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Menopause in the Workplace Literature Review

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Executive summary

This report outlines the findings of a literature review on menopause in the workplace, undertaken by the Department of Work and Pensions. The aim was to review the available evidence to address the following research questions:

- 1) What is the impact of menopause on women in relation to work and employment?
- 2) What support is offered by employers and how effective is it?
- 3) What is the cost to the UK economy related to women's experiences of menopause in the workplace?
- 4) What are the evidence gaps and recommendations for future research?

The research builds on a previous comprehensive review conducted in 2016 (Brewis et al. 2017) by looking at salient literature published since April 2016 until October 2024. The review had a particular focus on literature published in the UK, as this was considered most appropriate for UK employers, although a secondary search of evidence from G7 countries was carried out where UK evidence was scarce. In total, 42 publications met the search criteria and were included in the review.

The review found considerable evidence that some women going through menopause experience symptoms which can impair their confidence and well-being at work and, to a lesser extent, their ability to effectively do their jobs. Few studies report positive or negligible experiences of menopause, which is likely a result of the research designs most commonly used. However, the degree to which any impact on women's experience at work is due to menopause per se, or the particular social and cultural circumstances surrounding the menopause is not clear.

Several studies emphasise that women's experiences of menopausal symptoms are deeply entangled with negative stereotypes of older women as less able and the menopause as a necessarily degenerative moment in women's lives. Moreover, studies also highlight how work may impact on experiences of the menopause, i.e. a potential reverse causal direction.

Overall, there is a paucity of evidence of the extent and kinds of support offered by employers. Small case studies from a range of sectors suggest that employer support is disparate and uneven. Many studies report that women going through the menopause feel reticent to seek support in the workplace, and a fear that further interventions could lead to increased stigma for older women in the workplace.

Only two publications addressed the financial cost to the UK economy. The most indepth of these estimated the annual cost to the economy to be approximately $\pounds 1.5$ billion due to unemployment and a further $\pounds 191.0$ million due to absenteeism and $\pounds 22.4$ million due to presenteeism.

Based on these findings, there are a number of recommendations for future research on menopause and employment. These include longitudinal research, studies with representative samples, intersectional research with diverse samples, research which includes more objective measures of women's menopause status and symptoms, research on women not in employment due to menopause, intervention studies, including the potential negative consequences of any intervention, and studies which estimate the financial cost attached to women's experiences of menopause.

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Summary

With the increase in women's participation in the labour market, more women are experiencing menopause while in employment. Understanding the impact of menopause in the workplace is therefore of growing importance. Policy proposals by the UK Government, in the Employment Rights Bill (2024), would require large employers to produce Menopause Action Plans on how they will support employees through menopause and there is a commitment in the Plan to Make Work Pay (2024) to provide guidance to smaller employers on measures to support employees through menopause. Such policies can contribute to the current government's stated ambition of reaching an employment rate of 80%, by helping women experiencing menopause to remain in employment or to reduce the barriers to re-entering the workplace.

To help inform policy work in this area, this report outlines the findings of a literature review of the most recent research around menopause in the workplace. The review aims to address the following research questions:

- 1) What is the impact of menopause on women in relation to work and employment?
- 2) What support is offered by employers and how effective is it?
- 3) What is the cost to the UK economy related to women's experiences of menopause in the workplace?
- 4) What are the evidence gaps and recommendations for future research?

This literature review builds upon a similar review conducted by Brewis et al (2017). Brewis et al included evidence up to the end of March 2016, so this review looks at evidence produced after that and up until October 2024. Only literature produced in the UK was included, as this would be most relevant to UK employers, although a secondary search to address question three on workplace interventions was widened to include G7 countries, owing to the paucity of available UK evidence. Literature searches were undertaken using the EBSCO Discovery Service, which covers 95 databases. In total, 42 publications met the criteria to be included in the review.

Key Findings:

- There is considerable evidence that some women going through menopause experience symptoms which can impair their confidence and well-being at work and, to a lesser extent, their ability to effectively do their jobs.
- Few studies report positive or negligible experiences of menopause in the workplace, although there is evidence that some women find positive aspects when experiencing menopause. Different research methods are required to uncover these experiences.

- Studies highlight how work conditions and environment, for example the requirement to wear a uniform or the amount of control over a work environment, may impact on experiences of menopause, i.e. a potential reverse causal direction or at least intersecting factors.
- The experience of menopause at work was also found to be related to women's wider situation, for example financial position or job security, and underlying health conditions, and that disentangling the symptoms and effects of these factors from those directly attributable to menopause is difficult both for researchers and those experiencing menopause.
- Evidence of the association between menopausal symptoms and women's engagement in employment is mixed, with some studies suggesting that menopause can result in reduced employment and progression in work, and increased absenteeism and intention to leave the workplace or reduce hours.
- There is evidence to suggest that social and cultural circumstances surrounding menopause impacts on women's engagement in work, with gendered agism limiting women's job opportunities and impacting women's self-confidence.
- Overall, there is a paucity of evidence of the extent and kinds of support offered by employers. What evidence there is suggests disparate and uneven support.
- Many women report that they would like more workplace support in the form of information on menopause and adjustments according to their needs. However, these sentiments were not universal, with some women worrying about the potential of such support furthering discrimination and stigma for older working women.
- High quality research on the efficacy of interventions to support women experiencing menopause in the workplace is lacking.
- Only two publications addressed the financial cost to the UK economy. The most in-depth of these estimated the annual cost to the economy to be approximately £1.5 billion due to unemployment and a further £191.0 million due to absenteeism and £22.4 million due to presenteeism.
- The literature review highlights several evidence gaps and recommendations for future research, including:
 - Longitudinal research, both qualitative and quantitative
 - Studies with representative samples, to include those with neutral or positive experiences of menopause in the workplace

- o Intersectional research with diverse samples
- Research which includes more objective measures of women's menopause status and symptoms
- Evidence about the extent and forms of support offered by employers
- Research on women who have left employment due to menopause or who seek employment while going through menopause
- Intervention studies, including the potential negative consequences of any intervention
- Studies which estimate the financial cost attached to women's experiences of menopause

1. Introduction

Background

Women over fifty make up a significant percentage of the labour market, and this proportion is growing. In the year to 2024, there were around 4.6 million economically active women aged 50 to 64, with a further 5.4 million aged 35 to 49 (Office for National Statistics, Annual Population Survey, 2024). Menopause normally affects women between the ages of 45 and 55 (NHS, 2022) with the average age of onset in the UK being 51 (NHS, 2024), although some women are affected before the age of 45. As more women are experiencing menopause while in employment, understanding the impact of menopause in the workplace becomes ever more crucial.

There is increasing acknowledgement of the growing importance of this area, as evidenced by the increase in guidance for employers that has been produced in recent years, by advocacy groups, professional organisations and trade unions (Hardy et al. 2018). However, it is not clear how widely this guidance is followed or implemented (Westwood, 2024).

Policy proposals by the UK Government, in the recent Employment Rights Bill, would require large employers to produce Menopause Action Plans on how they will support employees through menopause. In addition, there is a commitment in the Plan to Make Work Pay to provide guidance to smaller employers on measures to support employees through menopause.

The Government set out an aspiration, within the Get Britain Working (2024) White Paper, to reach an 80% employment rate within the UK. This White Paper identified three key groups for whom economic inactivity could be reduced: people who are economically inactive due to long-term sickness, young people who are not in education, employment or training, and women with caring responsibilities. Supporting individuals in the key groups into employment, is clearly important. However, further contributions to the achieving the 80% employment rate ambition could also come from reducing the numbers of people who fall out of employment and preventing them from becoming economically inactive.

