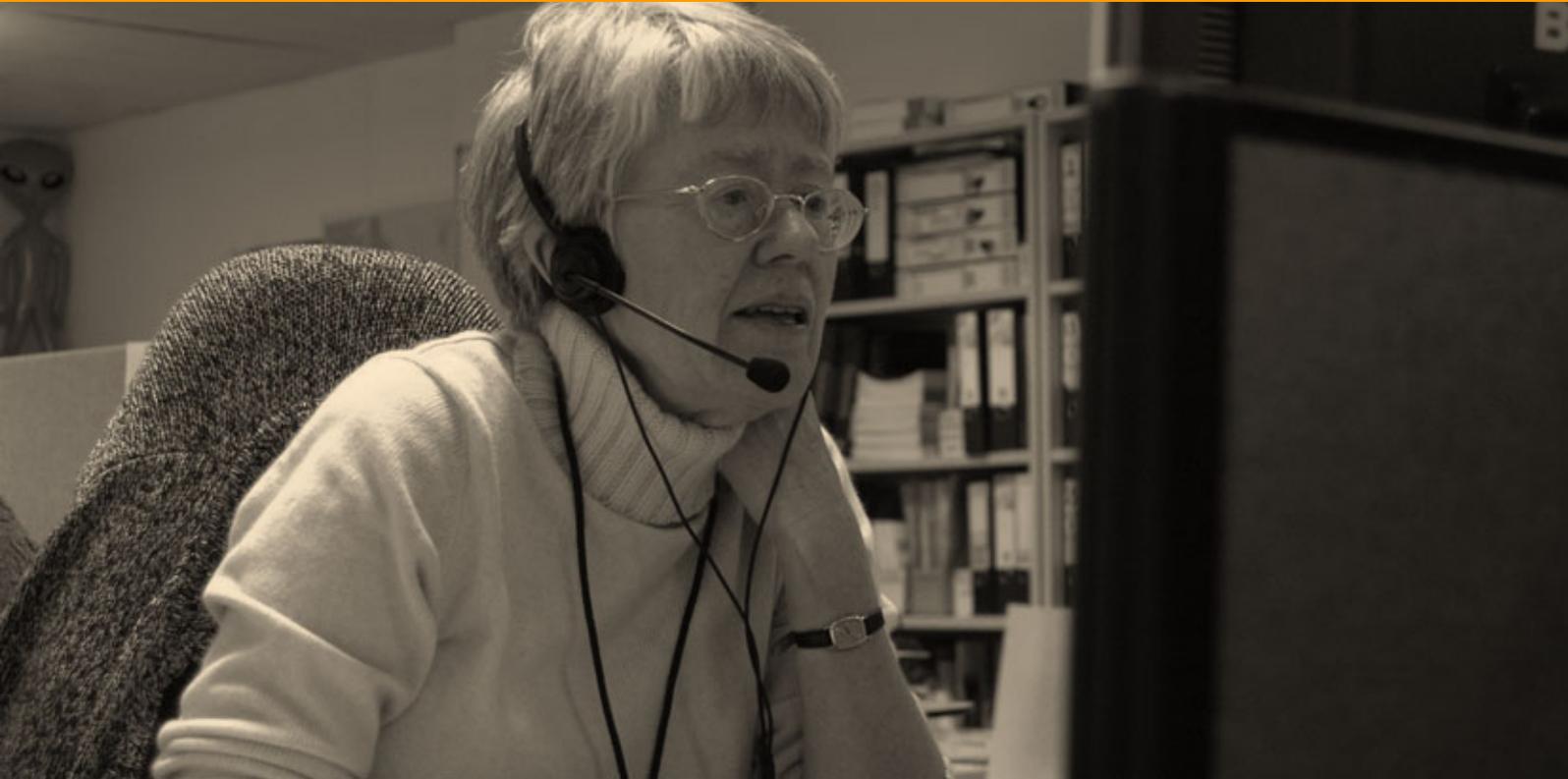


Older Women, Work and Health



Reviewing the evidence

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Lesley Doyal and Sarah Payne, University of Bristol

TAEN – The Age and Employment Network

207–221 Pentonville Road
London N1 9UZ

Help the Aged

207–221 Pentonville Road
London N1 9UZ

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Foreword

This timely research, commissioned by Help the Aged and TAEN (The Age and Employment Network), draws attention to a neglected issue in the world of employment. It identifies a lack of evidence about the occupational health of older women, including those from black and minority ethnic communities. The Government's declared aspiration is to add one million older people to the workforce, as outlined in its most recent strategy on work, health and well-being: however, there is little mention of older workers or, indeed, of women, in any of its policy statements.

The recent publication of research undertaken for the Department for Work and Pensions, *Is work good for your health and well-being?* (September 2006), broadly concludes that work is good for health and well-being provided it is 'good' work. But many women are in low-skilled, low-paid jobs with a lack of autonomy. TAEN works to help create an effective job market for people in mid- and later life. It is supported by Help the Aged.

This research paper builds on earlier work commissioned by the Pennell Initiative for Women's Health in 2002. As former trustees of Pennell, we campaigned with colleagues to improve the health and well-being of women in mid-life. We sought to reach people who had no voice and to give them a means of expressing their needs. Pennell found that voice. Now that Pennell has been absorbed into Help the Aged, we share a common belief that the middle years – vital yet so often overlooked – are the key to 'getting things right' to prevent disadvantage in older age.

We welcome this research, which is both relevant, in view of the changes in employment legislation, and needed – by women, employers and society as a whole. We are delighted, too, that ideas pioneered by Pennell are being incorporated into government strategy such as NHS Life Checks at mid-life and that Help the Aged is working closely with the Department of Health to influence this agenda.

