrival, and even less equipped to manage its symptoms at work. The majority of the women in this study felt they needed further advice and support. Workplaces and working practices are not designed with menopausal women in mind. Heavy and painful periods during the peri-menopause, hot flushes, mood disturbance, fatigue, and poor concentration pose significant and embarrassing problems for some women, leaving them feeling less confident and at odds with their desired professional image. Many are anxious about these perceived performance deficits, and about their colleagues' and line managers' perceptions of their competence. Women are not comfortable disclosing their difficulties to their managers, particularly if those managers are younger than them or were male. In this research, where women had taken time off work to deal with their symptoms, only half of them disclosed the real reason for absence to their line managers. Some women said they worked extremely hard to overcome their perceived shortcomings. In short, the years leading up to and after the menopause can be a demanding and stressful experience, lasting for some significant period of women's later working life. Some women use HRT to help cope with the more troublesome symptoms at work. Others considered working part-time, although they were concerned about the impact on their career if they did so, or had even thought about leaving the labour force altogether.

This study is exploratory; it aimed to map the range of experiences, and to offer suggestions for future research and workplace actions. It does not claim to be a representative sample of all 45-55 year-old women. Women vary considerably in their experience of menopause; not all women find their symptoms debilitating, and some 'sail through' the menopause without experiencing any major difficulties. Whereas nearly half of the women found it somewhat/fairly difficult to cope with work during menopausal transition, an equal proportion of women did not find it difficult at all. Only 5 percent reported it to be very or extremely difficult. Of those who had difficulties, the major impacts of the symptoms they attributed to the menopause on work were: (i) poor concentration; (ii) tiredness; (iii) poor memory; (iv) feeling low/depressed; and (v) lowered confidence. Hot flushes were a major source of distress for many women. The features of work that made them more difficult to cope with were: (i) working in hot and poorly ventilated environments; (ii) formal meetings; and (iii) high visibility work such as formal presentations.

In all, just under half (42 percent) of this sample felt their job performance had been negatively affected by their menopausal symptoms, and of those that did not, a third felt their performance would have been affected had they not made additional efforts to overcome their difficulties. Nearly a fifth of women felt that the menopause had a negative impact on their managers and colleagues' perceptions of their competence at work.

Women had developed many strategies for coping with problematic menopausal symptoms at work: (i) adjustments to the work environment (e.g. obtaining fans or opening windows); (ii) adjustments to work routines (e.g. changing work hours, taking breaks, taking days off, not working voluntary overtime and adopting flexible working practices); (iii) active coping strategies, (disclosure, requesting formal adjustments, trying to control emotions, using positive reinterpretations and a sense of humour, and taking precautionary measures such as wearing layers of clothes, and having a change of clothes at work); (iv) compensatory strategies such as writing notes, lists and making greater use of technology; and (v) avoidance or withdrawal from challenging situations or tasks. In addition they adopted more general strategies such as altering their diet, trying to sleep longer at weekends, doing more exercise, wearing layers of clothing, seeking out more information about the menopause, maintaining a sense of humour, or avoidance and denial, and making time for themselves changes to their appearance as a result of an increasingly negative self image. Nearly three quarters of the women who had tried hormone replacement therapy (HRT) reported that work was one of the main reasons they

had decided to try it, and the majority said it had helped (91 percent). Nearly half had tried complementary approaches and of them 70 percent thought it was helpful.

The results showed that some women received considerable understanding and help from their colleagues and managers and greatly valued this support. They believed it enabled them to continue working well and productively. However, such practices vary enormously. In many settings, there is very little awareness of the menopause as a potential occupational health issue; it is a 'taboo' topic. In such circumstances, women suffer in silence, dare not speak openly about their difficulties, and consequently cannot receive the understanding and support they need. Many were embarrassed to disclose their problems or feared that their managers would be embarrassed if they broached the subject. It is also notable that women of this age (45-55) also often have multiple roles: nearly half of this sample reported having children still living at home, and one in five were acting as carer for an elderly or disabled relative or person. Women also discussed support given to them outside work from family, friends and healthcare professionals. Emotional, informational and instrumental support were valued. Some mentioned they would have liked to receive more from professional sources (for example from GPs), particularly during the initial diagnosis of and adjustment to the menopause.

Taking an overview of the results, it is clear that four overarching issues emerged as areas for possible improvements at work: (i) greater awareness of managers about the menopause as a possible occupational health issue, (ii) increased flexibility of working hours and working arrangements, (iii) better access to informal and formal sources of support, and (v) improvements in workplace temperature and ventilation.