It is important that guidance and any future policies around menopause and work are based on robust evidence. Therefore, reviewing the latest available literature and research on menopause in the workplace is required to understand the impact on those experiencing menopause whilst in employment, what support is offered by employers and whether these interventions are beneficial, and to estimate the cost of menopause to the UK economy.

An evidence review by Brewis and colleagues, entitled 'The effects of menopause transition on women's economic participation in the UK,' was commissioned by the Department for Education and published in 2017. This reviewed evidence from 1990

to the end of March 2016, including only English language literature. The topics covered included the extent to which menopause is a problem for working women (in the workplace and in the wider labour market); the impact of symptoms and the attitudes of employees/employers on women's economic participation; how women experiencing menopause can be better supported; whether the economic cost can be quantified and, if so, how; and identifying evidence gaps.

The report concluded that the evidence identified many negative effects of menopause on women's economic participation. This was mainly due to the symptoms experienced during menopause and their effect on women's work, and that menopause is not well understood or provided for in the workplace or in policies. However, it was highlighted that the quality of evidence was mixed, mainly due to small or non-representative samples and inconsistencies in the definition of key terms, such as menopausal symptoms.

Key findings from the review were:

- Working women experience menopause differently with a wide range of physical and psychological symptoms. These symptoms can create a domino effect, whereby one symptom leads to another
- There is evidence to suggest that these symptoms have a negative impact on women's economic participation and work performance
- Menopause is poorly understood and not well provided for in workplace cultures, policies or training
- Working women experience gendered ageism in relation to menopause
- Interventions to support women experiencing menopause at work need to account for the wide range of symptoms. Interventions may be low cost (e.g. environmental interventions) or high cost (e.g. flexible working)
- Menopause at work does not necessarily carry a cost, and positive aspects and views need to be considered

The report also highlighted several gaps in the evidence base, which included:

- few studies of workplace interventions, no studies of variations in menopause experience and economic participation
- no research on difficulties in finding work or on wages, few studies on transition as it relates to continued employment
- Few studies on women in manual and/ or low-paid work
- No studies comprehensively quantifying the economic costs of menopause
- Few studies where work and menopause are the prominent focus of the research

The current literature review aims to build upon the work of Brewis et al, in order to look at the latest evidence produced in the eight years since that report and to see whether any of the evidence gaps have been filled and where gaps remain. Unlike the Brewis et al. report, this literature review has a UK focus, primarily, although international evidence has been taken into account where a paucity of UK evidence was identified.

This literature review aims to understand the key issues faced by women in the labour market experiencing menopause, including in the perimenopause phase. As

many experts comment, the different phases of menopause are difficult to discern both for those experiencing menopause transition and clinicians. The report uses the term 'menopause' referring to any stage of menopause in which women may experience symptoms and/or stigma related to menopause.

Research Questions

1. What is the impact of menopause on women in relation to work and employment?

- What menopausal symptoms are women experiencing in the workplace and how is this impacting them?
- How does the experience of menopausal symptoms at work vary across the population of female workers, by factors such as age, occupation, sector, salary and ethnicity? What other factors are identified in the literature as intersecting with the experience of menopausal symptoms at work?
- In what ways does the experience of menopausal symptoms influence (re)engagement in paid work? For example, reducing working hours/decisions around progression and promotion/leaving or staying out of the labour market?

2. What support is offered by employers and how effective is it?

- What support, if any, do employers offer their workers who are experiencing menopausal symptoms, and how does this vary by occupation, sector, size of organisation and so on?
- How well-supported do workers feel by their employer? What is identified as helpful or not by women?
- How effective is employer support or other interventions at improving staff wellbeing, productivity and reducing staff turnover?
- Are there any unintended consequences of employer provided support?
- What are the costs and benefits of providing this support?

3. What is the cost to the UK economy related to women's experiences of menopause in the workplace?

- What percentage of working women are likely to reduce employment hours and/or leave the labour market due to their experiences of menopause?
- What is the estimated sickness absence for women experiencing menopause?
- What is the estimated economic cost of this lost labour?

4. Evidence gaps and recommendations

• What are the key evidence gaps relating to menopause and the workplace and/or labour market? What are the recommendations for addressing these gaps?

2. Methodology

The publications for this review were identified by the DWP Library team, based on search criteria we provided. Search terms included variations on 'work', 'unemployment', 'redundancy', 'economic', 'productivity', 'capabilities', and 'menopause', 'perimenopause', 'climacteric' and 'premenopausal', using all relevant combinations. These terms were taken from Brewis et al.'s 2017 review, on which we are building the present review. A scoping review of recently published literature reviews and consultation with subject experts revealed no new relevant terms to add to this list.

Only research published between April 2016 and October 2024 in English are included in this review, and books and theses were not included. The review also focusses primarily on UK evidence. This decision was taken in acknowledgement of cultural diversity in experiences of menopause (Brewis et al. 2017) and because UK evidence is most likely to yield results most relevant to UK employers and policymakers. However, our initial search of the literature revealed very few intervention-based studies (for research question 3) and a second search for literature was conducted for intervention research conducted in any of the G7 countries, considered most similar in terms of work culture and policy context. The search terms and inclusion criteria were mostly unchanged from the first search, however new terms were included in order to target intervention studies and G7 countries. These terms were 'intervention', 'evaluation', 'randomised control trial', 'RCT' and other related terms.

The EBSCO Discovery Service was used for the literature searches. 95 databases are covered by this service, including ScienceDirect, Web of Science, MEDLINE, JSTOR and Wiley Online Library. Only empirical research was considered for inclusion, a priority being placed on peer-reviewed literature. Grey literature was included if we considered it of sufficient quality and where gaps in the academic literature existed. Additional publications were identified through citation checking. 66 publications were reviewed in this stage of the search, of which 40 were included. In the second round of searching, 15 publications were identified of which 2 were included. Studies were excluded if they did not contain data relevant to our research questions, if they failed to meet standards of robust empirical research or if they provided only background information on the wider body of menopause research.

We used a Framework approach to analysis (Ritchie and Spencer,1994, Ritchie et al. 2003). In the first stage, we created a table, in Microsoft Excel, for data extraction from included studies. We conducted a pilot extraction whereby all three team members extracted separately from the same three publications. This resulted in some adjustments and refinements to our table headings.

All data relevant to our research questions were put into the table, as well as details of the methods and quality of the studies. Team members checked over one another's tables to ensure consistency in approach and understanding. In the second stage, we synthesized the findings according to the broad research questions, pulling out common themes, which were again cross-checked amongst team members.

Summary of included studies

Most publications in the review draw on UK-based data only, the exceptions to this are studies that feature data from countries alongside the UK or those identified in the second search. Overall, 70% of the publications are concerned with the impact of menopause on women in the workplace, how they deal with symptoms and how menopause is viewed/discussed in the workplace. Samples in these publications are mostly women aged 45-60 at various stages of menopause. Most studies draw on samples of women working full time in professional settings such as offices, although a few focus on women working in frontline positions such as the police service or the ambulance service (Atkinson et al., 2021, Brown et al., 2023) and some look into the differences in experiencing menopause at work between manual and non-manual jobs (e.g. Yoeli and McLusky, 2021). Only one study includes data from or about trans men (Beck and Financial Services Skills Commission, 2021). The findings in general then can be said to be most relevant to cis women. Where studies gave information about ethnicity, most reported that the majority of participants were white. Therefore, there is a lack of ethnic diversity in the evidence base.

