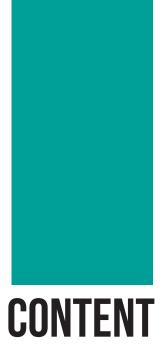
SPORT HEALTH EXERCISE

EXPERIENCES AND HEALTH BEHAVIOURS OF MENOPAUSAL WOMEN IN IRELAND





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Key Findings

- Menopause is a significant part of a woman's lifecycle that occurs 12 months after the last period. Women experience various symptoms during the years leading up to this stage. There is limited data relating to health behaviours and experiences of women going through menopause in Ireland.
- In total 855 women aged between 44 and 65 years completed the online questionnaire. Of those, 21% identified as early-stage perimenopause, 22% late-stage perimenopause, 41% symptomatic postmenopausal and 16% asymptomatic postmenopausal.
- 78% of respondents indicated that menopausal symptoms interfere sometimes or often in their daily activities.
- Almost one third (31%) of women are using HRT and women also use alternative therapies to manage their symptoms with herbal remedies being the most popular option for women in this analysis.
- In the postmenopausal symptomatic group, 59% of women experience 13 or more symptoms. The most commonly reported symptoms are hot flushes affecting 92% of women, low sex drive (89% of women) and night sweats (87% of women).
- The majority (80%) of women reported weight changes during the menopause transition and 66% of women were classified as either overweight or obese. Almost half of women (48%) reported finding it difficult to manage their weight.
- Overall, 47% of women engage in moderate physical activity almost daily, with 30% engaging at least 3 times a week, 17% occasionally and 7% never or rarely. Walking is the most frequently preferred form of exercise (79%) followed by exercise classes (16%) and resistance training (14%).
- The majority (77%) of women feel they lack knowledge and are unprepared for menopause. Social media is the main source (53%) of information on menopause for women, followed by government websites (40%) and GPs (21%).

78%

of respondents indicated that menopausal symptoms interfere sometimes or often in their daily activities.

Introduction

Menopause is the cessation of a women's menstrual periods followed by a year of amenorrhea (no periods). It is part of the natural aging process and signifies the end of the female reproductive process. The average age of menopause is 51 years with about four years of irregular periods leading up to this event¹. Women's average life expectancy is 80 years, therefore around a third of their lives are post menopause. During the lead up to menopause, also referred to as perimenopause or menopausal transition, a woman's body goes through many hormonal and biological changes. For some this can be accompanied by physical and emotional changes². Although a range of symptoms are reported not all women are affected and every woman has a different experience.

Female infants are born with about 1-2 million eggs in their ovaries, with no new eggs made after birth. This amount declines slowly over the course of the reproductive lifespan, alongside a woman's monthly cycles. At about the age of 37 the rate that a woman loses eggs speeds up rapidly, with almost none left at menopause³. This finely balanced process is controlled by several hormones which all interact with each other throughout menstrual cycles. During the menopausal transition there are changes in the amount of these hormones being made, and the ovaries gradually lose function.

Many women experience the discomfort of hot flushes, poor sleeping patterns, vaginal dryness and anxiety during the months and years leading up to their final period. Some have reported muscle aches, tiredness, lack of sex drive, increased appetite, cravings and putting on weight and body shape changes⁴. The experience is unique for everyone and women can experience a range of symptoms of varying severity which can potentially impact on quality of life.

We know very little about menopausal experiences of women living in Ireland, so this research aimed to describe the experiences and behaviours of women going through menopause in Ireland.

Study Design

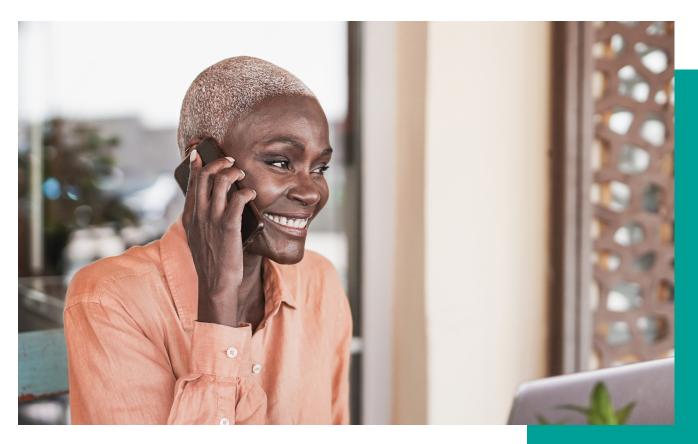
A questionnaire⁵ originally developed in America was adapted for the Irish context to assess menopausal symptom experience alongside symptom management strategies.