Sandra Chalmers

Val Hammond

Executive summary

In the light of government fears of a 'dependency crisis', older employees are now being encouraged to stay at work longer. But we know very little about how this could affect their health. This is especially true of women workers. Though their participation in the labour force continues to grow, few studies have explored the links between their health and well-being, especially in older age groups.

Women now make up nearly half of all employees in the UK. The female employment rate is about 70 per cent and is increasing in older age groups. There are one and a half million female workers aged 45–64 and 113,000 over the age of 65. Yet little is known about the quality of their working lives. At all stages of their working lives women are more likely than men to work part-time; they are concentrated in certain areas of employment; they are more likely to be in low-status jobs; and they earn less than men.

All these factors influence the well-being of women workers, especially in the later years of their employment. But the combination of age and gender discrimination means that few studies have explored their circumstances or analysed their occupational health needs.

The impact of work on women's health

There is a growing body of evidence that waged work can have both positive and negative effects on women's health. But the balance of effects varies according to the women's circumstances. The impact of employment on well-being is affected by factors such as income, housing conditions, domestic and caring responsibilities – and, of course, age.

The benefits that work outside the home can bring are well documented. Financial rewards are very important, especially for those (including widows) with few resources to support themselves. Work can also make a major contribution to mental health, offering a source of self-esteem and independence as well as a network of social support.

But work may also pose threats to women's well-being, especially for those in lower-status, more physically demanding jobs. Many occupational health risks are the same for both sexes. However, there are also significant differences in the hazards facing the two groups. Some of these reflect biological differences between women and men but others are a consequence of the differences between male and female lifestyles.

Researchers have identified important reproductive hazards for both male and female workers. However, we know very little about the impact of sex differences in occupational health in older age groups. More is known about social or gender differences. Women and men tend to work in different industries and different jobs, which expose them to different physical and psychosocial hazards. Women's relative lack of autonomy and low status seem to be especially important here.

Women and men also have different responsibilities at home. It is women who tend to have the greatest burden of domestic labour, in addition to the pressures of waged work. There is some evidence of changes in the gender division of domestic responsibilities but more traditional patterns tend to remain among older couples. 'Mid-life' women aged 45–65 are also most likely to be combining employment with care of dependants, which can have significant effects on their own health.

Major health problems of older women workers: stress and musculo-skeletal problems

Many studies have shown that women workers are more likely than their male co-workers to report work-related psychological distress. The most stressful forms of employment are those which are poorly paid, make high demands but offer little control. Workers who have direct responsibility for the fate of others are also more likely to experience the 'burnout' most frequently reported by those employed in health care and education. Such pressures can be a risk

factor for coronary heart disease, especially if they are exacerbated by additional pressures at home.

Studies from a number of countries show that women are also more likely than men to have musculo-skeletal problems including repetitive strain injury, upper limb disorders, back pain and carpal tunnel syndrome. The causes for this are complex but reflect in part the fact that the 'light work' women are assumed to do is often physically demanding. They have to move heavy loads, adopt awkward working postures and expend high levels of static muscular effort. They are also more likely than men to be engaged in work that requires repetitive tasks, while work stations may not be designed to meet their needs. Alongside these physical hazards in the workplace women may also face physical risks at home such as lifting heavy children or moving adult dependants.

Putting age and gender on the agenda: recommendations for change

Any attempt to promote the health of older women within the labour force will come up against two types of discriminatory practice: those against women and those against older workers. But the pattern is slowly changing. Evidence from a number of different countries and campaigns by international organisations such as the International Labour Organisation (ILO) are beginning to move the agenda forward. This is reinforced by the growing policy commitment in the UK and elsewhere to tackle age discrimination in the workforce in response to the perceived crisis in economic support ratios. The role of trade unions in pushing for these changes will be of great importance.

Tackling hazardous work environments

This will require greater age and gender sensitivity in the practices of the Health and Safety Executive and associated bodies. It will necessitate the development of an appropriate knowledge base and more appropriate indicators for monitoring the occupational

health of older women. Researchers will need to include appropriate numbers of women and men in their studies. At a more practical level, occupational health and safety standards and the design of workplaces will need to be revisited to ensure they reflect the diversity of employees.

Reshaping the organisation of work

Changes will be needed in the culture of the workplace if older women are not to be damaged by psychosocial aspects of their work. This will involve giving them greater control over their working lives. It will also require more effective policies to facilitate the combination of working lives and care of dependants.

Promoting health in the workplace

Workplace health promotion programmes are becoming increasingly common. However, they have often been criticised for failing to meet the needs of older workers in general and older women in particular. Issues of access need to be considered, as does the possibility of single-sex provision. Workplaces can also be important places for cervical and breast cancer screening, which older women are more likely to miss out on. Means need to be found for making such services available for those working in small as well as large workplaces.

Wider public policies for meeting the health of older women workers

Broader public policy initiatives will also be necessary if the health needs of older women in employment are to be met. These will need to focus on equalising pensions and other benefits that will enable older women to make health choices about employment. The Equality Act of 2006 creates a public sector duty to promote gender equality, which should help to drive forward change. The new regulations on age discrimination in employment and training, in force from October 2006, also offer an important opportunity.

The health and work of older women

Introduction

The last decades of the twentieth century saw a marked ageing of populations in most parts of the world. This was accompanied by a 'greying' of the workforce as the average age of employees rose (Auer and Fortuny, 2000). Many developed countries including the UK responded to this by encouraging older workers to retire early. However, in recent years fears of a 'dependency crisis' have been sparked by the rising cost of pensions and health care. As a result policies have gone into reverse with increases proposed in the pension age to 'encourage' workers to stay longer in employment (Loretto et al, 2005). However, we know almost nothing about how longer working lives could affect health.