The publications used a variety of methods. Most rely on self-reports of experiences and consequences of menopause by women currently experiencing menopause such as via surveys, interviews and focus groups. Nine literature / systematic reviews are included. If a review did not contain interpretations beyond what we found in our own analysis of the literature and/or only contained relevant literature already reported on by Brewis or ourselves, it was excluded from the review.

The studies are of variable quality. The limitations of included studies are discussed in the findings section. In some cases, researchers made claims that we felt were not verifiable according to the methods used, and in such cases those findings are not reported.

A table of the included studies and their relevant key findings can be found in Appendix A.

3. Findings

3.1 The impact of menopause on women in relation to work and employment

The studies report on a range of symptoms and how they impact on women's experiences of the workplace. There is considerable evidence that some women going through menopause experience symptoms which can impair their confidence and well-being at work and, to a lesser extent, their ability to effectively do their jobs. For example, a cross-sectional survey as part of the Health and Employment After Fifty (HEAF) study (D'Angelo et al. 2022), finds that the most common symptoms reported by women are vasomotor (91.7%); trouble sleeping (68.2%); psychological (63.6%) and urinary (49.1%). Questions relating to severity of symptoms were not asked, but 27% of the sample reported at least moderate problems coping with menopause at work. Other studies report higher proportions of staff reporting disruption to work due to menopause symptoms, but those studies specifically recruited women to understand the impact of menopause, meaning women with difficult experiences are likely to be overrepresented. For example, among defence staff in the UK (Wilman and King, 2023), over half of respondents to an online survey about the impact of menopause felt their symptoms adversely affected their productivity at work (53.5%). And a mixed methods study aiming to understand how menopause affects women working in financial services (Beck and Financial Services Skills Commission, 2021) found almost identical findings (53% of employees currently experiencing menopause said menopause made it difficult to feel confident at work, and 40% that their experience made it difficult to enjoy work). This is the only study identified which includes trans men, but due to low numbers the authors were unable to make any reliable comparisons according to gender.

Few studies identify which symptoms are perceived as most disruptive: a large online survey of women working in the public sector (Beck et al., 2020) found that fatigue, hot flushes, difficulty focusing or concentrating, anxiety and worry, and insomnia were reported as most impactful on work. While a survey conducted with users of a digital menopause application (Schei et al., 2023) found that psychological symptoms were most commonly perceived to impair participants' work. Since most of these studies recruit participants with the aim of understanding how women experience symptoms at work, they are unlikely to accurately describe the distribution of symptoms across the general population of women going through menopause, and probably give an over-estimate of symptoms and their severity.

Qualitative research gives more depth to quantitative findings and enables an understanding of the mechanisms through which menopause may impact on women's experiences of work (Steffan et al., 2025; Bodza et al., 2019; Dunn, 2022; Beck and Financial Services Skills Commission, 2021; Brown et al., 2023; Hobson and Dennis, 2024; Steffan and Potočnik, 2023; Cronin et al., 2023; Butler, 2020; Whiley et al., 2023). These studies illustrate that women's confidence may be harmed by menopause, creating anxiety around their ability to work well. For instance, a focus group study (Cronin et al., 2023) with nurses from across six different countries, including the UK, found that participants struggle to manage symptoms at work and are worried about making mistakes which could affect patient care. And in a study examining experiences in the financial services (Beck and Financial Services Skills Commission, 2021) participants similarly explained in focus groups and interviews that the menopause precipitated a lack of confidence in their abilities and fear of making a mistake. Frontline staff in these studies in particular mentioned brain fog and tiredness as most disruptive (Brown et al, 2023; Cronin et al. 2023). Participants also often report feelings of embarrassment and shame around menopause (e.g. Butler, 2020; Whiley et al., 2023) which compounds these experiences: There is evidence that women may 'conceal' themselves to hide their menopausal status, such as by missing meetings or avoiding specific physical environments with colleagues, thereby having knock on effects on their ability to do their work and progress in their workplace (Beck et al., 2022).

Few studies report positive or negligible experiences of menopause, which is likely a result of the research designs most commonly used. An analysis of the testimonials of women going through menopause published in the Guardian newspaper revealed that menopause can be experienced positively, although the overwhelming message in media articles is negative (Quental et al., 2023). The authors found that women reported feeling invisible when entering menopause, but then ultimately finding this liberating as it freed them from motherhood and beauty 'mandates' thereby allowing them to focus more on work and other things that mattered to them. Similar findings are reported in Beck et al. (2022).

Studies also highlight how work may impact on experiences of menopause, i.e. a potential reverse causal direction or at least intersecting factors. For example, Cronin et al. (2024) found in the mixed method case study of one healthcare organisation that menopausal symptom severity is associated with work stress. And an online survey (Atkinson et al. 2020) conducted with women police staff (n=1684) found that the degree to which menopausal symptoms are considered 'bothersome' depends on a number of factors: wearing police uniforms, having caring responsibilities, and belonging to force A or C included in the study. Participants who had higher levels of gualifications, worked in female dominated spaces and in Force B reported less bothersome symptoms (p11). Force B was mentioned as being more supportive for colleagues going through menopause, possibly related to the higher educational attainment, and it being a more female-dominated workplace with more female managers than in the other forces. Similarly, Brown et al. (2023)'s study with female ambulance service staff found that front-line participants report less control and a more negative impact of menopause than other participants. These staff are also more likely to consider leaving their role than office-based staff. These studies demonstrate how the work context can shape women's experiences of menopause and suggest that overall lower earning women with less control over their work

environment are likely to experience greater disruptions to work. Research with larger representative samples is needed to confirm these results.

The experience of menopause at work was also found to be related to women's wider situation and underlying health conditions. For example, the Health and Employment After Fifty (HEAF) study (D'Angelo et al. 2022, p1), reported that 'Risk factors for difficulties coping at work included: financial deprivation, poorer self-rated health, depression, and adverse psychosocial occupational factors but not physical demands... women with financial difficulties and those with jobs in which they feel insecure, unappreciated, or dissatisfied are at greatest risk.' Moreover, an in-depth qualitative study with 80 women experiencing menopause found that participants struggled to disentangle menopause related symptoms from other health related factors, as well as their work environment and domestic responsibilities. Participants reported being tired but acknowledged that this may also be attributed to a high paid and unpaid (domestic) workload (Steffan and Loretto, 2025). Similarly, a narrative literature review (Yoeli et al. 2021) of women's experiences of menopause in casual, informal, or precarious jobs reported that 'anxiety was not only a symptom of menopause but a response to the mounting social pressures placed upon them [participants]' (p16). Casual work is not regarded as a direct cause of worsening menopausal symptoms by the authors, instead factors that drive women into casual work - lifelong poverty and lack of education opportunities - are more closely associated with a difficult menopause. These studies give some indication of how the experience of menopausal symptoms at work varies across the population of female workers, but more fine-grained analytical and comparative research is still needed: most studies give very limited demographic data or report an inability to make statistical comparisons due to low numbers of diverse participants.