## **7.2 Management awareness**

Over half of the women in this study had not disclosed their menopausal symptoms to their line manager. Whilst some reported that the reason for this was that their symptoms were not bad enough to affect their work, many were reluctant to disclose because their line manager was a man. Women commented during interviews that men in particular (unless their wife or partner was also experiencing the menopause), were ignorant about the menopause and its effects, and that they would be uncomfortable discussing it with them. Raising awareness among managers about the menopause, would enable them to deal with women more sensitively and sympathetically, and also encourage women in need to ask for help. This is essential if women are to be offered flexibility that they report helpful during this transition.

## **7.3 Flexibility**

Flexibility in working hours and working practices was considered particularly helpful by many women. Over half of the sample reported they were not able to negotiate working hours or working practices as much as they needed to in order to deal with their symptoms. Many women reported that disturbed sleep patterns had a significant impact on their health and well-being during this time, and the ability to alter their working day to accommodate this was extremely helpful.

## **7.4 Formal and informal sources of support at work**

Over half of the women felt that it would be useful to have information or advice regarding the menopause and how to cope with work from their employer (e.g. occupational health services, human resources, personnel, diversity adviser) as well as having informal support for women going through the menopause at work (e.g. women's network groups and contact telephone numbers). A substantial proportion of women also said that talking to other women who were going through, or who had gone through, the menopause was very helpful.

## **7.5 Temperature of work environment**

Temperature in the workplace appeared to be an issue for many women. Nearly half of the sample reported not having temperature control in their usual working environment. Some

could not open windows, or experienced interpersonal difficulties doing so in shared workspaces. The majority of women worked in a shared workspace. Being in a hot and unventilated environment was rated by women experiencing hot flushes as the most challenging work situation. An improvement of workplace temperature and ventilation was considered by many to be one of the most helpful things that could be done for women going through the menopause.

## **7.6 Next steps**

At the time of finalising this report, we have several plans to take the research further. For example, a particular brief from the funding body was to provide recommendations for employers. Employers are required to account for the diversity and experience of their workforces, and in so doing need to raise awareness key stakeholders and managers as to likely occupational health issues. Information about the menopause, thus far a neglected issue, its impact on working life, the impact of work on menopausal symptoms, and ways to support working women during this stage of their lives will be disseminated. Separate guidance will be published for employers by the funding body, the British Occupational Health Research Foundation, in order to meet this objective.

In addition, the large dataset that this project has generated is a rich source of further enquiry on the topic of women's experience of working through the menopause. For example, individual preferred coping strategies may prove to be related to outcomes and symptom management. These analyses may be of more theoretical interest and will be likely to be of more interest to women than their employers. Further analyses are planned and will be published.

It should also be noted that this research was restricted to the experiences of women in managerial and administrative positions. Manual women are likely to be in equal if not more need of attention in this respect (as their working practices usually offer less flexibility and control) and further study should address this issue.

## **7.7 Final Words**

With any longstanding health-related condition, informed, sympathetic and appropriate support from line management is crucial in order to provide employees with the support they need. It is widely thought that such support encourages employee loyalty and facilitates continued participation in the labour force. This study has made it clear that the menopause presents an occupational health issue for some women, and for a significant period of time. The research has also revealed that women feel greater awareness and support from employers and managers would be helpful.

## 8. REFERENCES

- Addison, C. C., Campbell-Jenkins, B. W., Sarpong, D. F., Kibler, J., Singh, M., Dubbert, P., et al. (2007). Psychometric evaluation of a coping strategies inventory short-form (CSI-SF) in the Jackson Heart Study cohort. *International Journal of Environmental Research and Public Health*, 4(4), 289-295.
- Bates Gaston, J. (1991). The female reproductive system and work. In J. Firth-Cozens & M. A. West (Eds.) *Women at work: Psychological and organizational perspectives*. Milton Keynes: Open University Press.
- Bird, C.E. & Fremont, A.M. (1991). Gender, time use and health. *Journal of Health and Social Behaviour*, 32, 114-129.
- Bowles, C. (1986). Measure of attitude toward menopause using the semantic differential model. *Nursing Research*, 35(2), 81-85.
- Brambilla, D. J., McKinlay, S. M., & Johannes, C. B. (1994). Defining the perimenopause for application in epidemiologic investigations. *American Journal of Epidemiology*, 140(12), 1091-1095.
- Cassou, B., Manderaue, L., Aegerter, P., Touranchet, A., & Derrienic, F. (2007). Work-related factors associated with age at natural menopause in a generation of French gainfully employed women. *American Journal of Epidemiology*, 166(4), 429-438.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37-46.
- Cox, T., Griffiths, A. & Rial Gonzales, E. (2000). *Work-related stress*. Luxembourg: Office for Official Publications of the European Communities (92-828-9255-7).
- Czaja, S. J. (2001). Technological change and the older worker. In J. E. Birren & K. W. Schaie (Eds.) *Handbook of the psychology of aging (5<sup>th</sup> edition)*. San Diego: Academic Press.
- Daley, H. (2002). Women's work. *Hazards*, 77, 29.
- Deane, R., Chummun, H. & Prashad, D. (2002). Differences in urinary stress hormones in male and female nurses at different ages. *Journal of Advanced Nursing*, 37(3), 304-310.
- Dennerstein, L., Lehert, P., Burger, H., & Dudley, E. (1999). Mood and the menopausal transition. *The Journal of Nervous and Mental Disease*, 187 (11), 685-691.
- Department of Health. (2006). *The General Practice Physical Activity Questionnaire (GPPAQ)*. Retrieved (21.09.2008) from <http://www.dh.gov.uk/en/Publicationsandstatistics/Publications>.
- Department for Work and Pensions, and Department of Health. (2008a). *Dame Carol Black's review of the health of Britain's working age population: Working for a Healthier tomorrow*. London: The Stationary Office.
- Department for Work and Pensions, and Department of Health. (2008b). *Improving health and work: Changing lives. The Government's Response to Dame Carol Black's review of the health of Britain's working age population*. London: The Stationary Office.
- Doyal, L. (2002). *The health and work of older women: A neglected issue*. Huddersfield: Pennell Initiative for Women's Health.
- Doyal, L. & Payne, S. (2006). *Older women, work and health: Reviewing the evidence*. London: Help the Aged/ The Age and Employment Network. <http://policy.helptheaged.org.uk/NR/rdonlyres/A8B57615-F7A6-49F5-AFA9-5C7ED47D428D/0/hspennellreport151106.pdf>

