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AT THE ONSET AND AT THE CESSATION, REPRODUCTIVE LIFE SPIN OF SYMPTOMS: INDUCED STRESS IN WOMEN

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Abstract

Menstruation and menopause represent pivotal stages in a woman's reproductive life, influencing her body and fertility. This global issue impacts women across diverse backgrounds, with symptoms-induced stress posing risks to cardiovascular health, hormonal balance, and mental well-being. This study explores the comparison of the onset and cessation of the reproductive life span, examining menstrual-related issues, and gynecological problems using questionnaires.

The study revealed increase in stress-related symptoms across reproductive phases. At menarche, 64.7% of participants reported anxiety or tension, while this figure rose to 69.8% during the reproductive phase. Similarly, depressive symptoms increased from 52.9% at menarche to 67.4% during the reproductive years. Menopause is marked by a high prevalence of psychological distress, with 88.9% of women experiencing anxiety or nervousness and 94.4% reporting feelings of depression. Additionally, 75% of menopausal women reported hot flashes, and 77.8% experienced sweating.

The study underscores the importance of addressing menstrual-related issues, gynecological problems, and stress management to improve women's health and quality of life.

Key points: Menstrual-related issues, Gynecological problems, Menopause, symptoms, Stress

1. Introduction

Menstruation and menopause mark pivotal stages in a woman's reproductive journey, influencing her body, fertility, and overall well-being. This global concern affects women across diverse backgrounds, with symptoms-induced stress posing risks to cardiovascular health, hormonal balance, and mental well-being.

Women in Moradabad, India, experience stress-induced symptoms during menarche and menopause, impacting hormonal balance, physical comfort, and psychological well-being. Understanding menstrual and gynecological problems during these life stages is crucial for healthcare professionals to guide interventions and promote women's well-being. Menstruation and menopause are pivotal phases in a woman's reproductive journey, influencing her physical well-being and fertility. (1–9) Globally, women across diverse backgrounds experience stress-induced symptoms during menarche and menopause, posing risks to cardiovascular health, hormonal balance, and mental well-being.(10–12)

Reproductive Life Spin of Symptoms: Induced Stress in Women: A woman's reproductive life involves significant physiological changes and hormonal fluctuations, contributing to a spectrum of symptoms inducing stress.(13,14) Understanding the difference menstrual cycles onset, cessation, and associated issues is crucial. Menarche, marking the beginning of menstruation, often induces stress in young girls navigating hormonal shifts, irregular periods, and the challenges of discreet management.(15–19) The "reproductive life spin" concept highlights the cyclical nature of reproductive health, with stress levels fluctuating throughout this journey.(20–27)

Menopause and Transitional Stress: Approaching menopause, the cessation of menstruation, introduces another transition marked by hormonal fluctuations and various physical and emotional symptoms. (28–30) Hot flashes, mood swings,(31) and changes in sexual health contribute to stress during perimenopause.(32–35) The psychological impact of transitioning from a fertile phase to a non-reproductive one adds to the complexity of stress experienced by women during menopause.(34,36–47)

Let us begin by examining the stress-inducing symptoms experienced by young girls during menarche and how it profiles a young girl's journey into womanhood.

Questionnaires as Tools for Assessment: To quantify the between stress and the reproductive life spin, structured questionnaires serve as valuable tools. Surveys capturing women's experiences of symptoms, stress levels, and the perceived impact of reproductive milestones provide insights into the nuanced relationship between stress and reproductive health.

The aim of this study is to compare the onset and cessation of the reproductive life span, focusing on menstrual-related issues, gynaecological problems, and stress levels. Using questionnaires and statistical analysis, the study aims to identify and analyse the minimize of these issues during menarche and menopause, and to assess the impact of these stages on women's overall health.

2. Materials and Methods

The participants are selected from the Department of Gynaecology, Teerthanker Mahaveer University, Moradabad, India, between April 29 and December 29, 2023. A cross-sectional study design is employed, enrolling a total of 113 participants who met the specified inclusion and exclusion criteria.

Inclusion Criteria:

Females within the reproductive phases: menarche, reproductive, and menopause.