There is also evidence of an association between menopausal symptoms and women's engagement in employment, but there are mixed results. On the one hand, several studies report women's intention to reduce hours or leave work due to menopause (e.g. Brown et al., 2023; Hobson and Dennis, 2024; Steffan and Potočnik, 2023; Bodza et al., 2019; Verdonk et al. 2022) as well as workdays missed (Currie and Moger, 2019; Cronin et al., 2024). For instance, a case study of one healthcare organisation conducted by Cronin et al. (2024) found a correlation between symptom severity, absenteeism and intention to leave the workplace. Of those who reported moderate or severe symptoms, 60% had taken time off, left early or been late for work in the preceding four weeks which they attributed to their symptoms. Of those with severe symptoms, 64% reported an intention to reduce working hours, 47% to leave the workforce and 44% to leave their employing organisation. A survey amongst financial services employees (Beck and Financial Services Skills Commission, 2021) found that almost half (47%) of women and trans men experiencing menopause said they were 'much less' or 'somewhat less' likely to apply for a promotion because of menopause. And over half (52%) also reported that it made them less likely to take on extra responsibilities. However, only a very small proportion (4%) reported reducing their seniority and responsibilities. In contrast, a survey (Hardy et al. 2018b) with female members of a trade union and professional association for family court and probation staff in England, Wales and Northern

Ireland found no difference between pre, peri and post-menopausal women with respect to work absence, job performance, turnover intention and intention to leave the labour force. Although, severe hot flushes at work were associated with a higher intention to leave employment. In fact, the main predictor of work outcomes in this study was work environment, in particular role clarity and work stress. These studies rely on opt-in survey participants and have a low overall response rate limiting their generalisability. It is also difficult to predict to what extent intention to reduce hours or leave employment will occur.

Two studies draw on longitudinal data from the same birth cohort study and give more robust evidence (Bryson et al., 2020; Evandrou et al., 2021). The most detailed of these was carried out by Bryson et al. (2022). They found that psychological symptoms related to menopause (as reported by women themselves) impact on employment rates, negatively, while vasomotor symptoms tend not to: 'Every additional psychological problem associated with menopause reduces employment and full-time employment rates by 1-2 percentage points, rising to 2-4 percentage points when those symptoms are reported as particularly bothersome.' (p2) Additionally, they found that early natural menopause (before age 45) reduces months spent in employment by 9 percentage points once women enter their 50s compared with women who do not experience early menopause, although this is not associated with a difference in full-time employment rates. Evandrou et al.'s (2021) analysis of these data similarly noted that women who reported experiencing menopausal symptoms were more likely to change their employment status, either by reducing their hours or leaving work entirely. Additionally, they found that women were less likely to leave work if their partners were unemployed. The analysis of longitudinal data strengthens the reliability of these findings and the large sample size mean that many different potentially confounding factors could be taken into account. Women were only asked to report menopausal symptoms experienced in the previous year when aged 50 however, posing some limitations.

While there is evidence that menopause impacts on women's engagement in work, the degree to which it is menopause per se, or the particular social and cultural circumstances surrounding menopause is not clear. Several studies emphasise that women's experiences of menopausal symptoms are deeply entangled with negative stereotypes of older women as less able and menopause as a necessarily degenerative moment in women's lives (Beck et al., 2022; Steffan and Potočnik, 2023; Cronin et al., 2023; Bulter, 2020; Whiley et al., 2023; Steffan et al., 2025). For example, a mixed methods study around women's experiences of gendered aging at work found 'a clear acknowledgement from women in this study of a detrimental impact on work performance owing to a range of physical and psychological menopause symptoms. But also a feeling that there is a perception from others of a decline in performance at work, which isn't always the case.' (Steffan and Potočnik, 2023, p1198). Indeed, policewomen reported being ridiculed by colleagues when going through menopause (Atkinson et al., 2021). Such perceptions of menopause can impact on women's self-confidence and therefore their assessment of their own productivity and performance (Willman and King, 2023), highlighting the limitations of studies which rely on women's self-assessment of their

work performance during menopause. A similar observation was made by Ryan and Gatrell (2024) in their literature review of studies on employed, middle- and older-age women's experiences in organisations. They concluded that gendered agism limits women's job opportunities as employers assume deteriorating health. A failure to recognise the heterogenous experience of women, some of whom may find aging liberating (see for example Quental et al., 2023) or do not experience health issues that impact on their performance, means that most or all older women are likely to experience negative impacts of menopause via discriminatory treatment at work.

3.2 The effectiveness of support for women in the labour market going through menopause

Overall, there is a paucity of evidence of the extent and kinds of support offered by employers. Small case studies from a range of sectors suggest that employer support is disparate and uneven (e.g. Cronin et al., 2024; Steffan and Potočnik, 2023; Hobson and Dennis, 2024; Atkinson et al., 2021). A large online survey (5399 respondents) about women's experiences of menopause at work found that only 19% were aware of support offered in their workplace (Beck et al., 2020). This study found substantial variation across sectors in the provision of information: 43% in Public Administration and Defence; 24% in Administrative and Support Service Activities; 11% in Human Health and Social Work Activities and 8.2% in Education. The survey cannot be said to be necessarily representative, but with such a large number it can capture the views and experiences of a range of working women. However, there is also evidence to suggest that even when employers have policies and support mechanisms in place, employees may not be aware of them (Target and Beck, 2022; Hobson and Dennis, 2024; Beck et al., 2020) or engage with them (Cronin et al., 2024; Butler, 2020). A survey of employers would give a clearer picture of the support offered, though not of engagement nor effectiveness.

Many studies report that women going through menopause feel reticent to seek support in the workplace (Steffan and Potočnik, 2023; Hardy et al., 2019; Currie and Moger, 2019; Beck et al., 2020; Butler, 2020; Cronin et al., 2023; Steffan and Loretto, 2024; Verdonk et al., 2022). As reported in the findings section related to research question 1, there is a strong consensus of stigma related to menopause and gendered aging more generally, which shapes participants' perceptions and preferences around support. For example, a qualitative study exploring norms around menopausal disclosure at work, found that support was perceived to depend on the attitudes and experiences of managers (Daly et al., 2024). This helps to explain why women often report preferring to disclose menopausal status (if they do) to older female colleagues who are assumed to be more sympathetic (Steffan and Potočnik, 2023; Hardy et al., 2019; Beck et al., 2020; Cronin et al., 2023; Target and Beck, 2022) and why women in more precarious roles are less likely to disclose their menopausal status (Grandey et al., 2020). These findings may be more reflective of the current state of support offered than what women might find helpful.

Where studies probe women's preferences for workplace support, there are mixed results. Many study participants report wanting more information about menopause and more consideration from employers about their needs such as via adjustments to the work environment (Adelekan-Kamara et al., 2023; Hardy et al., 2017; Beck et al., 2020; Target and Beck, 2022; Harper et al., 2022). For example, 77% of women indicated in a large-scale online survey that they would like information on menopause provided at work. However, this support should consider the particular circumstances of the target population, as highlighted by Butler (2020): She conducted a qualitative interview study with women in back-office, local government administration roles with no line management responsibility. The women reported that the employer support offered was patronizing and assumed the cultural preferences of managerial staff - suggesting yoga, for example - which they deemed unrealistic and unsuitable. Nonetheless, there is also evidence of women who are more sceptical about support delivered via the workplace, fearing this may lead to further discrimination and stigma for older working women (Daly et al., 2024; Hardy et al., 2017; Cronin et al., 2023; Target and Beck, 2022). This suggests that any intervention developed should carefully investigate potential negative impacts or unintended consequences of such support (to date none were found). Grandey et al. (2020) came to similar conclusions in their review of studies on how menstruation, maternity and menopause impact on women's experiences of work. They concluded that 'researchers must consider the organizational climate and whether sharing findings about needs for accommodation is helpful or further puts women's careers at risk in that context.' (p26)

In the absence of wider appropriate support, women develop their own strategies, including through seeking peer support and making minor changes to their workspace (such as using a fan, wearing light layered clothes or working from home) (Cronin et al., 2023; Hobson and Dennis, 2024; Butler 2020). In line with the findings around how the work context may shape experiences of the menopause, women report that flexible working patterns would make menopause more manageable (Adelekan-Kamara et al., 2023; Hardy et al., 2017). Not all women will have such control over their work environments, particularly non-office-based staff or those in lower ranking positions (Atkinson et al., 2021; Butler 2020; Wilman and King, 2023). This evidence is based on self-reported experiences or preferences of women going through menopause and thus does not evaluate the efficacy of interventions.

