

A Study to Assess Women's Health in Selected Educational Institutes of Pune City

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ABSTRACT

Background: Women in academic settings often encounter a range of health challenges influenced by academic workload, psychological stress, lifestyle habits, nutritional practices, and limited health-seeking behaviour. These factors can negatively affect their physical, mental, and reproductive health, thereby impacting their academic performance and overall quality of life. Educational institutions provide an ideal environment for implementing preventive healthcare measures, health education, and regular screening programs that can improve the health and well-being of women. Understanding the health status of women in these settings is essential for planning effective health promotion strategies and interventions.

Aim: The present study aimed to assess the health status of women in selected educational institutes of Pune city. **Methods:** A descriptive research design was adopted for the study. A total of 500 women aged between 18 and 45 years were selected from various educational institutes in Pune city using a convenience sampling technique. Data were collected using a structured questionnaire that included demographic information and questions related to general health status, menstrual health, nutritional practices, and common health problems. The collected data were analysed using descriptive statistics such as frequency, percentage, mean, and standard deviation, along with inferential statistics to determine any association between health status and selected demographic variables. **Results:** The findings revealed that several participants experienced common health concerns, including anaemia, menstrual irregularities, and nutritional deficiencies. These conditions were observed across different age groups and educational backgrounds. Despite the prevalence of these health problems, inferential analysis indicated that there was no statistically significant association between women's health status and the selected demographic variables. **Conclusion:** The study emphasizes the importance of strengthening women's health services within educational institutions. Regular health screening, nutritional assessment, menstrual health awareness, and targeted health education programmes should be integrated into institutional health initiatives to promote early identification, prevention, and management of common health problems among women. Such interventions can contribute to improved health outcomes, enhanced academic productivity, and overall well-being of women in educational settings.

Key words: Assess, Woman, Health, Educational Institute, Health Assessment

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INTRODUCTION

Women's health is a vital component of public health and plays a significant role in the overall development and well-being of society. Health among women encompasses physical, reproductive, mental, and social well-being and is influenced by various biological, environmental, socioeconomic, and lifestyle factors.¹ Maintaining good health among women is essential not only for their personal well-being but also for the health and welfare of families and communities.

In recent years, women have increasingly participated in higher education and professional careers, leading to changes in their lifestyle, dietary habits, physical activity patterns, and stress levels. While educational institutions provide opportunities for academic and personal growth, women studying or working in such settings may experience health challenges related to nutrition, reproductive health, mental stress, sleep disturbances, and lifestyle behaviours. Academic

demands, social expectations, work-life balance, and limited time for self-care may contribute to various health concerns.²

Physical health problems such as obesity, under nutrition, anaemia, and hypertension continue to affect a considerable number of women. Reproductive health issues, including menstrual irregularities, and poly-cystic ovary syndrome (PCOS), are increasingly reported among young and adult women and can significantly affect their quality of life. In addition, mental health concerns such as stress, anxiety, and poor sleep quality have become common among women due to academic, occupational, and personal responsibilities.³ Educational institutes represent an important setting for assessing women's health because they include women from diverse backgrounds and age groups. Understanding their health status can help identify common health problems, promote awareness, and guide the development of targeted interventions and health promotion programs. Early

identification and management of health issues can contribute to improved academic performance, productivity, and overall quality of life.⁴

Although several studies have examined specific aspects of women's health, there is a need for comprehensive assessment encompassing physical, reproductive, and mental health domains among women in educational settings. Therefore, the present study was undertaken to assess the health status of women in selected educational institutes of Pune City and to identify the prevalence of common health concerns.⁵ The findings of the study may provide valuable information for healthcare professionals, educators, and policymakers in planning appropriate health promotion and preventive strategies for women.

Need of the Study

Women's health is a multidimensional concept encompassing physical, reproductive, mental, and social well-being. Maintaining good health is essential for women's personal development, educational achievement, and professional productivity. Although considerable progress has been made in healthcare services and health awareness, many women continue to experience common health problems such as anaemia, nutritional deficiencies, menstrual disorders, obesity, stress, anxiety, sleep disturbances, and lifestyle-related illnesses. These conditions not only affect their quality of life but also reduce academic performance, work efficiency, and overall well-being. Studies have reported that anaemia and poor nutritional status remain major public health concerns among women of reproductive age, particularly in developing countries.¹

Women studying or working in educational institutes encounter unique health challenges due to academic workload, professional commitments, irregular dietary habits, sedentary lifestyles, inadequate physical activity, and psychosocial stress. These factors may increase the risk of physical and mental health problems, many of which remain undiagnosed because of limited health-seeking behaviour and inadequate routine health screening.² Research has shown that stress, menstrual health problems, and unhealthy lifestyle practices are common among women in educational settings and may negatively influence their physical and psychological health.³

Despite increasing attention to women's health, there is limited research comprehensively assessing physical, reproductive, nutritional, and mental health among women in educational institutions. Most available studies focus on individual health conditions rather than providing an overall assessment of women's health status.⁴ Therefore, there is a need to generate evidence regarding the health status of women in educational settings to identify common health problems, associated risk factors, and priority areas for intervention.