Studies of health care in the NHS have indicated that older patients too often receive inferior treatment, with breast cancer and heart disease singled out for attention (Age Concern, 1999). A similar pattern is evident in the much smaller occupational health sector. Few studies have been done on the links between ageing and well-being in different workplaces and the UK has made little progress in meeting the special needs that sometimes arise for older workers of both sexes. This lack of knowledge is especially marked in the case of female workers (Messing and Stellman, 2006).

The last two decades have seen a rapid increase in the numbers of women entering paid work. This is a global phenomenon, with the UK following the general trend. As a result many more women are now employed during and beyond their menopausal years. An OECD report (2006) also shows a large rise in labour force participation among older women in OECD countries, in contrast to falling participation among older men. Yet middle-aged and older women continue to be one of the least visible groups in society (Arber, 1998). Few studies have explored the links between their health and their employment experience and few workplace interventions have been designed to promote their well-being.

This paper describes the participation of older women in the UK labour force and explores the

available evidence on the impact of paid work on their health. It concludes with recommendations for changes in occupational health services, workplace health promotion strategies and wider public policies that would benefit older women workers.

Older women in the workforce in the UK

Between 1975 and 2005 the employment rate for women in the UK rose from 60 to 70 per cent (Equal Opportunities Commission, 2006). Women now make up nearly half of all employees and an increasing number of them are in the older age groups, with 63 per cent of women aged 45–64 still employed. One and a half million female workers in the UK are aged between 45 and 64, and 113,000 are over the age of 65 (EOC, 2006). Yet we know very little about the quality of their working lives.

The situation of women in the labour force differs from that of men at all ages. Most importantly, women tend to have a more transient and less formal relationship to their employment. In 2005 about 42 per cent of women worked part-time compared to only 9 per cent of men (EOC, 2006). These figures are very similar in the older age groups with 45 per cent of women workers and 9 per cent of male workers aged 45–64 being part-time (EOC, 2006). Over the age of 65 the proportion rises dramatically, to 82 per cent and 63 per cent respectively.

Women are also concentrated in certain areas of employment. They make up 79 per cent of all workers in health and social care and 73 per cent in education (EOC, 2006). Women also predominate in clerical and secretarial work, personal and protective services and sales. Among the age group over 50, 23 per cent of women are in health or social care compared with only 5 per cent of men, while 20 per cent of men are in engineering compared to only 7 per cent of women (EOC, 2006).

As well as this vertical segregation between 'male' and 'female' jobs, there is also a high degree of horizontal segregation between women and

men in the workforce. Women are much more likely than men to be in the lowest positions in each occupational setting. They occupy only about one-third of managerial and administrative jobs and within this category are likely to be in the lowest grades (EOC, 2006). In the age group 45–64 10 per cent of women are at managerial level compared to 20 per cent of men.

This gender difference in occupational status is reflected in earnings. Despite the Equal Pay Act, average hourly earnings for women working full-time in 2005 were 17 per cent lower than those of men, while part-time earnings were 38 per cent below. The gender gap in full-time annual earnings was 27 per cent (EOC, 2006). The gender pay gap increases with age, reflecting women's time out of the labour market in caring work, which decreases earnings in later life, and lower qualifications among current cohorts of older women. The widest gap in Britain is found among those aged over 40, for whom the mean pay gap is over 20 per cent (Women and Equality Unit, 2003).

Older women at work: why do we know so little about their health?

Women workers have always been seen as less important than their male colleagues, who continue to be defined as the breadwinners. Age discrimination is also common in the workplace, with older employees of both sexes often assumed to be less productive and not worthy of significant investment. This combination of age and gender bias means that older women are doubly disadvantaged and their well-being is often low on the list of priorities both at home and at work.

Most occupational health research has focused on large workplaces in the industrial sector, while problems experienced by workers in other parts of the economy have been largely neglected (Daykin, 1998; Messing and Stellman, 2006). Women are generally assumed to be in low-risk occupations and there have been few attempts to examine their work-related health problems (OECD, 1993; Ostlin, 2000; Messing, 1998). An exception is a review from the European Agency

for Occupational Health and Safety which examines recent evidence on women, work and health (<http://agency.osha.eu.int/publications/reports/209/en/index.htm>). Significantly, however, it makes almost no reference to age. Similarly, a recent issue of the journal *Environmental Research* (vol. 101, issue 2, June 2006) focused on women's occupational health but the papers included did not focus on the significance of age differences.

The analysis that follows is therefore a preliminary one, which uses information from a wide variety of sources. Fortunately, some countries have paid more attention than the UK to the problems of their older workforce and to the needs of women in particular (Walker, 1998). We will draw on these wherever appropriate in an attempt to open up these hidden areas of British working life.

Is work good for (older) women's health?

This is a frequently asked question to which there is no simple answer.

The traditional assumption was that women were inherently domestic creatures who were too weak to work outside the home, which was potentially damaging to their health. Even after the menopause, when their immediate reproductive responsibilities have ended, women have still been identified with the private, interior world of the family rather than the public world of work. In recent years, however, such assumptions have been increasingly challenged.

A growing body of evidence suggests that waged work can have both positive and negative effects on women's well-being (Bartley, Popay and Plewis, 1992; Doyal, 1995 ch. 5; Glaser et al, 2005; Klumb and Lampert, 2006). However, any attempt to draw up a universal balance sheet of these effects is complicated by the diversity of women's circumstances.