Four evaluations of support were found in the UK context, but mostly of low quality. These indicate some potential avenues for further research. The most robust study is a Randomised Control Trial (RCT) to assess the effectiveness of a self-help cognitive behavioural therapy (CBT) booklet delivered at work settings (Hardy et al., 2018a). Compared to the control group (on a waitlist for the intervention) women who used the booklet reported reduced severity and frequency of menopausal symptoms at 6 and 20 weeks. They also reported improved work and social adjustment, sleep, and negative menopause beliefs at 6 and 20 weeks, and reduced work impairment due to menopause-related presenteeism at 20 weeks. Presenteeism refers to participants' perceptions of productivity and work impairment due to menopause symptoms while being present at work. There was no difference between groups in other work-related outcomes (i.e. absence and turnover intention). The qualitative part of the study found that CBT helped women to reframe their experiences of menopause and gave them more confidence in dealing with symptoms and in their ability to work effectively. This intervention relies on individual women making changes and therefore may not be effective in establishing a cultural step-change. Its acceptability across different demographic groups also would need to be further investigated.

Schei and Abernethy (2024) conducted a longitudinal single-arm evaluation of a menopause health application. 2432 users of the app were followed over 180 days. The app, known as 'Peppy', is offered as an employee-benefit to various client companies. It gives users access to evidence-based menopause content, courses and events run by expert menopause practitioners, as well as the potential for one-to-one consultations with personalised advice on how to manage their symptoms. The researchers found that self-reported work impairment due to menopause improved over time, with a linear relationship observed between engagement with the app and a reduction in work impairment reported. However, the scale of the change in work impairment was small. This study lacks a control group, suffered substantial attrition from the original sample of 11,870, and both authors reported a financial interest in Peppy Health. Another study indicated that women are favourable towards digital support apps for menopause (Cronin et al., 2023), so a more robust study may be fruitful for further investigation, perhaps integrating CBT methods as per the RCT study described above.

Another study surveyed women going through menopause to understand the role of women's adaptive behavioural strategies (specifically 'Selection, Optimisation and Compensation' (SOC)), as well as supervisory and female peer social support in helping women manage their menopause symptoms at work (Steffan and Potočnik, 2023). The authors measured the impact of these behaviours on self-reported retention (such as intention to leave the organisation or impact on promotion applications) and job performance. The use of SOC alongside supervisory and female peer support ameliorated the negative impact participants reported of physical menopause symptoms on work performance, but SOC use negatively impacted work performance when used to manage psychological symptoms. This gives further credence to the previous reported evidence that physical and psychological symptoms do not necessarily have similar impacts (see Bryson et al., 2022). The survey however was small (142 women) and is unlikely to be representative.

The fourth study focused on managers and their engagement with employees going through menopause. This was a pre-post evaluation of a 30-minute online training for managers. Participants were followed up until four weeks after receiving the training. The authors observed statistically significant improvements in menopause-related knowledge, attitude, and reported confidence in talking about menopause with staff. Over 90% of participants followed up reported that they found the training useful and would recommend it to others, but actual behaviour change was not found at the final follow-up (Hardy et al., 2019). Further research which investigates the impact on women employees of such training as well as a longer follow-up would be useful.

Widening our search for evidence beyond the UK did not identify any strong evidence for supportive practices which could be put in place. A pre-post intervention study conducted the Netherlands (Verburgh et al., 2020) evaluated a pre-existing workplace health promotion intervention-the work-life programme (WLP). Female workers in low paid jobs (n=56) were recruited via HR invitations. The post-test results indicate improvements in menopause symptoms but no impact on work related outcomes. Dennis and Hobson (2023) conducted a narrative literature review which evaluated evidence of effectiveness of workplace programmes supporting women with menopause symptoms. They identified 12 studies, of which four are reported on already in this review (Dunn, 2022; Hardy et al., 2019; Hardy et al., 2018; Target and Beck, 2022). Overall, the authors concluded that none of the studies provide compelling evidence of an improvement to women's ability to work. There is some evidence of improvement of symptom management in interventions that offer health advice though, which may be fruitful for further research. In terms of mental wellbeing, qualitative studies report women felt better after interventions, but quantitative studies reported mixed or no improvement. Another systematic review was identified (Van der Heijden et al., 2021) which included 66 publications on women's menstruation, menstrual disorders and menopause at work. The bulk of these studies were focussed on menopause and were conducted in the UK (overlapping with findings reported here and in Brewis et al. 2017). The authors of both these reviews emphasize the need for more high-quality intervention research to effectively support women in the workplace.

No study was found which estimated the financial cost of delivering interventions nor the potential economic savings of doing so.

3.3 The cost to UK economy related to women's experience of menopause in the workplace

The literature search found only two publications which addressed the financial cost to the UK economy related to women's experience of menopause in the workplace. There are limitations to the evidence but the estimated annual cost to the economy is approximately £1.5 billion due to unemployment and a further £191.0 million due to absenteeism and £22.4 million due to presenteeism.

In 2024, a report was commissioned by the NHS Confederation (Gorham and Langham, 2024) to evidence the costs to the UK economy of various women's health conditions, which included estimates of the economic impact of menopause. The authors used data from Wave 10 of the British Cohort Study (BCS) and the Reproductive Health Services (RHS) to conduct econometric longitudinal analysis performed at the individual level. Based on the analysis of the BCS, the authors estimated that there are 60,000 women in the UK who were not in employment due to perimenopause or menopause. Assuming the average wage of women of menopausal age, this would equate to an increase in direct economic impact of

approximately £1.5 billion per year if these women were to return to employment. In addition, the authors identify causal relationships between menopause symptom severity and employment and economic inactivity. Those experiencing three to four symptoms were found to be five percentage points less likely to be in employment than the general population, and those experiencing eight menopause symptoms being six percentage points less likely to be in employment symptom and twice as likely to be economically inactive due to ill-health.

Furthermore, analysis of the RHS data indicated that women with severe menopause take seven days of absence from work per year due to their menopause symptoms. The economic impact of absenteeism due to severe perimenopause and menopause symptoms was estimated to be $\pounds191.0$ million per year, with presenteeism contributing a further impact of $\pounds22.4$ million per year.

For comparison with other health conditions, the same report estimated that women aged 16-45 with primary and secondary dysmenorrhea miss between 11 and 16 days of work, with an economic impact of £10.6 billion per year due to absenteeism and a further £883.0 million per year due to presenteeism. In addition, a report by Cardoso and McHayle (2024), commissioned by the NHS Confederation, estimated that the cost to the UK economy of mental ill health due to sickness absence and presenteeism was approximately £110 billion in 2022.