- Elliot, R., Fischer, C. T., Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology, 38*, 215-229.
- European Agency for Safety and Health at Work (2002). *Gender issues in health and safety at work*. Luxembourg: Office for Official Publications of the European Communities.
- Fisher, J. M. (1994). Facing menopause in the workplace. *Personnel Journal, 73* (10), 134-136.
- Frankenhauser, M. (1991). The psychophysiology of workload, stress and health: Comparison between the sexes. *Annals of Behavioral Medicine, 3*, 197-204.
- Geurts, S. A. E. & Demerouti, E. (2003). Work/non-work interface: A review of theories and findings. In M. J. Schabracq, J. A. M. Winnubst, & C. L. Cooper (Eds.) *The Handbook of Work and Health Psychology (2<sup>nd</sup> edition)*. Chichester: John Wiley and Sons.
- Greer, G. (1991). *The Change: Women, Ageing and the Menopause*. London: Hamish Hamilton.
- Griffiths, A. (1997). Ageing, health and productivity: A challenge for the new millennium. *Work and Stress, 11*(3), 197-214.
- Griffiths, A., Cox, S., Griffiths, R., & Wong, Y. (2006). *Ageing, work and health*. British Association of Women in Policing. Summary available at <http://www.bawp.org/assets/file/BAWP%20Menopause%20Extract.pdf>.
- Griffiths, A., Knight, A. & Mohd Mahudin, D. (2009). *Ageing, work-related stress and health: Reviewing the evidence*. London: TAEN – The Age and Employment Network and Age Concern and Help the Aged (Age UK).
- High, R. V., & Marcellino, P. (1994). Menopausal women and the work environment. *Social Behavior and Personality: An International Journal, 22*(4), 347-354.
- Hunter, M. S., & Liao, K. L. M. (1995). A psychological analysis of menopausal hot flushes. *British Journal of Clinical Psychology, 34*(4), 589-599.
- Hunter, M., & Rendall, M. (2007). Bio-psycho-socio-cultural perspectives on menopause. *Best Practice & Research in Clinical Obstetrics & Gynaecology, 21*(2), 261-274.
- Ilmarinen, J. (1994). Aging, work and health. In J. Snel & R. Cremer (Eds.) *Work and Aging: A European Perspective*. London: Taylor and Francis.
- Im, E.O., & Meleis, A. I. (2001). women's work and symptoms during midlife: Korean immigrant women. *Women & Health, 33*(1/2), 83-103.
- Jennings, S., Mazaik, C., & McKinlay, S. (1984). Women and work: An investigation of the association between health and employment status in middle-aged women. *Social Sciences Medicine, 19* (4), 423-431.
- Kapadia, L. H. (1996). ABC of work related disorders: Women at work. *British Medical Journal, 313*, 1073-1076.
- Kirby, P. (1998). *No more 'Men Only' health and safety*. London: Trades Union Congress.
- Kishi, R., Kitahara, T., Masuchi, A., & Kasai, S. (2002). Work-related reproductive, musculoskeletal and mental disorders among working women – History, current issues and future research directions. *Industrial Health, 40*(2), 101-112.
- Landis, J., & Koch, G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159-174.