The findings of the present study will provide valuable evidence for healthcare professionals, educational administrators, and policymakers in planning comprehensive health screening programmes, health education initiatives, nutritional counselling, and preventive healthcare services.⁵ The study will also promote awareness among women regarding healthy lifestyle practices and timely utilization of healthcare services. Therefore, the present study was undertaken to assess the health status of women in selected educational institutes of Pune City and to generate evidence that can support the development of effective health promotion strategies and improve the overall health and well-being of women.

Aim of the Study

The aim of the study was to assess the health status of women in selected educational institutes of Pune City

Objectives

1. To assess the women's health in selected educational institute of Pune city.
2. To find the association with selected demographic variables.

MATERIAL AND METHODS

The present study adopted a quantitative research approach with a descriptive research design to assess the health status of women in selected educational institutes of Pune City. The study was conducted among 500 women aged 18–45 years, who were selected from various educational institutes using a convenience sampling technique. Women who were willing to participate and available during the period of data collection were included in the study.

Data were collected using a structured self-administered questionnaire developed after an extensive review of the literature and expert consultation. The tool consisted of two sections. Section I included demographic variables and **section II** comprised items related to women's health, including general physical health, nutritional status, menstrual health, common health problems, lifestyle practices, and health-seeking behaviour. The questionnaire was reviewed by subject experts to establish content validity before its administration.

The reliability of the research tool was established using Cronbach's alpha method, and the obtained reliability coefficient was 0.82, indicating that the instrument had good internal consistency and was reliable for data collection. A pilot study was conducted on 50 women (10% of the total sample) from educational institutes that were not included in the final study to assess the feasibility, clarity, and practicality of the research tool and data collection procedure. The pilot study confirmed that the questionnaire was understandable, feasible to administer, and suitable for the main study;

therefore, no major modifications were required before the final data collection.

RESULTS

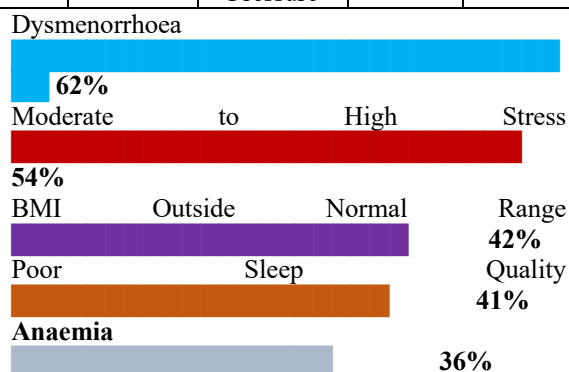
Section I: Finding related to description of findings related demographic characteristics in term of frequency and percentage.

The demographic characteristics of the participants revealed that the majority (50%) belonged to the 36–45 years age group, followed by 30% in the 27–35 years age group and 20% in the 18–26 years age group. With regard to educational status, 39% of the participants had completed postgraduate education, 37% were graduates, and 24% had obtained a Ph.D. degree. Regarding marital status, the majority of the participants (70%) were married, while 20% were unmarried and 10% were single.

Section II

Table no 1: Findings related to women's health n=500

Sr. no	Health Domain	Health Indicator	Frequency	Percentage
1	Reproductive Health	Dysmenorrhoea	310	62%
2	Mental Health	Moderate to High Perceived Stress	270	54%
3	Physical Health	BMI Outside Normal Range	210	42%
4	Mental Health	Poor Sleep Quality	205	41%
5	Physical Health	Anaemia	180	36%
6	Reproductive Health	Irregular Menstrual Cycles	140	28%
	Reproductive Health	Polycystic Ovary Syndrome	75	15%
	Physical Health	Elevated Blood Pressure	40	8%



Irregular Menstrual Cycles

28%

PCOS

15%

Elevated Blood Pressure

8%

Fig. no 1: Assessment of women's health under physical health, reproductive health, and mental health domains

The above table no 1 fig no 1 shows the assessment of women's health was carried out under three major domains: physical health, reproductive health, and mental health. The findings revealed that several participants experienced common health problems affecting their overall well-being.

Physical Health: The analysis of physical health indicators showed that 42% of the participants had a Body Mass Index (BMI) outside the normal range, indicating either underweight or overweight status. Anaemia was observed among 36% of the women, with haemoglobin levels below 12 g/dL. In addition, 8% of the participants were found to have elevated blood pressure, suggesting a risk for hypertension.

Reproductive Health: The findings related to reproductive health indicated that 28% of the participants reported irregular menstrual cycles. Polycystic Ovary Syndrome (PCOS) had been diagnosed in 15% of the women. Dysmenorrhoea (painful menstruation) was the most common reproductive health problem, affecting 62% of the participants.

Mental Health: Assessment of mental health showed that 54% of the participants experienced moderate to high levels of perceived stress, as measured using the Perceived Stress Scale (PSS-10). Furthermore, 41% reported poor sleep quality, indicating significant concerns related to psychological well-being and sleep health.