Finally, the report also notes that there will be a further economic cost from an estimated 370,000 women experiencing poor mental health and 210,000 experiencing worse health outcomes due to the perimenopause or menopause, but no monetary estimate was possible due to limitations in the survey data. The authors acknowledge limitations to the estimates due to some of the assumptions in the calculations, namely those associated with the analysis assuming those experiencing menopause are between 45 and 55. Assuming that menopause starts at 45 is a cautious estimate and precludes those entering menopause prematurely. Also, the median wages used in the analysis was an average of the 40 to 49 and 50 to 59 age brackets as figures for the 45 to 55 age brackets were not available. Further to those assumptions identified by the authors, the cohort from Wave 10 in the BCS are aged between 46 and 48, from which extrapolations are made to ages between 45 to 55. No details of the data sample from the RHS are provided. It is also noted in the report that the headline figure does not take into account some economic factors associated with women returning to or staying in employment, in particular possible savings, for example reduced welfare payments, employers' savings due to staff retention, or indirect impacts from increases in the women's incomes. The study also does not take into account potential cost benefits accrued through women's engagement in unpaid labour when they leave employment or reduce paid work hours (such as by caring for family who may otherwise rely on state support).

A study by Smith et al. (2020), was focussed solely on the symptom of vaginal dryness in premenopausal, perimenopausal and postmenopausal women. The study primarily aimed to understand the impact of vaginal dryness on health-related quality of life (HRQoL) but did estimate the average cost to both the employee and employer incurred through absenteeism and presenteeism. However, it must be noted that

these estimates were the cost of the symptom of vaginal dryness for all women in the study, not just for those whose vaginal dryness could be attributed to menopause. The study estimated that the average age-adjusted lost weekly wage for those experiencing vaginal dryness was £67.82 for those in employment, which represented a 16% loss of average earnings. In addition, the mean weekly wages lost were found to increase in line with increased symptom severity. The estimated average weekly cost to the employer was £82.46 per participant across all degrees of severity. The total weekly cost to employers of all participants in the study was estimated to be £31,622.

While this study suggests that employees and employers can incur a financial cost due to vaginal dryness as a symptom of menopause, an estimate for those experiencing menopause specifically remains a gap in the evidence, as identified by the authors. Other limitations of the estimates include the fact that this estimate is based on self-reported absence and presenteeism and median age-related weekly wage for all UK women rather than reported wage.

The evidence review by Brewis et al. highlights the lack of studies comprehensively quantifying the economic costs of menopause and this literature review suggests this is an area where evidence is still scarce.

3.4 Evidence gaps and recommendations for future research

Since the publication of Brewis et al.'s report (2017) we have identified 42 publications which examine the effects of menopause on women's economic participation and the support that may mitigate against negative impacts. Most of these studies come from the UK, as per our aims in this review. This indicates an increase in research interest in the topic over the last eight years (reflected in wider media reports too, see Orgad and Rottenberg, 2014). Still, we identify several research gaps, some of which echo those identified by Brewis and colleagues in 2017:

- Longitudinal research. Only six of the included studies are longitudinal in nature. Three of these draw on birth cohort studies (Bryson et al., 2022; Evandrou et al., 2021; and Gorham and Langham (2024) who combine BCS data with data from the Reproductive Health Survey). Longitudinal research is beneficial since it can facilitate an examination of cause-and-effect relationships between menopause and engagement in employment (Brewis et al., 2017). Ideally this would be both qualitative and quantitative, given the complex nature of identifying menopause and its potential impact.
- **Studies with representative samples**. Studies to date suggest that different women experience menopause and worked-related effects of menopause differently. Research with representative samples would capture the experiences of individuals who have more neutral or positive experiences of menopause (currently under-researched).

- Intersectional research with diverse samples can complement broader studies with representational samples to enable in-depth analysis of how difference demographic and contextual factors shape the experience of menopause. This would help to unpack the varying influence of gender, age and menopause on employment, as well as potential cross-cutting factors, such as ethnicity, co-morbidity, work context and job role.
- Research which includes more objective measures of women's menopause status and symptoms. A literature review (Grandey et al. 2020) that sought to understand how menstruation, maternity and menopause (the 'three Ms') impact on women's experiences at work, argues, as we have, that the shame and stigma and general negative view of menopause (Rowson et al., 2023) may impact on women's assessment of their ability to work. Most studies rely on women's self-reported perceptions of work impairment and is therefore potentially influenced by societal biases. As pointed out by Grandey and colleagues, research about men and hormone changes more typically use biological markers of hormones and other more objective methods to study work ability (for example by using a performance test). Thus, while difficult, such studies are not without precedence. Brewis et al. (2017) outline a number of potential measures which may be actioned for such research with women, of which none were identified.
- Research which includes transmen and non-binary people. Although this review aimed to focus on women's experiences of menopause, we also sought to identify literature which included anyone experiencing menopause. Only one study was identified that included transmen (Beck and Financial Services Skills Commission, 2021) with a sample size too small to draw any conclusions about the particularity of their experiences.
- Evidence about the extent and forms of support offered by employers. Isolated and small-scale studies suggest that support is uneven or nonexistent. However, these studies rely on employees' accounts, who may not be aware of employer policies (Target and Beck 2022; Hobson and Dennis, 2024; Beck et al., 2020) or engage with them (Cronin et al., 2024; Butler, 2020). A survey of employers would give a clearer picture of the support offered, though not of engagement nor effectiveness.
- Research on women who have left employment due to menopause or who seek employment while going through menopause. Such research would help in identifying potential barriers into work for women experiencing menopause, as well as the conditions under which some women left employment.
- Intervention studies. Few intervention studies were identified, and most were of low quality. Thus, there is very little evidence about the kinds of support that may be effective. Given women's account of stigma and their reticence about seeking support at work, due attention should be given in any future studies to the potential negative consequences of any intervention, such

as via an ethnographic or case study approach. No intervention studies estimated costs and savings associated with the intervention.

• Studies which estimate the financial cost attached to women's experiences of menopause. The literature search found only two publications which addressed the financial cost to the UK economy related to women's experience of menopause in the workplace, which have some limitations. Moreover, no intervention-based studies reported costs (or potential financial savings) associated with the examined interventions.

4. Conclusion

This report reviews 42 publications examining the effects of menopause on women's economic participation. The bulk of the research we uncovered explores the various ways in which women experience menopause at work, and the cross-cutting factors which shape these experiences. There is clearly evidence of women's engagement and progress at work being hampered by their experiences of menopause. The extent of these issues across the population is not clear due to the nature of the study designs. The scholarship to date demonstrates the challenging nature of researching menopause, since symptoms vary and experiences are deeply intertwined with societal views about gender and aging, as well as women's broader life circumstances. With this in mind, future research should draw on a variety of methods and with individuals of various backgrounds and circumstances in order to get a more wholistic understanding of this phenomenon.

Less research has been conducted on the kinds of support which could enable women experiencing menopause to flourish at work. We surmise that this is related to the relative newness of attention to aging women in the workplace, as well as the aforementioned complexity in studying experiences of menopause. Still, this is an important area of research which could have far-reaching implications for women and workplaces more generally and the government's aims outlined in Get Britain Working White Paper (HM Government, 2024). Here again we stress the need for mixed methods and longitudinal research, which pay careful attention to the potential unintended consequences of intervention support, including wider policy implementation around menopause support at work (such that it may inadvertently increase stigma and discrimination against aging women). Finally, we note a paucity of research which captures the financial cost of menopause and the potential savings of effective employment support for women experiencing menopause. Such research could signal to employers the potential gains in supporting older women at work, in addition to the overriding importance of ensuring women's economic independence and wellbeing at work.