Exclusion Criteria:

Pregnant women, Women with surgical menopause or hormone replacement therapy, Smokers and alcoholics, Individuals with chronic or metabolic diseases, Participants on pharmacologic treatment, antioxidant supplementation, oral contraceptives, or intrauterine devices (IUDs).

The study involved administering questionnaires to assess menstruation, menstrual-related struggles, and gynaecological issues among the participants.

Statistical Analysis

Differences are considered significant when presented as frequency and percentage. Statistical analysis was performed using SPSS.

3. Results

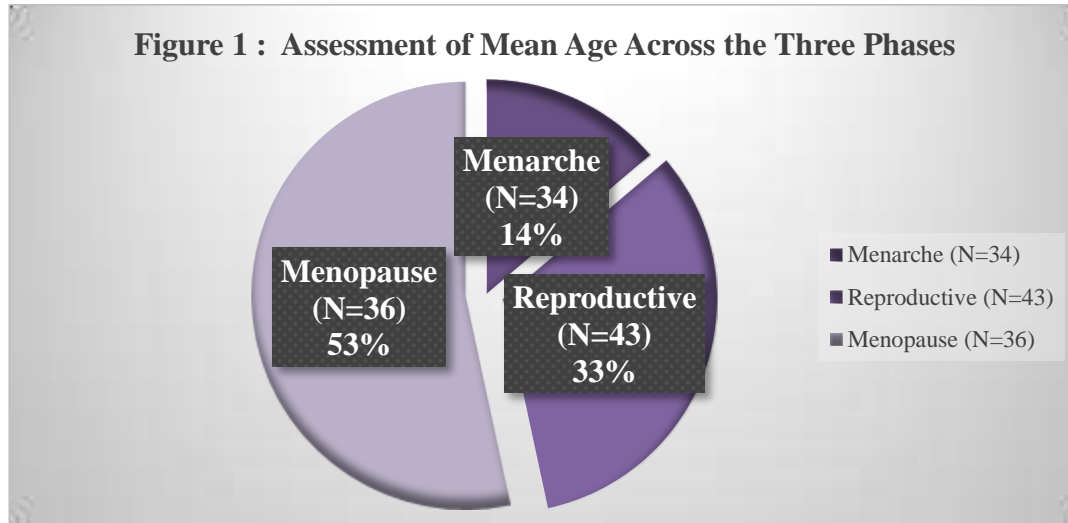


Table 1: Prevalence of Menstrual and Related Symptoms Across Menarche and Reproductive Phases

Symptom/Condition	Menarche (N=34)	Reproductive (N=43)
Anger or irritability	No: 16 (47.1%) Yes: 18 (52.9%)	No: 14 (32.6%) Yes: 29 (67.4%)
Anxiety or tension	No: 12 (35.3%) Yes: 22 (64.7%)	No: 13 (30.2%) Yes: 30 (69.8%)
Tearfulness or increased sensitivity to rejection	No: 19 (55.9%) Yes: 15 (44.1%)	No: 22 (51.2%) Yes: 21 (48.8%)
Feeling depressed or hopeless	No: 16 (47.1%) Yes: 18 (52.9%)	No: 14 (32.6%) Yes: 29 (67.4%)
Difficulty with sleeping	No: 14 (41.2%) Yes: 20 (58.8%)	No: 14 (32.6%) Yes: 29 (67.4%)
Abdominal pain (so that you need to take painkillers)	No: 16 (47.1%) Yes: 18 (52.9%)	No: 15 (34.9%) Yes: 28 (65.1%)
Breast tenderness, abdominal bloating and/or swelling	No: 24 (70.6%) Yes: 10 (29.4%)	No: 24 (55.8%) Yes: 19 (44.2%)
Headache	No: 21 (61.8%) Yes: 13 (38.2%)	No: 24 (55.8%) Yes: 19 (44.2%)
Have you ever felt sick due to menstrual problems?	No: 29 (85.3%) Yes: 5 (14.7%)	No: 31 (72.1%) Yes: 12 (27.9%)
Prevalence of Gynaecological and Related Health Conditions Across Menarche and reproductive Phase		
Ovarian cyst or cysts	Yes: 2 (5.9%) No: 32 (94.1%)	Yes: 10 (23.3%) No: 33 (76.7%)
Polycystic ovaries or PCOS	Yes: 2 (5.9%) No: 32 (94.1%)	Yes: 10 (23.3%) No: 33 (76.7%)