The questionnaire was electronically distributed to women who categorised themselves as either early or late stage perimenopausal, postmenopausal with symptoms or postmenopausal without symptoms. Participants were recruited via emails distributed in a variety of workplaces; emails were also sent to menopause support groups who shared recruitment posts on their social media platforms. Women also shared the link to the questionnaire with friends and family members through word of mouth. The research was carried out in January and February 2021.

The questionnaire comprised 19 questions. Participants were asked for their self-reported weight, height, date of birth and age of commencement of periods. Women then choose from the following menopause stages, premenopause, peri-menopause early stage, peri-menopause late stage, post menopause symptomatic or post menopause asymptomatic (Table 1).

Menopause Stage	Description
Pre-Menopause	"I do not have menopausal symptoms yet, and I continue to have regular or variable periods."
Peri-Menopause –Early Phase	"I am currently experiencing menopausal symptoms. I have regular monthly periods, but the length or flow of each period varies."
Peri-Menopause –Late Phase	"I am experiencing menopausal symptoms and have not gone 12 months in a row without a period, but I sometimes have more than 60 days between periods."
Post-Menopause –Symptomatic	"I haven't had my period in over 12 months, but I continue to have menopausal symptoms."
Post-Menopause –Asymptomatic	"I haven't had my period in over 12 months, and I no longer have (or never had) menopausal symptoms."

Table 1. Description of Menopause Stage



Participants were asked whether symptoms interfere or have ever interfered with their daily activities dependent on their stage of menopause, the use of hormone replacement therapy, other remedies used to combat menopausal symptoms, and the effectiveness of these remedies in reducing menopausal symptoms. In addition, a subgroup of postmenopausal women was asked a series of questions relating to menopausal symptoms and severity.

Women were asked if changes to lifestyle helped alleviate symptom severity. Participants were also asked if their weight varied since transitioning through menopause and if they have taken any measures to manage their weight. The final questions focused on where women obtained information about the menopause and gauged their interest in bespoke lifestyle programmes for menopausal women.

This study was approved by the Department of Sport and Health Sciences Research Ethics Committee in Athlone Institute of Technology.

Results

In total 855 women aged between 44 and 65 years completed the online questionnaire. Of those, 178 (21%) identified as early-stage perimenopause, 188 (22%) late-stage perimenopause, 348 (41%) symptomatic postmenopausal and 141 (16%) asymptomatic postmenopausal.

Age of onset of menarche (first occurrence of menstruation)

The average age at menarche was 12.6 \pm 1.5 years with a range of between 8 and 19 years of age.

Interference of menopausal symptoms with daily activities

The majority (78%) of respondents indicated that menopausal symptoms sometimes or always interfered with their daily activities; 21% did not experience any impact of symptoms. Table 2 shows a breakdown of these findings for each group. The postmenopausal asymptomatic participants recalled symptoms from when they were symptomatic, and the other groups reported current status.

	All women n=854	Perimenopause Early n=178	Perimenopause Late n=188	Postmenopause Symptomatic n=348	Postmenopause Asymptomatic n=140
Never (%)	20.6	11.8	11.2	16.1	55.3
Sometimes (%)	64.6	72.5	68.6	69.0	38.6
Always (%)	13.0	13.5	19.1	14.1	1.4
l don't know/l prefer not to answer (%)	1.8	2.2	1.1	0.9	4.3

Table 2. Impact of menopausal symptoms on daily activities

Symptoms experienced by postmenopausal women

A subgroup of postmenopausal women (n=238) were asked about their symptoms. Seventeen common symptoms (hot flushes, insomnia, muscle/ joint pain, dizziness, depression, fatigue, headaches, heart palpitations, anxiety, night sweats, irritability, vaginal dryness, skin dryness, hair loss, lack of focus, poor memory, and low sex drive) were listed and women were asked if they experienced the symptoms and if so to rate the severity as either mild, moderate, or severe.