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Appendix

Table of studies included

Author(s) & Date	Sample	Methods	Relevant Key Findings
Adelekan- Kamara et al (2023)	21 menopausal participants, all female aged 40+ and 20 non- menopausal participants, 6 female, 14 male, aged 30+. All participants are medical doctors.	Qualitative interviews	Improved Menopausal Experience (IME) was achieved through knowledge and awareness in the workplace, openness to discussion, organisational culture and supported personal autonomy.
Atkinson et al. (2021)	1684 police staff, PCSOs and Volunteers currently in pre-menopause, perimenopause or post-menopause and aged over 40. The sample was collected via a link sent out by participating police forces to staff.	Online survey	Front-line participants reported symptoms more negatively compared to those in office-based roles with higher levels of qualifications. Participants disclosed menopausal symptoms at work more in female dominated workplaces or if they struggled to maintain their work level.
Beck et al. (2020)	5399 participants most of whom were white women working in the public sector with an average age of 50 years	Online survey	Mixed response to direct questions on menopause as a taboo. Most don't receive any information or support from employers, most don't share their experiences with colleagues/managers.
Beck et al. (2022)	Draws on literature from Brewis et al. (2017) and updates up to 2020. 82 pieces of literature were reviewed	Literature review	Menopause exacerbates the visibility paradox facing female workers - women become more invisible as older

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	0000 1007		and therefore overlooked for promotion and opportunities, but this invisibility is experienced as freeing and allows them to focus on work better.
Beck, V. A., & Financial Services Skills Commission (2021)	2089 women and 287 men working in the UK financial services. Most respondents were white and able bodied.	Online surveys, focus groups and in-depth interviews	Less than a quarter of women and trans men disclose their menopause status at work. The financial sector is losing talent because of the menopause, but authors argue that the right support can allow women to stay in work and progress in the financial sector.
Bodza et al. (2019)	3, all white British, two aged 45-50, one aged 55+, all counsellors	Qualitative interviews	There was a lack of knowledge, understanding and dialogue relating to menopause in the counselling profession. The capacity to continue working therapeutically presented potential ethical dilemmas which were affected by menopausal symptoms.
Brown et al. (2023)	22 female ambulance staff aged 42-62 in either perimenopause or post menopause stage	Qualitative interviews	A lack of awareness and support in the workplace negatively impacted on participants' experiences. Participants felt underprepared for the menopause. Participants had to use sick leave or reduce their hours during menopause.

			Participants felt unable to talk to male co-workers about menopause.
Bryson et al. (2022)	3405 women from the 1958 cohort, surveyed at regular increments from birth to 55 years old	Longitudinal survey using data from the UK National Child Development Study (1958 Birth Cohort)	Experiencing menopausal symptoms does appear to impact on work engagement; psychological issues related to menopause more likely to impact on work engagement. Full-time employment rates were reduced by 0.5-4% points per additional symptom.
Butler (2020)	23 women in their 50s working in office-based administration roles with no line management responsibility.	Qualitative interviews and focus groups	Participants report dissatisfaction with employer support, and that the work context negatively impacts on their experience of menopausal symptoms. Embarrassment key issue.
Cowell et al. (2024)	Any literature with relevant data - 43 studies included	Literature review	Women reported a lack of support from employers and that menopause negatively impacted on workplace relationships. Menopause wasn't discussed in the workplace as it was considered taboo.
Cronin et al. (2023)	48 nurses in six different countries, aged 45+	Focus groups	Nurses wanted support strategies that enabled talk, track and treat modalities to alleviate menopausal discomforts, and felt the measures should include digital and non-digital interventions.

Cronin et al. (2024)	167 employees from a female dominated organisation participated in a survey, with 7 managers being interviewed	Case Study research approach	There was a positive correlation between symptom severity, absenteeism and intention to leave the workplace. Employees were uncomfortable discussing menopause with their managers. Menopause was a taboo for employers and managers. Managers didn't have enough time to attend menopause training/support sessions
Currie & Moger (2019)	Women aged 45+ years with menopause symptoms (currently or within previous 10 years). Survey 1 n=1000, survey 2 n= 1000 and survey 3 n=650 women and 350 partners of women.	3 online surveys, pre and post introduction of NICE menopause guidelines	Many women reported negative impacts of menopausal transition on work. On average, women reported missing 3.27 days of work each year due to menopause symptoms, almost half of women did not report the real reason to their employer.
Daly et al. (2024)	48 employees from a UK-based company. Most participants were female, white, heterosexual and aged between 25-59 years	Hybrid vignette-story completion in qualitative interviews	This study reports four themes: The burden of menopause, managing menopause at work, Menopause as not belonging in the workplace, and Menopause as unlocking new life potential.
D'Angelo et al. (2022)	Adults between 50 and 64 recruited through invites from GPs. 69% of returned questionnaires (3055) were usable	Cross sectional analysis of survey data from the Health and Employment After Fifty (HEAF) Study	One third of women reported difficulties coping with menopause symptoms at work. Financial deprivation, poor health, depression and adverse psychosocial

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Dennis &	12 studies selected for	Narrative	occupational factors were all risk factors for difficulties coping at work. Physical demands were not a risk factor. The interventions had
Hobson (2023)	in-depth view, four were British, seven European and one was Brazilian. The majority of studies targeted working women aged between 40 and 62	Evidence Review	no significant effect on work ability, but women's wellbeing and ability to manage symptoms saw improvements. Interventions aimed at improving workplace openness and manager's skills were well received.
Dunn (2022)	7 working women experiencing menopause. No additional demographic information included.	Qualitative interviews	Menopause was not explicitly discussed during workplace coaching. Most women still found it helpful, but did not feel able to discuss menopause.
Evandrou et al. (2021)	3109 women from the 1958 cohort. Data was used from the 8th and 9th waves where participants were aged 50-55	Longitudinal cohort study using data from the UK National Child Development Study (1958 Birth Cohort)	Women who reported experiencing menopausal symptoms were more likely to change their employment status, either by reducing their hours or leaving work entirely. Women were less likely to leave work if their partners were also unemployed. HRT users experienced a stronger association between severe symptoms and reducing hours
Gorham & Langham (2024)	Difficult to ascertain numbers, analysis was based on the assumption that those who experience menopause are aged	Economic Longitudinal analysis using data from the UK National Child	The economic cost of menopause-caused unemployment is £1.5 billion per year. The economic impacts of absenteeism and

	45-55 years. Wave 10 of the British Cohort Study was used for which participants are between the ages of 46-48	Development Study (1970 Birth Cohort) and Reproductive Health Services (RHS)	presenteeism due to severe symptoms is £191 million and £22.4 million a year respectively.
Grandey et al. (2020)	Inclusion criteria for papers was unclear but was quite varied across the three topics. Authors do not report the number of included studies.	Literature review	Commonalities in experiences across the three domains: stigma, but women feel ambivalent; subjective v objective explanations for work outcomes; assumption of unidirectional effects of menopause symptoms.
Hardy et al. (2017)	137 women, average age of 54 years, roughly 75% were perimenopausal, 25% postmenopausal. Most were non-manual workers with a degree or professional level qualifications. Most were working full time	Online survey	Participants reported the importance of employer/manager awareness of menopause, good communication skills and behaviours and employer level actions in relation to how menopause in the workplace should be approached.
Hardy et al. (2018a)	Women aged 45-60 years, having 10 or more problematic HFNS (Hot flushes and night sweats) a week, working full time in non-manual jobs, recruited through the human resources/occupationa I health departments of 8 organisations	Randomised Controlled Trial	Self-help CBT (cognitive behavioural therapy) significantly reduced symptom problem ratings, improved work adjustment and reduced work impairment due to menopause-related presenteeism.
Hardy et al. (2018b)	216 pre, peri and post- menopausal women aged 45-60 years working 36 hours a week in a non-manual job. Most were white and educated to	Online survey	Roughly half of respondents had considered leaving the labour force. Work stress was high; however, participants work performance