Whatever their age, women differ significantly in both their domestic situations and the work they do. Factors such as income, housing conditions, support networks, number of dependants and level of caring responsibilities,

and access to transport are significant in determining the impact of employment on a women's well-being. Work is usually a healthier occupation for a 60-year-old white solicitor, for example, who has a high degree of control over her working life and can buy domestic help if she needs to, than it is for a 60-year-old African Caribbean office cleaner with little job security and a heavy domestic burden.

The reality is therefore a complicated one. The impact of employment will vary dramatically depending on a woman's income, her physical and psychological status, her domestic circumstances and different aspects of her working conditions. These in turn will interact with different dimensions of age and factors such as class and ethnicity to create particular patterns of health and illness among different cohorts of women. Our understanding of these links is still very partial but we can begin to draw the picture in the hope that further research can fill in the missing pieces (Messing, 1998)

The benefits of work for older women

We know from a wide range of studies that women's physical and mental health can be enhanced by employment outside the home (Klumb and Lampert, 2006). For those with limited resources, the wages they earn may be essential if they are to meet basic needs such as eating well or keeping warm in winter. This will be especially important for those older women who have been unable to build up their own pensions or benefit entitlement: less than 20 per cent of women qualify for a full state pension compared to 98 per cent of men and few have built up occupational pension rights.

Work can also make an important contribution to mental health. For many women it is a major source of self-esteem and bestows emotional independence that may be difficult to achieve in the domestic environment (Bromberger and Matthews, 1994; Payne, 1999; Walters et al, 2002). In addition, many women of all ages report that much of their social support comes from colleagues in the workplace (Stansfield et

al, 1997; Khlal et al, 2000). A large body of evidence now links such support to positive health and well-being, which is likely to be of particular significance for women who have been widowed or whose children have moved away.

These findings highlight the potential for work to promote women's well-being. However, few studies have looked in detail at its impact across the life cycle. As the emotional and physical needs of women change with age, it is evident that their relationship to work will also change. It is likely to have a different meaning in their lives and will also impact on their minds and bodies in new ways. More longitudinal research is needed to uncover these complex processes but a small pilot study has given some indication of how older women see the benefits.

An informal survey carried out for the Pennell Initiative asked a group of women aged between 45 and 65 about their lives in general and their experiences of paid work in particular (Doyal, 2000). About 80 per cent were still in paid work. Of these, some two-thirds felt that the overall effects of this work were positive for their health; just under a third felt the effects were mixed; and only 5 per cent felt the effects were bad. The health-promoting effects mentioned included the opportunities it gave for promoting skills, for keeping mind and body active, for doing something useful for society, for giving opportunities to interact with others and for giving a sense of identity. Similar results were found in an Australian study (Patrickson and Hartmann, 1998).

Employment can therefore be beneficial for older women's health. But it may also have negative effects depending on their circumstances both at home and at work. In the case of the Pennell study, the sample was a group of white middle-class women, most of whom were doing professional jobs. It is unclear whether the cost/benefit equation of advantages and disadvantages would be the same for those in lower-status, more physically demanding jobs. For them, the risks of work may outweigh the benefits. The next section will clarify what is known about the particular risks women may face



in employment and will explore the relationship of these risks to biological and social ageing.

What are the risks facing older women?

Many occupational health risks are not gender-related. Men and women can both be affected by stress at work, for instance, or by exposure to toxic substances. However, there are also significant differences in the hazards facing the two groups. Some of these reflect the biological differences between women and men but others are a consequence of the differences between male and female lifestyles – which in turn are influenced by paid and unpaid work responsibilities. We need to explore the evidence relating to both these dimensions of health if we are to make sense of the particular risks facing older women.

The impact of working conditions on the functioning of reproductive biology has received considerable attention in occupational health settings. However, the main focus has been on younger workers (especially women) and the most common response has been the introduction of protective legislation to prevent

exposure to reproductive hazards. Among older employees, other biological differences between the sexes have generally been ignored despite the growing volume of evidence of their impact on health (Wizemann and Pardue, 2001). We know very little about the impact of the menopause on occupational health, for instance (Paul, 2003).

Over the last decade or so, medical researchers have identified important differences in male and female biology which are not directly related to reproduction. We know, for example, that women are genetically more susceptible than men to arthritis and other auto-immune diseases and to osteoporosis (NIH, 1999; Wizemann and Pardue, 2001). There is also growing evidence of significant differences in the way men and women metabolise a range of chemical substances: these findings will obviously influence patterns of occupational risk.

Social or gender differences in lifestyle and in patterns of employment are also important. Because women and men tend to work in different industries and in different jobs they may be exposed to different physical hazards. They may well also work in different psychosocial conditions (Matthews et al, 1998). Most importantly, women are more likely to be

in jobs offering little autonomy or respect. They are more likely than men to be harassed at work or to be the victims of violence. Whatever their job, there may also be an informal expectation that they will 'look after' others, sometimes to the detriment of their own well-being.

Alongside these different experiences of waged work, men and women also have different responsibilities at home. Though increasing numbers of men are now taking on these tasks, women are still likely to have more domestic duties than men. Both the physical and the psychological strains of the workplace may be exacerbated by domestic labour, yet this is usually ignored in measuring the impact of work on health. Much has been written about the problems of combining waged work and childcare but the domestic pressures on older working women have received much less attention.