Fifty nine percent of women experienced 13 or more symptoms, 32% between 7 and 12 symptoms and 8% less than 6 symptoms. Seven percent of women reported experiencing all 17 of the symptoms. The most commonly reported symptoms were hot flushes affecting 92% of women, low sex drive (89% of women) and night sweats (87% of women). Low sex drive (33.2%), vaginal dryness (26.5%), insomnia (26.1%) and hot flashes (26%) were the most severe symptoms reported.

Use of Hormone Replacement Therapy (HRT)

Overall, 31% of women use HRT and this was highest in those women who were in the late perimenopause stage (43%). The postmenopausal asymptomatic group were least likely to use HRT (9%). When asked why they did not use HRT, the most common response was that HRT was something they never considered (40%). Other reasons for not using HRT are summarised in Table 3.

	All women n=568	Perimenopause Early n=124	Perimenopause Late n=106	Postmenopause Symptomatic n=227	Postmenopause Asymptomatic n=111
l have never considered HRT (%)	40.0	46.8	37.7	33.4	46.8
l am not a suitable candidate (%)	13.4	8.1	9.4	20.3	9.0
l prefer not to take hormones (%)	25.2	16.1	22.6	26.9	34.2
Other remedies reduce my symptoms (%)	12.5	16.1	16.0	11.9	6.3
l don't know/l prefer not to answer (%)	9.0	12.9	14.2	7.0	3.6

Table 3. Reasons for not using HRT

Use of other remedies to combat menopausal symptoms

Over one third (38%) of women used herbal remedies to combat menopausal symptoms, followed by meditation, relaxation and/or yoga (34%). Twenty nine percent of women had not tried any other remedies (Table 4).

Table 4. Other remedies used to combat menopausal symptoms

	Herbal (black cohosh, etc) (%)	Breathing Exercises (%)	Sleep Aids (%)	Mindfulness (%)	Meditation/ Relaxation/ Yoga (%)	Chiropractic Care/ Spinal Manipulations (%)	l haven't tried other remedies (%)
All women n=855	38.0	26.1	21.6	24.1	34.3	7.1	29.0

Effectiveness of other remedies

Those women who used other remedies were asked to rate their effectiveness in alleviating menopausal symptoms. Effectiveness varied extensively between different remedies (Table 5).

Table 5. Effectiveness of other remedies in combating menopausal symptoms

	Herbal (black cohosh, etc)	Breathing Exercises	Sleep Aids	Mindfulness	Meditation/ Relaxation/ Yoga	Chiropractic Care/ Spinal Manipulations
Very effective (%)	36.1	20.7	36.4	25.6	25.9	60.6
Somewhat effective (%)	55.3	61.1	52.7	64.7	60.3	30.6
Not at all effective (%)	8.6	18.2	11.0	9.7	13.8	8.8

Body Mass Index and Weight changes during the menopause transition

Women were asked to self-report their height and weight, and this was used to estimate body mass index (BMI). BMI is defined as a person's weight in kilograms divided by the square of the person's height in metres (kg/m²) and may be useful as an indicator of nutritional status. Participants were categorised as having underweight (BMI ≤ 18.5 kg/m²), normal weight (>18.5 – 24.9kg/m²), overweight (25 – 29.9kg/m²) or obesity (>30kg/m²). Over 60% of women in each group were in the overweight or obese category. More women were categorised as obese in the postmenopausal symptomatic group (35%) compared to the postmenopausal asymptomatic group (23%) (Table 6).