	degree level. 58% were postmenopausal		remained high. Severe hot flushes were associated with a higher intention to leave work. The nature of HFNS (Hot Flushes and Night Sweats) had more of an impact on work outcomes than frequency. No association was found between work stress and menopausal status.
Hardy et al. (2019a)	98 white women in their 40s from one public and two private UK organisations. 62 and 61 provided data immediately and 4 weeks post training, respectively	Pre-post evaluation of training for line managers, quantitative and qualitative questionnaires	Participants reported an improvement in menopause-related knowledge, attitudes and confidence in intentions to discuss menopause with colleagues. 90% found the training useful and would recommend it to others.
Hardy et al. (2019b)	15 women aged 45-60 from King's College London's Menopause@Work Project - they worked in various job roles and sectors	Qualitative interviews	The organisational context and nature of discussion were key themes in the initiation and effectiveness of menopause-related discussions with managers. Facilitators included: open culture, awareness of menopause, proactive managers, respecting privacy, understanding and acceptance. Barriers included: male dominated workplaces/managers , fear of negative responses, stigma, embarrassment, dismissive conversations and

Harper et al. (2022)	947 perimenopausal women were recruited via social media. They were mostly from the	Online survey	inappropriate body language. Participants reported feeling menopause and related stigma impacted on their
	UK, white, married, parents and educated to Under/Post- graduate level		work and progression. There is silence around menopause. Participants wanted more support at work.
Hobson & Dennis (2024)	14 English speaking women aged between 34 and 59 working a mix of roles in NHS Wales. All were experiencing menopause symptoms	Online focus groups	The experience of menopause symptoms depended on factors such as ongoing or past symptom experience, expectations, social support and effectiveness of management strategies. The success of management strategies was varied. Some women were reticent to ask for support even in supportive workplaces.
Howe et al. (2023)	66 publications from a range of countries consisting of empirical studies, grey literature and various review types	Scoping review	High quality intervention research is lacking. Few studies are underpinned by a clear rationale for the intervention.
Quental (2023)	150 articles were testimonials written by women experiencing menopause in their personal and professional lives, who were educated and holding a leadership position.	Interpretive analysis of qualitative testimonies published in The Guardian newspaper	There is a possibility to view menopause as 'liberating' and productive for work

Ryan & Gatrell (2024)	Broad selection of literature using search terms related to gender, middle age, menopause, women in employment, women's health and feminist readings and studies on menopause. Number of publications included not reported.	Integrative literature review	Employers' negative perceptions of women's health can lead to discrimination in work. Employers may assume that older women are more flexible, often erroneously.
Schei & Abernethy (2023)	21,555 mostly female participants, 93.67% were aged 40-60. over 62% reported being peri or postmenopausal. 25.76% reported using HRT.	Retroactive observational study	Users' symptoms were reported as being more severe than the general European population and were more likely to use HRT. More severe symptoms were associated with greater work impairment. High levels of support reduced work impairment. The severity of psychological symptoms was the strongest predictor of work impairment.
Schei & Abernethy (2024)	11,870 users of the Peppy Health menopause application, 3380 in the 90 day follow up and 2432 in the 180 day follow up. The sample was mostly perimenopausal women who reported severe or moderate menopausal symptoms. The average age was 50	Pre-post evaluation	A significant decrease in the severity of menopause symptoms was observed in users across menopause, but improvement in reported work impairment was low (though was present). Authors not sure why.
Smith et al. (2020)	N=524. Self-reporting individuals from the UK suffering from vaginal dryness. Age range was 18-70, with an average of 40.18.		The estimated cost of working hours lost due to vaginal dryness (as reported by participants) was £67.82 weekly, with

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	Around 19% were menopausal, 19% postmenopausal, and 62% premenopausal		average loss to employers £82.56. Findings not separated according to menopause status (of questionable relevance but included for estimation of costs).
Steffan & Loretto (2025)	80 interviews of women over 50 in the UK, within a larger sample of 156 who worked in social care, manufacturing, finance or were self employed	Qualitative interviews	Organisational culture impacts women's experiences of menopause transition at work. In male- dominated organisations, women hide symptoms but this does not counteract negative stereotypes of menopause. In more gender/age inclusive organisations, women felt more able to disclose their status, with less fear of stigma.
Steffan & Potočnik (2023)	Sample 1: 21 women working in the UK. All participants were over 47 years of age employed in a broad range of jobs and industry types. Sample 2: 142 women with an average age of 51.15 years. The majority were employed full time in a variety of position types and industries	Qualitative interviews	The use of SOC (Selection, Optimisation and Compensation) alongside support from colleagues reduced the negative impact of physical menopause symptoms on work performance but was detrimental to work performance when used to manage psychological symptoms.
Targett & Beck (2021)	189 council employees, presumably or mostly all women, going through menopause	Online survey	Employees were often not aware of new menopause policies put in place by the council. Women would like more support and

Van der Heijden et al. (2021)	185 documents retrieved from the Web of Science dating between 1992 to 2020	Systematic review	information about menopause at work, but also fear the potential stigma that may come with it. More research has been conducted on menopause than on menstruation and menstrual disorders. Most research has also been conducted in the UK. The evidence for interventions to support women going through menopause transition is poor.
Verburgh <i>et al</i> (2020)	56 women working in a low-paid job, aged between 45 and 60 years. Of these, 12 were selected through purposive sampling to be interviewed.	Pre-post evaluation using mixed methods Quant study: pre-test-post- test study using self- report questionnaires. Qual study: semi- structured, in- depth interviews.	Female workers in low-paid jobs experienced a positive impact from the WLP (Work-life program), but it only significantly benefited menopausal symptoms. This was due to the WLP initiating a process of mental empowerment that encouraged women to openly speak about their personal issues related to midlife and make choices that enhance their health and wellbeing at work.
Verdonk et al. (2022)	36 articles in the main review and a further 27 in the results section, all publications were in English	Literature review	Studies in relation to menopause and work are scarce but increasing Menopause has a negative impact on work ability Menopausal complaints could be an explanation for older women's higher sickness absence rates

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			Menopausal women don't tend to leave the labour force outright Menopausal women don't speak up about problematic symptoms and engage with individual solutions Women use individual and workplace strategies successfully to cope with menopause Menopause being a taboo limits its discussion in the workplace High resilience of working women is put under pressure by work intensity, age, and labour market shortages
Whiley et al. (2023)	Six cisgender, white, British women with lived experience of menopause working in a professional office space recruited through snowball sampling and personal contacts	Qualitative interviews	Menopause at work is seen as both materially dirty through physical symptoms such as Hot Flushes and metaphorically dirty through the loss of fertility, which impairs women's femininity in a patriarchal setting
Willman & King (2023)	465 complete responses from regular serving women aged 40 and over.	Online Survey	The impact of menopause was greatest in the 7 following themes: coping in the workplace, fearing the effect on careers, accessing healthcare, the management of perimenopause by primary care, physical effects, psychological and cognitive effects, and physical activity. Issues were

			exacerbated in male- dominated environments.
Yoeli & McLusky (2021)	8 databases were searched using terms like menopause, grey economy, work, migrant and poverty and prioritising articles published after 1995. 13 articles were included.	Narrative review	Women working manual jobs reported musculoskeletal symptoms negatively impacting their performance. Psychological symptoms were more prevalent in lower-paid women working manual jobs. Working conditions were not attributed to difficulties managing symptoms, though the factors driving women into casual work, such as poverty or poor education opportunities, were closely associated with a difficult menopause.