Though there is some evidence of change in younger families, more traditional patterns of responsibility are still found in most older households. Increasing numbers of working women are combining employment with responsibility for the care of sick or elderly

dependants, which may have significant effects on their own health (Lloyd, 1999). It is 'mid-lifers' aged 45–65 who are most likely to be taking on this double burden. At the same time there is evidence that 'grannies' are increasingly responsible for child care, in order that younger family members can go out to work (Evandrou and Glaser, 2003, 2004).

The 1998 TUC *Women, Work and Health* survey asked safety representatives which work-related health problems women themselves reported most often (TUC, 1998). Eight-eight per cent of those questioned said that stress was the problem most commonly cited. After stress came musculo-skeletal problems (mentioned by 63 per cent) and repetitive strain injury (mentioned by 36 per cent). The next two sections examine these problems in turn, linking them to what little we know about the particular circumstances of older women.

Age, gender and occupational stress

The relationship between work, health and stress is a complex one. Some pressure can be



positive in helping individuals to meet challenges more effectively. However, too many stressors of a negative kind can be damaging to both psychological and physical health.

A number of studies have identified those aspects of work stress that are particularly hazardous for women (Frankenhauser, Lundberg and Chesney, 1991; Nelson and Burke, 2002). None of these has focused on older workers but they do provide important insights into the factors likely to have a cumulative impact on women during their working lives.

A number of studies have shown that women workers are significantly more likely than men to report work-related psychological distress (Nelson and Burke, 2002). The most stressful forms of employment are those which are poorly paid, have low status, make high demands but offer little opportunity for control (ILO, 2000; Karasek and Theorell, 1990). Many women's jobs have these characteristics, whether they are in factories, offices or other settings.

Workers who have direct responsibility for the welfare of other human beings also appear to be more likely to experience work-related distress. Again, this puts women's work in the spotlight. An inability to do these 'caring' jobs effectively (for whatever reason) will often be a source of stress for the worker herself. This is reflected in the 'burnout' reported by many of those working in the fields of health care, social work and education. It is also evident in the psychological problems reported by many service workers, who are expected to be polite to their clients whatever the provocation.

One of the most serious sources of stress for many women workers is the threat or the reality of violence. UK figures from the Health and Safety Executive suggest that 9 per cent of women workers aged 45–54 and 5 per cent of those aged 55–59 report having been attacked (Health and Safety Executive, 1999). The most dangerous jobs are those which involve contact with members of the public, and the majority of these are done by women. Recent figures show that one in five workers is subject to abuse or a physical attack at work each year and a

significant percentage of these are women (Gallagher, 1999).

A growing body of evidence shows that as well as damaging emotional health occupational stress may cause physical harm. Though much of this research has concentrated on men, the implications for women are now emerging. A large US study found that, over a ten-year period, women in jobs with high levels of strain but little control were nearly three times more likely to develop coronary heart disease than a comparable group in other jobs (Haynes, 1991). Those in low-grade clerical jobs were found to be especially vulnerable.

In order to improve our understanding of these gender differences in occupational stress, it is essential to put them into a broader context. Many women workers return home to face very similar stressors in their domestic environment. Their responsibilities include not only physical work but also what has been called 'emotional labour' (Hochschild, 1983, 1989). Of course, this activity is often a source of great pleasure. It can also be very strenuous, especially when it is combined with waged work.

Older women may be at particular risk from their domestic responsibilities. The reality of caring for a disabled partner or an elderly parent is very different from caring for children and the tensions and conflicts engendered can be very great (Lloyd, 1998). For some women it is the alternative reality of employment which sustains them when they need social support in dealing with the difficulties of the domestic arena. However, when work too is stressful and unfulfilling the double burden may be hard to bear.

A group of researchers in Sweden have illustrated the emotional complexities of the home/life split. In a number of studies they have compared the overall workloads of women and men and also explored their responses to stress (Frankenhauser, 1991; Frankenhauser, Lundberg and Chesney, 1991). Their findings indicate that while women and men in the same jobs may secrete similar levels of stress-related hormones during the working day, in the evening

stress levels seem to subside much more quickly among men than among women. The researchers attribute this to greater total workloads among women and also to gender differences in emotional response to these responsibilities.

It is clear that work-related stressors pose a significant risk to many women. However, there is little evidence of how these pressures affect older women in particular. For many, the years during and after the menopause may be ones of relative peace, with fewer pressures and more freedom (Charles and Walters, 1998). However, others may find that the cumulative effects of paid and unpaid work, combined with both biological and social aspects of ageing, increase their levels of stress with consequent damage to their health (Walters, 1993).

Ageing, gender and musculo-skeletal problems at work

Studies from a number of different countries indicate that women are more likely than men to experience musculo-skeletal problems and that their incidence and sometimes their severity increases with age (Messing, 1998, ch. 7; de Zwart et al, 1997; Strazdins and Bammer, 2004). Data from the US, for example, indicate that back and spine impairment is reported by 70 per 1,000 female workers compared with 58 per 1,000 males (Andersson, 1999). In the UK 44 million working days are lost by women each year as a result of back problems (TUC, 1999). These high levels of disability may be caused by accidental injuries or by more chronic problems resulting from repeated damage over the years to particular parts of the body.

Women are less likely than men to suffer injury as a result of a single incident but their risk increases with age. The most common age for women to suffer major injuries is 45 to 54 and this group seems to be at particular risk from falls (Kemmlert and Lundholm, 1998). The rate of major injuries from slip, trip and fall accidents in women workers in the UK and Sweden rises significantly with age but the same pattern is not found in men (McNamee et al, 1997).