Fibroids	Yes: 2 (5.9%)	Yes: 13 (30.2%)
	No: 32 (94.1%)	No: 30 (69.8%)
Endometriosis	Yes: 1 (2.9%)	Yes: 5 (11.6%)
	No: 33 (97.1%)	No: 38 (88.4%)
Eating disorders (anorexia, bulimia)	Yes: 16 (47.1%)	Yes: 25 (58.1%)
	No: 18 (52.9%)	No: 18 (41.9%)
Acne	Yes: 22 (64.7%)	Yes: 30 (69.8%)
	No: 12 (35.3%)	No: 13 (30.2%)
Infertility	Yes: 0 (0.0%)	Yes: 5 (11.6%)
	No: 34 (100.0%)	No: 38 (88.4%)

Table 2: Menopause-Specific Quality of Life Questionnaire

Symptom/Condition of Menopause	No	Yes
Hot flushes or flashes	9 (25.0%)	27 (75.0%)
Night sweats	13 (36.1%)	23 (63.9%)
Sweating	8 (22.2%)	28 (77.8%)
Being dissatisfied with my personal life	28 (77.8%)	8 (22.2%)
Feeling anxious or nervous	4 (11.1%)	32 (88.9%)
Experiencing poor memory	28 (77.8%)	8 (22.2%)
Accomplishing less than I used to	13 (36.1%)	23 (63.9%)
Feeling depressed down or blue	2 (5.6%)	34 (94.4%)
Being impatient with other people	3 (8.3%)	33 (91.7%)
Feelings of wanting to be alone	6 (16.7%)	30 (83.3%)
Flatulence (wind) or gas pains	4 (11.1%)	32 (88.9%)
Aching in muscles and joints	7 (19.4%)	29 (80.6%)
Feeling tired or worn out	5 (13.9%)	31 (86.1%)
Difficulty sleeping	4 (11.1%)	32 (88.9%)
Aches in back of neck or head	7 (19.4%)	29 (80.6%)
Decrease in physical strength	9 (25.0%)	27 (75.0%)
Decrease in stamina	3 (8.3%)	33 (91.7%)
Feeling a lack of energy	2 (5.6%)	34 (94.4%)
Drying skin	4 (11.1%)	32 (88.9%)
Weight gain	19 (52.8%)	17 (47.2%)
Increase facial hair	29 (80.6%)	7 (19.4%)
Changes in appearance, texture, or tone of your skin	6 (16.7%)	30 (83.3%)
Feeling bloated	3 (8.3%)	33 (91.7%)
Low backache	4 (11.1%)	32 (88.9%)
Frequent urination	3 (8.3%)	33 (91.7%)
Involuntary urination when laughing or coughing	6 (16.7%)	30 (83.3%)
Change in your sexual desire	8 (22.2%)	28 (77.8%)
Vaginal dryness during intercourse	7 (19.4%)	29 (80.6%)
Avoiding intimacy	13 (36.1%)	23 (63.9%)