BMI Category	All women n=839	Perimenopause Early n=175	Perimenopause Late n=183	Postmenopause Symptomatic n=344	Postmenopause Asymptomatic n=137
Underweight (%)	0.6	0.6	0.5	0.6	0.7
Normal weight (%)	33.7	37.1	32.8	31.4	36.5
Overweight (%)	35.3	33.7	37.2	33.4	39.4
Obese (%)	30.4	28.6	29.5	34.6	23.4

Table 6. Body mass index for all women and by menopause stage

Almost 80% of women reported weight changes during the menopause transition (Table 7).

Table 7. Self-reported weight change at different stages of the menopause

	All women n=849	Perimenopause Early n=178	Perimenopause Late n=188	Postmenopause Symptomatic n=344	Postmenopause Asymptomatic n=139
Yes (%)	79.5	73.6	83.0	84.0	71.2
No (%)	19.4	24.7	16.5	15.4	26.6
Prefer not to say (%)	1.1	1.7	0.5	0.6	2.2

Almost half of women (48%) reported finding it difficult to manage their weight although only 14% of these women reported managing their weight through diet, exercise, or both. Overall, 42% of women actively tried to manage their weight with either exercise (14%), diet (16%) or both (12%).

Engaging with physical activity

47% of the women who responded to the survey engaged in moderate physical activity almost daily, with 30% engaging at least 3 times a week, 17% occasionally and 7% never or rarely. This pattern was observed across all menopausal groups (Table 8). Walking was the most frequently preferred form of exercise (79%) followed by exercise classes (16%), resistance training (14%), yoga (11%), running (8%), swimming (7%) and cycling (5.5%).

	All women n=852	Perimenopause Early n=177	Perimenopause Late n=188	Postmenopause Symptomatic n=347	Postmenopause Asymptomatic n=140
Never (%)	1.2	1.1	2.7	0.3	1.4
Rarely (%)	5.8	8.5	4.8	5.5	4.3
Occasionally (%)	16.7	17.5	16.0	17.0	15.7
At least 3 times per week (%)	29.8	31.6	32.4	31.1	20.7
Almost daily (%)	46.6	41.2	44.1	46.1	57.9

Table 8. Engagement with physical activity



Preparedness for menopause

The majority of women (77%) felt that they were not prepared for menopause. When asked where they receive their information regarding the menopause the most common response was social media (53%) followed by government websites (40%) and the GP (21%). Family (3%) and friends (6%) were not common sources for gaining information (Table 9). There was negligible engagement with talks, radio/podcasts, magazines and health shops.

	All women n=839	Perimenopause Early n=175	Perimenopause Late n=183	Postmenopause Symptomatic n=344	Postmenopause Asymptomatic n=137
GP (%)	20.8	15.2	18.6	23.3	24.8
Gynaecologist/ Menopause Specialist/Health Professional (%)	0.9	1.1	0	1.7	0
Online Resources (Government Websites) (%)	39.6	34.8	39.4	40.2	44.0
Social Media Platforms (Facebook, Instagram) (%)	53.5	68.5	69.1	50.9	19.9
Internet (%)	2.6	4.5	0.5	2.6	2.8
Family (%)	2.7	1.7	1.6	4.3	1.4
Friends (%)	5.7	6.2	4.3	6.9	4.3
Other women (%)	1.8	0		2.0	4.3
Reading Books and Magazines (%)	3.8	2.3	2.1	4.1	7
Health Shop (%)	0.2	0	0	0.3	0.7
Talks (%)	0.1	0	0	0.3	0
Radio/Podcast (%)	0.4	0	0	0.6	0.7

Table 9. Sources of information relating to menopause

Interest in structured lifestyle programmes

The majority of women (78%) indicated that would have found a lifestyle programme useful to assist them through menopause; this was highest in the perimenopause groups (83% and 81% in the early and late perimenopause groups, respectively). Symptomatic postmenopausal also showed interest in a lifestyle programme (79%) and interest was a little lower in asymptomatic postmenopausal women (63%). Women were also asked to rate the most important aspects of a lifestyle programme (Table 10). Menopause education rated the most important (71%) followed by weight management (63%), weight loss (54%) and physical activity sessions (53%). Fifty five percent of women would prefer to do such a programme in a group setting with similar women and this was highest in the perimenopause early (72%) and perimenopause late (66%) groups.