Women in general and older women in particular are at greater risk than men from chronic musculo-skeletal problems including repetitive strain injuries, upper limb disorders, back pain and carpal tunnel syndrome (Sjogaard et al, 2006). An OECD study reported that musculo-skeletal disorders were increasing in ten European countries (including the UK) especially among women (OECD, 1993). In Sweden, for example, women doing manufacturing work such as electronic assembly were reported to have a 20 times greater risk of developing these problems than workers in the general population.

Explaining these patterns is not easy since the factors involved are often very complex. However, the excess of musculo-skeletal problems among women can be traced in part to the nature of their jobs. While men are assumed to have the 'heaviest' jobs, it is clear that many of the jobs done by women are at least as hazardous (Messing, 1998). Despite the belief that they do 'light' work, 28 per cent of female employees in the UK spend more than a quarter of their working hours moving heavy loads (TUC, 1999). Many are forced to adopt awkward working postures, while others have to expend high levels of static muscular effort. This happens in cleaning jobs and in factories as well as in retail sales or hairdressing, which require standing upright over lengthy periods of time.

A French study of train cleaners gave important insights into the ways in which traditionally female work can be heavy (Messing et al, 1993). Though the labour force was mixed, only women were allocated to cleaning the toilets. This work was dirty and physically demanding and required considerable technical skill. It involved travelling over 20 kilometres a day and maintaining uncomfortable postures. Twenty-five per cent of the time involved in the actual cleaning was spent in a crouched position. As a result, the women suffered from high rates of musculo-skeletal problems and were frequently absent from work.

Women are also more likely than men to be engaged in work that requires the performance



of repetitive tasks. Many of those working in factories and offices are operating with a very short work cycle which requires the same movements to be carried out many thousands of times a day (Sjogaard et al, 2006). This can have a severe impact on particular parts of the body, especially the neck, shoulder, arms and wrists. These problems can be exacerbated when desks, chairs and factory benches are designed to meet the ergonomic needs of the average male employee (Misner et al, 1997). Gender insensitivity of this kind in the design of workplaces contributes to the excess of repetitive strain injury (RSI) found among female employees (Carter and Banister, 1994).

Alongside these workplace risks it is necessary again to examine the risks of musculo-skeletal injury faced by women at home. Very few studies in this field have included domestic hazards but there is a growing body of evidence that they may be an important additional factor. A recent survey of back pain in workers in the Paris region found that in women both ageing and the number of children a worker had were significant risk factors (Alcouffe et al, 1999).

For many older women, lifting children (and grandchildren) is an important part of their past and present workload which needs to be taken into account. For others, the care of older dependants can be physically demanding and may be a significant part of the pressure leading eventually to musculo-skeletal damage.

Overall, it seems that women are more likely than men to acquire occupation-related musculo-skeletal injuries. Not surprisingly, the likelihood of such injuries increases with age. This reflects in part the processes of biological ageing but is also the culmination of a lifetime of exposure to physical stresses at home and in the workplace. However, recent studies suggest that it is men rather than women who are likely to be moved to 'lighter' work as they grow older (Aittomaki et al, 2005; Ilmarinen, 2002).

Gender, work and health: the example of nursing

The situation of nurses provides a valuable example of some of these gender-related work hazards. Health work in general is a

predominantly female activity, with some three-quarters of all NHS employees being women. Nurses are the largest single group in this workforce. Because nursing is seen as the archetypal female profession it has traditionally been assumed to be safe. However, the last few years have seen the gradual recognition that nursing may be damaging to the health of carers themselves and that some of these hazards are directly related to the gendered nature of the job.

Physical injuries are common among health workers in general and nurses in particular. These are often back injuries resulting from the lifting of heavy patients, since workers in hospitals are not protected by the same regulations that apply in factories. Many nurses receive puncture wounds and cuts, while wet floors and crowded spaces add to the hazards of hospital work. They are also at risk from toxic chemicals in the form of therapeutic drugs and anaesthetic gases, and sometimes from radiation, while older nurses appear to have an elevated risk of developing asthma (Forastieri et al, 1998).

At least as important as the physical risk is the psychological stress reported by many nurses

(Watson et al, 2006). The task of caring for others can exert a powerful influence on mental health in both positive and negative ways. A recent study of nurses in the NHS reported that 4 out of 10 had psychological problems as measured on the Health and Safety Executive (HSE) stress indicator (Employment Research 2006 at www.rcn.org/publications). This is significantly higher than among the general population. The pressures vary with different types of nursing but all nurses take on a significant degree of responsibility for managing the emotional as well as the physical needs of others. However, support for the carers themselves is rarely in place.

Nurses are expected to take on a great deal of responsibility for patient care, but their autonomy is often limited by a hierarchy of superiors, including managers as well as clinical staff. Research in Canada has shown that the degree of control nurses have over their work has a major impact on their job satisfaction and their well-being (Walters et al, 1998). Over the past few years, the intensification of nursing work has meant increasing pressure to sustain previous



levels of care with fewer resources, placing many nurses and other health care workers at increased risk of occupational stress and burnout.

About 145,000 nurses aged over 50 are still working in the NHS. There are no studies of the impact of their employment on their health (Watson et al, 2003). However, it is clear that the biological processes of ageing combined with the cumulative effects of long-term exposure to physical and psychological hazards are likely to lead to an increase in the prevalence of many health problems. It is significant that in a recent Royal College of Nursing survey nurses overwhelmingly rejected the idea of raising the NHS retirement age to 65 (see <http://rcn.org.uk/news/display>).

Putting age and gender on the agenda: recommendations for change

Women and men enter the workplace with different physical dispositions and with gendered identities. They do different kinds of jobs and have different domestic responsibilities. They also age in different ways and are treated differently during the ageing process. All of this has an impact on patterns of health and illness. Much more work is needed to map older women's occupational health problems. However, we can begin to think about how known risks could be minimised and how wider health promotion strategies could be developed.