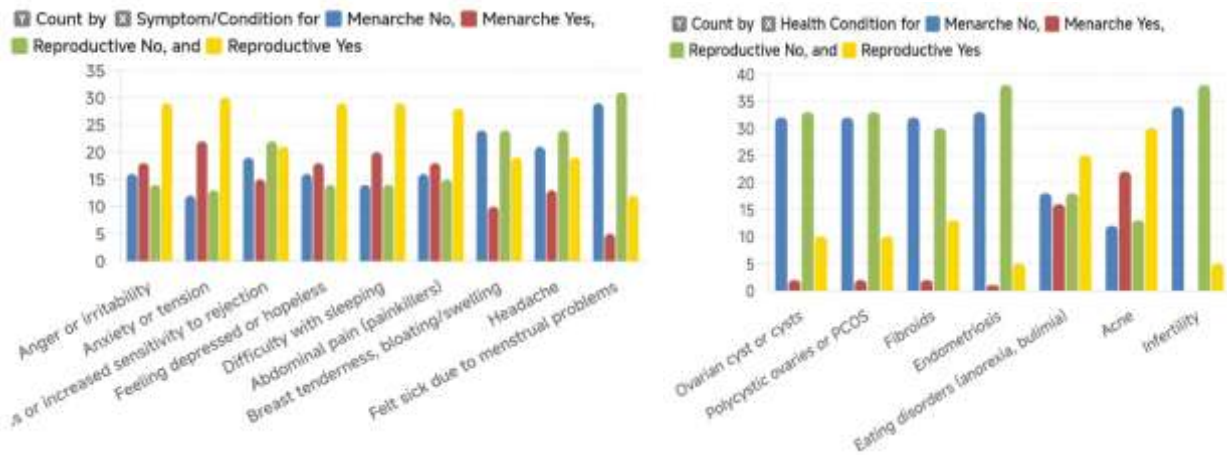


Fig 2 Menstrual and Gynaecological, Related Symptoms Across Menarche and Reproductive Phases