		All women
Menopause Education Information (n=772)	Very important (%)	71.1
	Somewhat important (%)	23.4
(n=772)	Not important (%)	5.5
	Very important (%)	63.2
Weight Management (n=717)	Somewhat important (%)	30.6
	Not important (%)	6.2
	Very important (%)	54.2
Weight loss (n=798)	Somewhat important (%)	35.3
	Not important (%)	10.5
	Very important (%)	52.9
Physical Activity Sessions (n=714)	Somewhat important (%)	41.4
	Not important (%)	5.6
Holistic Exercise (mind,	Very important (%)	46.3
body, spirit, and emotions)	Somewhat important (%)	41.3
(n=712)	Not important (%)	12.4
	Very important (%)	34.8
Yoga/Pilates (n=738)	Somewhat important (%)	43.4
	Not important (%)	21.8

Table 10. Importance of different elements of a lifestyle programme

SHE Report 2021



Main Findings

This study presents novel findings about the health behaviours and experiences for a sample of menopausal women living in Ireland. This was not a nationally representative survey but does provide a useful snapshot of how menopause is experienced in the absence of any existing research in this area.

Menopause impacts women in a variety of ways

Menopausal symptoms interfere in daily activities for most women (78%), while in the postmenopausal symptomatic group, 59% of women experienced 13 or more symptoms. The most commonly reported symptoms were hot flushes affecting 92% of women, low sex drive (89% of women) and night sweats (87% of women). The majority of women (80%) reported weight changes during the menopause transition with 48% of women finding it difficult to manage their weight. Based on self-reported heights and weights, 66% of women in this study were either overweight or obese, which is an independent risk factor for ill health.

Women lack information and support to manage menopause

Overall, women lacked knowledge and felt unprepared for menopause. Nearly one third (31%) of women are using HRT and women also used alternative therapies to manage their symptoms with herbal remedies being the most popular option among a variety presented. When asked where they receive their information regarding the menopause the most common response was social media (53%) followed by government websites (40%) and GPs (21%). It must be acknowledged that the majority of recruitment occurred through targeting support groups on social media, which may have led to the recruitment of women who might be experiencing a variety of symptoms and were more likely to use social media as a source of information. The majority of women reported interest in a structured lifestyle programme, focusing on menopause education, weight management and physical activity.

Implications for Research and Practice

Going forward there needs to be a greater focus on educating women who are transitioning through menopause, as findings from this analysis indicate that women felt unprepared and lacked knowledge during this time. Establishing the method and content of this education programme would require a multi stakeholder approach and importantly include representatives from women experiencing/having experienced menopause.

Given existing research on menopause symptoms and the prevalence of these among women this study, additional bespoke support services are also required for women going through menopause. Pharmacological (hormonal and nonhormonal) approaches have shown to be effective in the management of menopausal symptoms⁶. The evidence for non-pharmacological approaches including lifestyle and behaviour modifications for menopausal symptoms is mixed, limited or non-existent⁷. However, maintenance of a healthy body weight may help to reduce vasomotor symptoms and cognitive behavioural therapy has also been shown to be beneficial in reducing the effect of vasomotor symptoms as well as improving sleep and overall wellbeing⁸.

In Ireland, to the authors knowledge, there is no evidence that supports the feasibility or effectiveness of a structured lifestyle programme, and therefore no visible approach to this provision for women during menopause. Researchers in the SHE Research Group are working to contribute to the knowledge and practice gap around supports for women going through menopause. This report presents a snapshot of Irish women's experience of menopause that aligns with further activity exploring the lived experience of menopause and developing and evaluating a lifestyle programme for women in menopause.