- Lee, K. (2000). Menopausal women need better health management. *Employee Benefit News, February*, 11.
- Lloyd, L. (1999). The well being of carers: An occupational health concern. In N. Daykin & L. Doyal (Eds.) *Health and Work: Critical Perspectives*. London: Macmillan.
- Lombardi, E. (1997). Work conditions, mastery and psychological distress: Are housework and paid work contexts contextually similar? *Women and Health*, 26, 17-39.
- Mathews, B. S. (2004). *Gray literature: Resources for locating unpublished research*. Retrieved August 6, 2009 from <http://www.ala.org/ala/mgrps/divs/acrl/publications/crlnews/2004/mar/graylit.cfm>
- Messing, K. (1998). *One-eyed science: Occupational health and women workers*. Philadelphia: Temple University Press.
- Messing, K., Punnett, L., Bond, M., Alexandersoin, K., Pyle, J., Zahm, S. et al (2003) Be the fairest of them all: Challenges and recommendations for the treatment of gender in occupational health research. *American Journal of Industrial Medicine*, 43, 618-629.
- McMillan, T. L. & Mark, S. (2004). Complementary and alternative medicine and physical activity for menopausal symptoms. *Journal of the American Medical Women's Association*. 59(4), 270-277.
- Office for National Statistics, (2005). Leading causes of death in England and Wales: How should we group causes? *Health Statistics Quarterly* 28, 5-17. [http://www.statistics.gov.uk/articles/hsq/HSQ28\\_death.pdf](http://www.statistics.gov.uk/articles/hsq/HSQ28_death.pdf)
- Office for National Statistics. (2007). *UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007) Structure and explanatory notes*. Fareham: Office for National Statistics.
- Office for National Statistics. (2010). Labour Force Survey. <http://www.statistics.gov.uk/pdfdir/lmsuk0410.pdf>
- Östlin, P., Eckerman, E., Mishra, U., Nkowane, M., & Wallstram, E. (2006). Gender and health promotion: A multisectoral policy approach. *Health Promotion International*, 21, 21-35.
- Paul, J. (2003). *Health and safety and the menopause: Working through the change*. London: Trades Union Congress.
- Reynolds, F. (1999). Distress and coping with hot flushes at work: implications for counsellors in occupational settings. *Counselling Psychology Quarterly*, 12(4), 353-361.
- Reynolds, F. (2002). Exploring self-image during hot flushes using a semantic differential scale: associations between poor self-image, depression, flush frequency and flush distress. *Maturitas*, 42(3), 201-207.
- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman, & R. G. Burgess (Eds.) *Analyzing Quantitative Data*. London: Routledge.
- Salazar, A., & Paravic, T. (2005). Job performance and climacteric in female workers. *Revista Médica Chile*, 133(3), 315-22.
- Sarrel, P. M. (1991). Women, work, and menopause. In M. Frankenhaeuser, U. Lundberg, & M. Chesney (Eds.) *Women, work and health: Stress and opportunities*. London: Plenum Press.
- Shrader, S. P. & Ragucci, K. R. (2006). Life after the women's health initiative: evaluation of postmenopausal symptoms and use of alternative therapies after discontinuation of hormone therapy. *Pharmacotherapy*, 26(10), 1403-1409.

- Social Issues Research Centre (2002). *Jubilee women: Fiftysomething women – lifestyle and attitudes now and fifty years ago*. London: Choices Campaign, HRT Aware.
- Thompson, C., McCaughan, D., Cullum, N., Sheldon, T. A., & Raynor, P. (2004). Increasing the visibility of coding decisions in team-based qualitative research in nursing. *International Journal of Nursing Studies*, *41*, 15-20.
- Tobin, D. L., Holroyd, K. A., Reynolds, R. V., & Wigal, J. K. (1989). The hierarchical factor structure of the coping strategies inventory. *Cognitive Therapy and Research*, *13*(4), 343-361.
- Trades Union Congress (2002). *Older women's health and safety ignored*. Press Release, March 8. Retrieved November 3, 2003, from [http://www.tuc.org.uk/h\\_and\\_s/tuc-4557-f0.cfm](http://www.tuc.org.uk/h_and_s/tuc-4557-f0.cfm)
- Ussher, J. M. (1998). Menstruation and menopause: The making or breaking of woman? In G. N. Penny, P. Bennett, & M. Herbert (Eds.) *Health Psychology: A Lifespan Perspective (2<sup>nd</sup> edition)*. The Netherlands: Harwood Academic Publishers.
- Waddell, G., & Burton, A. K. (2006). *Is work good for your health and well-being?* London: The Stationery Office.
- Walstedt, J. (2001). Employment patterns and health among US working women. In Goldman, M.B. & Hatch, M.C. (Eds.) *Women and health*, pp 447-455. San Diego: Academic Press.