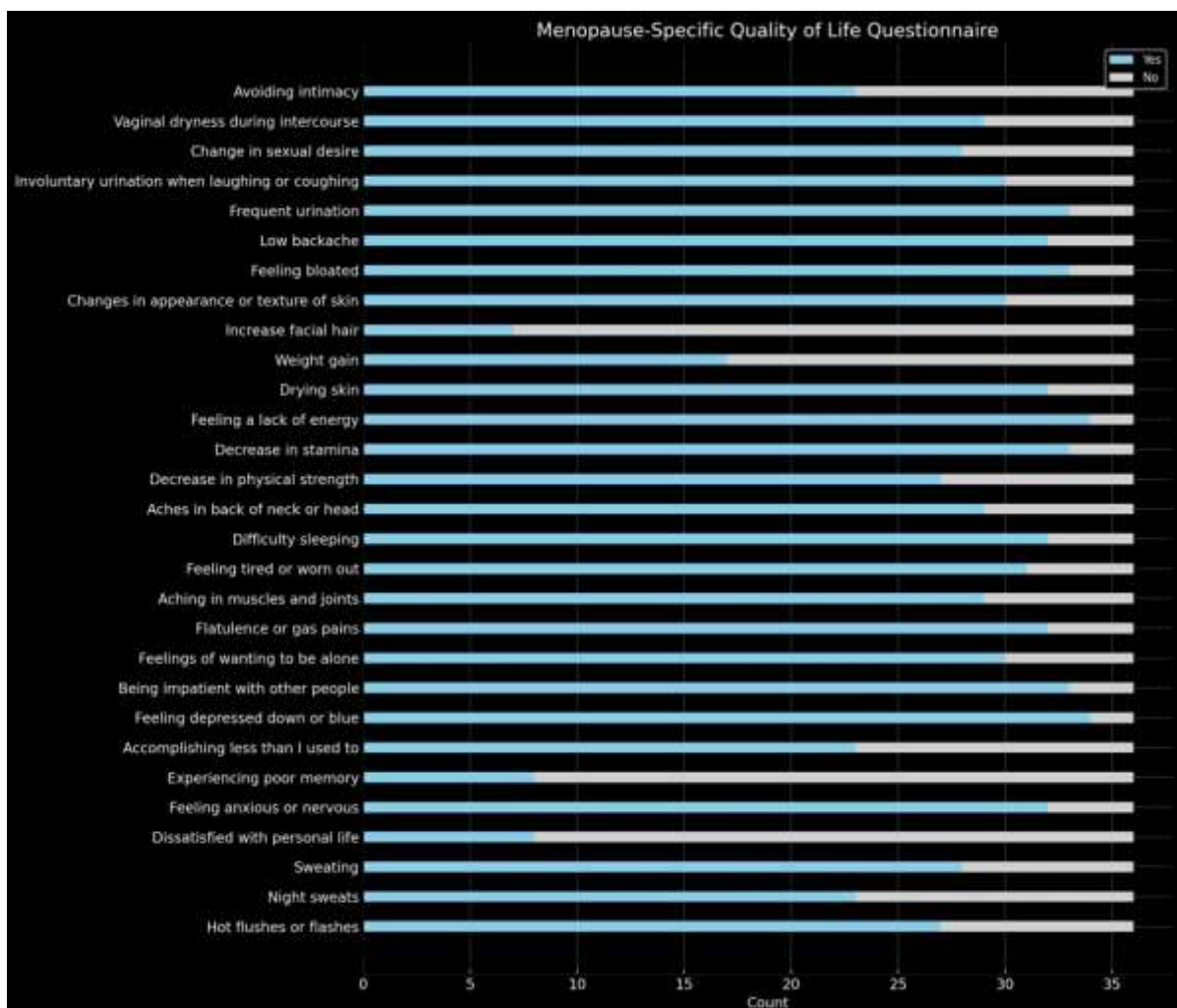


Fig 3 Symptom/Condition of Menopause

Table 1 presents the prevalence of menstrual-related symptoms across menarche and the reproductive phase. A significant percentage of participants experienced anger (52.9% and 67.4%), anxiety (64.7% and 69.8%), depression (52.9% and 67.4%), difficulty sleeping (58.8% and 67.4%), abdominal pain (52.9% and 65.1%), breast tenderness (29.4% and 44.2%), headaches (38.2% and 44.2%), and general malaise due to menstruation (14.7% and 27.9%) during menarche and the reproductive phase, respectively.

The reproductive phase exhibited a significantly higher prevalence of gynecological conditions compared to menarche. Specifically, ovarian cysts (23.3% vs. 5.9%), polycystic ovary syndrome

(PCOS) (23.3% vs. 5.9%), fibroids (30.2% vs. 5.9%), and endometriosis (11.6% vs. 2.9%) are more common among reproductive-aged participants. While eating disorders (47.1% and 58.1%) and acne (64.7% and 69.8%) are prevalent across both phases, infertility is exclusively observed during the reproductive years (11.6%).

Table 2 Menopausal women reported a wide range of symptoms significantly impacting their quality of life. Common complaints included vasomotor symptoms such as hot flashes (75.0%), night sweats (63.9%), and increased sweating (77.8%). Psychological symptoms encompassed anxiety (88.9%), depression (94.4%), mood swings (impatience, wanting to be alone), and memory difficulties (22.2%). Physical manifestations involved musculoskeletal pain (aches, joint pain), fatigue (86.1%), sleep disturbances (88.9%), and changes in weight, skin, and urinary function. Additionally, sexual dysfunction is prevalent, with vaginal dryness (80.6%) and decreased desire (77.8%) being commonly reported.

4. Discussion

The present study underscores the significant burden of menstrual-related symptoms, gynecological conditions, and menopausal challenges across the female reproductive lifespan. Consistent with previous research (Shrinjana Dhar et al., 2023), our findings reveal a high prevalence of menstrual disorders such as dysmenorrhea, polymenorrhea, and irregular cycles among the reproductive-age population.(48)

Statistical analysis demonstrated a strong association between reproductive phase and the experience of symptoms like anger, anxiety, depression, and physical discomfort. The increased prevalence of gynecological conditions, including ovarian cysts, PCOS, and fibroids, during the reproductive years is in line with established epidemiological data.

Menopause is characterized by a constellation of symptoms, including vasomotor disturbances, psychological distress, and somatic complaints, significantly impacting women's quality of life.

These findings emphasize the need for comprehensive healthcare strategies addressing the unique needs of women throughout their reproductive lifespan. Early intervention, focused education, and accessible healthcare services are crucial for mitigating the impact of menstrual disorders, gynecological conditions, and menopausal symptoms. (49) To find the underlying improvement and create focused interventions, further research is necessary.

5. Conclusion

This study comprehensively examines the prevalence of menstrual-related symptoms, gynecological conditions, and menopause-specific quality of life issues across different stages of the reproductive lifespan, highlighting significant patterns and associations.

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