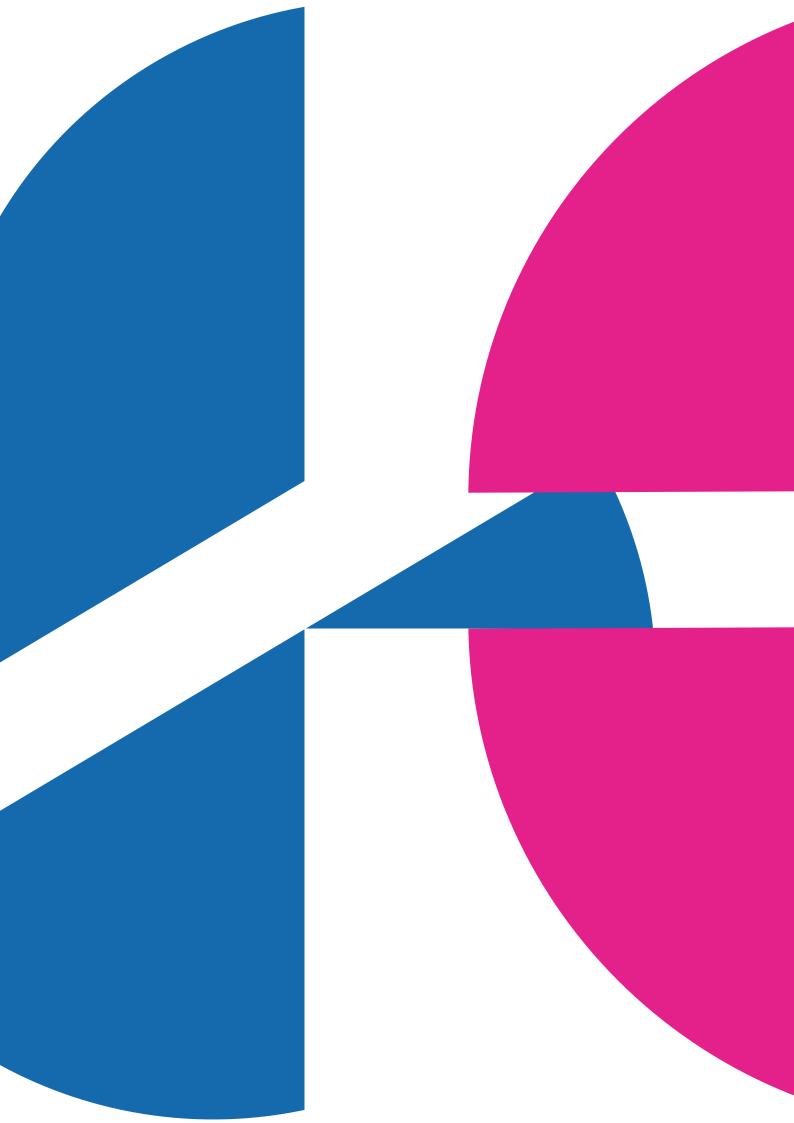




References

- 1. Laine C, Goldmann DR, Sox HC, Col NF, Fairfield KM, Ewan-Whyte C, et al. Menopause. Ann Intern Med. 2009 Apr 7;150(7):ITC4-1
- 2. Valdes A, Bajaj T. Estrogen Therapy. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 [cited 2020 Dec 11]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK541051/
- 3. Broekmans FJ, Knauff EAH, te Velde ER, Macklon NS, Fauser BC. Female reproductive ageing: current knowledge and future trends. Trends Endocrinol Metab. 2007 Mar;18(2):58–65
- 4. Santoro N, Epperson CN, Mathews SB. Menopausal Symptoms and Their Management. Endocrinol Metab Clin North Am. 2015 Sep;44(3):497–515
- 5. Marlatt KL, Beyl RA, Redman LM. A qualitative assessment of health behaviors and experiences during menopause: A cross-sectional, observational study. Maturitas. 2018 Oct;116:36–42
- 6. Stuenkel CA, Davis SR, Gompel A, et al. Treatment of symptoms of the menopause: an Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab 2015;359:3975-4011
- 7. Hickey M, Szabo R & Hunter M. Non-hormonal treatments for menopausal symptoms. BMJ 2017;359:j5101 doi: 10.1136/bmj.j5101
- 8. Nonhormonal management of menopause-associated vasomotor symptoms: 2015 position statement of The North American Menopause Society. Menopause 2015 22(11):1155–72.







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