Any attempt to promote the health of older women will come up against two types of discriminatory practice: those against women and those against older workers. As we have seen, the traditional focus of occupational health research and practice has been the younger male worker. Relatively little attention has been paid to the older workers and female workers who now make up the majority of the UK labour force. However, this pattern is slowly beginning to change.

The recognition that women may have different occupational health needs from men is now spreading. Work in Canada, the US and Sweden has been especially important in driving forward

this agenda (Collins et al, 1997; Messing, 2000; OECD, 1993; European Foundation for Living and Working Conditions, 1996; European Agency for Occupational Health and Safety, 2003). The ILO has also produced a number of documents on gender issues in occupational health through its SAFEWORK programme (Forastieri, 1999). In the UK, the TUC has begun to recognise women's occupational health and safety issues and has launched a number of relevant publications (Kirby, 1998; Paige, 1999).

At the same time that women workers are attaining greater visibility, the ageing of the workforce is also beginning to attract the attention of policy-makers with the introduction of the Employment Equality (Age) Regulations 2006. There are clearly equity arguments for tackling age discrimination in the workplace. But there are also sound economic reasons for keeping older workers healthy. These relate to changing demographic structures and the perceived crisis of economic support ratios as well as the problem of labour shortages and the cost of benefits for those who are no longer in employment. A National Audit Office report suggested that discrimination against older workers aged over 50 costs the UK economy from £19 to £31 billion per year in lost output and taxes and increased welfare payments (NAO, 2004).

Health, Work and Well-being, published in 2005, offers a vital first step in bringing together the key stakeholders concerned with the health of the working age population. It creates a new partnership between the Department for Work and Pensions, the Department of Health and the Health and Safety Executive in order to develop a new strategy for occupational health and well-being. This initial draft makes little or no mention of older workers in general or of the particular needs of women at any age. But it does offer an opportunity to put older women workers' needs on the agenda as the strategy is developed.

Tackling hazardous work environments

The first stage of any plan for promoting the well-being of older female employees must be

to remove physical hazards from the workplace. In the UK overall responsibility for this task lies with the Health and Safety Executive, but it has traditionally paid little attention to this group of workers. Changes will therefore be required in the practices of the HSE and associated bodies if the particular needs of older female workers are to be recognised.

The starting point for such change must be a clear commitment to developing the appropriate knowledge base. This will require more effective monitoring of health status and also a better understanding of the factors likely to undermine the well-being of this particular group of workers. The strains experienced by older women after many years working at a keyboard, for example, or cleaning offices have yet to be explored. Similarly, more work is needed on the inter-relationships between female biology (including the menopause) and exposure to hazardous substances (Paul, 2003; Arbuckle, 2006).

In order for this knowledge base to be created, more accurate indicators will be needed for monitoring the occupational health of older women. The indicators most commonly used

at present are statistics on the number of workers claiming sickness benefit or receiving compensation for industrial injuries. However, studies in a number of countries have shown that this systematically underestimates the numbers of women whose health is damaged by work (Messing, 1998). This is because women in general and older women in particular are less likely than men to be entitled to compensation or to industrial injury benefit and are therefore excluded from the data.

If these gaps in occupational health knowledge are to be filled, the current priorities of researchers will also need to be revised. The problem of age and gender bias is one that is already receiving attention in medical research more generally. We know, for example, that young men have traditionally been much more likely than women or older men to be included in epidemiological studies and in clinical trials relating to heart disease. Similar bias is evident in occupational health research, and this will need to be remedied if the health of all groups of workers is to receive appropriate attention (Alexanderson et al, 1998; Messing, 1998)





Research designs for future studies should be sensitive to both gender and ageing issues. More attention will need to be paid to specifically 'female' jobs, especially those that are done in smaller workplaces. At the same time women and older people should be included in appropriate numbers in all studies relating to work settings in which they are represented. There is a particular need for more research that allows for the experiences of men and women to be compared across their lifetimes. At present insufficient data are available to measure exposures for women, whose work histories are often episodic and involve complex exposures to multiple hazards.

As well as reconfiguring the knowledge base it will be necessary to ensure that occupational health and safety practice is based on a recognition of human variability and an understanding of differences in vulnerability (ILO, 2000; European Agency for Safety and Health at Work, 2003). Current occupational health standards, including levels of exposure to toxic chemicals, were originally calculated to meet the needs of young, fit men. If older female members of the workforce are to be properly

protected, these will need to be revised (Hansson, 1998).

There is also evidence that many workplaces are designed to fit male rather than female workers (Messing, 1998). The height of workbenches, for example, may be not be suitable for the average woman and lengthy working at the wrong height can lead to serious damage. Similar observations have been made about the size and shape of protective devices and clothing, which can be hazardous if they are not a proper fit. If these problems are to be tackled successfully, women of varying ages will need to be involved in the design process (Misner et al, 1997).

At the workplace level, both safety representatives and employers also need to be encouraged to take an age- and gender-sensitive approach to health and safety issues. This is likely to require specific measures to ensure the incorporation of women's concerns into health and safety policies and into risk assessments. Again, strategies of this kind will be most effective when older women themselves are actively involved in both the identification and the management of these risks.

Reshaping the organisation of work

As well as identifying physical risks in the work environment, it is also important to go beyond the traditional areas of health and safety to examine the ways in which work is organised (Daykin, 1999; Hilfinger et al, 1997). As we have seen, many women are damaged by psychosocial aspects of their work and changes will be needed in the culture of the workplace if this is to be prevented. In the case of older women these changes will need to be based not only on an understanding of gender concerns but also on a recognition of the potential value of older workers and a commitment to meeting their needs in a non-discriminatory way.

This will not be achieved unless there is a clear commitment to equality strategies in the workplace (Kauppinen and Ojala, 2000). In particular, the skills and the contribution of older women need to be valued as highly as those of other workers: to achieve this will require significant cultural change. One of the most difficult challenges is how to give older women greater control over their working lives. More active involvement in shaping their own work and more investment in their potential would promote the well-being of older women while at the same time increasing their value to employers.

A second major challenge is ensuring the compatibility of employment and family commitments in the lives of individual employees. As we have seen, many older women workers are part of what has been called the 'sandwich generation'. They still have some responsibility for their own children or, more likely, grandchildren, while at the same time looking after a frail or disabled adult, usually a parent or spouse. In these circumstances the tension between paid work and informal care is a major concern both for individual women (and men) and for policy-makers attempting to square the circle of a flexible labour force and more care in the community.

Most carers receive little support from their employer and many experience discrimination because they are perceived as unreliable. In

recent years the UK government has been encouraging employers to develop what are called 'family-friendly' strategies, including flexible working hours, the availability of compassionate leave and facilitation of job-sharing. These policies have so far been designed mainly to support workers with childcare responsibilities. However, the Work and Families Act 2006 also entitles those who care for adults to request flexible working. This provides a base upon which both state and workplace policies could be tailored to meet the needs of older female workers more effectively.

Promoting health in the workplace

Over the last decade the traditional notion of occupational health and safety has been extended to include broader health promotion activities.

The most sophisticated examples of this new approach are probably to be found in the US, where an increasing number of larger employers have recognised the business case for what are called worksite wellness programmes (Collins et al, 1997). Fewer firms have developed such initiatives in the UK but NHS health promotion departments have increasingly included the workplace as one of the settings for their activities (Daykin, 1999).

A major focus of these programmes is what are often called 'lifestyle' issues. The aim is to help individual workers to live their lives in healthier ways and the topics covered include smoking, alcohol, nutrition and exercise. It is never too late to make changes in relation to these, as the recent public health campaign 'Small change: big difference' pointed out. However, such initiatives have often been criticised for failing to recognise the needs of older workers in general and of older women in particular (Daykin and Naidoo, 1995).

Many women, especially those who work part-time, find it difficult to participate in after-work activities. They may also be concerned that lack of fitness will result in the loss of employment (McDaniel, 1988). Many will have learned to identify sport and fitness activities as a male

preserve and may find it hard to imagine themselves participating. If health promotion initiatives are to work with this group, they must not be youth-oriented but must reflect the concerns of older women.

In one US study women themselves identified cheapness, convenience, social support and 'fun' as the key characteristics they looked for in such initiatives (Emmons et al, 1996). In some settings women-only classes may be important, at least in the early stages. This appears to be especially the case for smoking cessation, since women report receiving very little support at home. Single-sex cessation groups can help through allowing participants to share the gendered concerns that play a part in sustaining their smoking.

As well as helping those women who wish to make healthier choices, the workplace can also be an important site for secondary prevention in the form of screening. The national programmes for breast and cervical screening in the UK do cover a significant proportion of the female population. However, coverage can always be improved and workplaces with a large female workforce offer important opportunities. Cervical cancer screening in particular often misses older women, who no longer receive reproductive health care. This is especially true of women in lower social classes, who are at the highest risk of dying from the disease. Screening organised through the workplace can therefore meet the needs of some 'harder to reach' groups (Alterman et al, 1998).

The Bradford Project, set up under the auspices of the Pennell Initiative, provided a valuable illustration of how older women can be helped to focus on their own health needs. It offered women the opportunity for a health and lifestyle consultation around the time of their 50th birthday and one of the main access routes was through the workplace. Among the organisations participating were Yorkshire Building Society, Bradford Council and Grattan's, all of which have a large number of female workers.

If the benefits of health promotion services are to be made more widely available to older women workers, means need to be found for

delivering them in small workplaces as well as large ones. Not surprisingly, the best services are currently offered by large firms, but a significant proportion of older women are to be found in small workplaces. New strategies need to be developed for making similar services available to them on-site or for encouraging them to use services available elsewhere. An important element in this will be training to ensure that human resource and occupational health personnel take the health needs of older women more seriously.

Wider social policies for meeting the health needs of older women workers

Initiatives in the workplace are obviously central to promoting the health of older women workers. However, these alone will not suffice.

Broader aspects of social policy are also important if the health needs of older women in employment are to be met. Changes will be needed in pensions and other benefits to ensure that women are able to make healthy choices concerning employment and retirement. Improvements will also be needed in the provision of care for dependants. But underlying all of these will need to be a greater commitment to age and gender equality.

Age discrimination policies and practice in the UK have traditionally been weak. Mechanisms to tackle gender inequality have been more robust but they have still had serious limitations. Moreover, there has been no formal mechanism for integrating the two. This situation will change in 2007 with the creation of the Commission for Equality and Human Rights following the Equality Act of 2006. Under this new legislation, aspects of inequality relating to age, race, sex and gender, disability and sexuality will be brought together within a framework of human rights. This provides an important opportunity for promoting the health of older women workers as their role in the labour force increases.

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TAEN – The Age and Employment Network
207–221 Pentonville Road, London N1 9UZ
T 020 7843 1590 F 020 7843 1599
E taen@helptheaged.org.uk www.taen.org.uk

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