Overall, the findings indicate that nutritional problems, menstrual health issues, stress, and poor sleep quality were common among women in the selected educational institutes, highlighting the need for regular health screening and health promotion programmes.

Section III: Finding related to association with selected demographic variables

The association between selected demographic variables and the health status of women was analysed using **Fisher's Exact Test** to determine whether significant relationships existed between participants' demographic characteristics and their overall health status. The demographic variables considered for analysis included age, educational status, and marital status. The findings revealed that there was no statistically significant association between the health status of women and any of the selected demographic variables ($p > 0.05$). This indicates that variations in age group, educational qualification, and marital status did not

significantly influence the health status of the participants in the present study. The results suggest that health concerns among women were observed across different demographic categories, emphasizing the need for universal health screening, health education, and preventive healthcare interventions for women in educational institutes irrespective of their background characteristics.

DISCUSSION

The present study assessed the health status of women in selected educational institutes of Pune City and examined the association between health status and selected demographic variables. The findings revealed that women experienced various physical, reproductive, and mental health concerns. A considerable proportion of participants had health-related problems, with abnormal BMI (42%) and anaemia (36%) being among the major physical health concerns identified. These findings indicate the presence of nutritional and lifestyle-related health issues among women, which may influence their overall quality of life and productivity.

The findings of the present study are consistent with the study conducted by **Kaur et al. (2021)**, which reported a significant prevalence of anaemia and nutritional problems among women of reproductive age. The authors highlighted that inadequate dietary intake, poor nutritional practices, and increased physiological demands contribute to a higher risk of anaemia among women. Similarly, the present study identified anaemia as an important health concern, emphasizing the need for regular nutritional assessment and health education interventions⁶.

Regarding reproductive health, the present study found that dysmenorrhoea was the most prevalent problem, affecting 62% of participants, followed by irregular menstrual cycles (28%) and PCOS (15%). Similar findings were reported by **Rafique and Al-Sheikh (2018)**, who observed that menstrual problems, particularly dysmenorrhoea, were common among young women and had a negative impact on daily activities, academic performance, and psychological well-being. These findings support the importance of menstrual health awareness and early identification of reproductive health problems among women⁷.

The present study also identified significant mental health concerns, with 54% of participants experiencing moderate to high perceived stress and 41% reporting poor sleep quality. These results are supported by **Sivertsen et al. (2019)**, who found that stress and sleep disturbances were common among young adults and were associated with reduced well-being and functional performance⁸.

The analysis of association between demographic variables and health status using Fisher's Exact Test showed no statistically significant association

between health status and selected demographic variables ($p > 0.05$). Similar findings were reported by **Patel et al. (2020)**, where demographic characteristics were not significantly associated with overall health status among women. The present findings highlight that health problems can occur across different demographic groups, indicating the need for comprehensive health screening and preventive healthcare programmes for all women in educational settings⁹.

CONCLUSION

The present study concluded that the majority of women had an average health status, with several health concerns identified across physical, reproductive, and mental health domains. The findings revealed that a considerable proportion of participants experienced abnormal BMI, anaemia, menstrual problems such as dysmenorrhoea and irregular cycles, moderate to high levels of perceived stress, and poor sleep quality. These health issues may have a significant impact on women's physical functioning, psychological well-being, academic performance, and overall quality of life.

The association between selected demographic variables and health status was assessed using Fisher's Exact Test. The results indicated that there was no statistically significant association between health status and demographic variables such as age, educational status, and marital status ($p > 0.05$). This suggests that health concerns were present among women across different demographic groups and were not restricted to any particular category.

Based on the study findings, it is concluded that women require comprehensive and continuous health promotion strategies focusing on nutritional improvement, menstrual and reproductive health awareness, stress management, and mental health support. Regular health screening programmes, counselling services, and preventive healthcare initiatives within educational institutes are recommended to facilitate early identification and management of health problems. Such interventions can contribute to improving women's health status and enhancing their overall well-being.

Recommendations

1. Annual health check-ups for all women in institutes
2. Nutritional interventions and iron supplementation programs
3. Counselling cells for stress management
4. Awareness sessions on PCOS, menstrual hygiene, and lifestyle modification

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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REFERENCES:

1. Sehgal M, Jatana S, Johnson L. Developing and validating a Women's Health Index for India. *J Public Health Policy*. 2025;46(2):342-358. doi:10.1057/s41271-025-025-
2. Kumar A, Khan ME. Health status of women in India: evidence from National Family Health Survey-3 (2005-06) and future outlook. *Res Pract Soc Sci*. 2010;6(2):1-21.
3. Dey J, Ramanathan C, Dutta S. Issues and concerns of women's health in India: a case study of Cachar, Assam. *Indian J Hum Dev*. 2020;2(3):1-14. doi:10.1177/2516602620957781.
4. Pasa K, Singh NM, Bharali N, Hmar T, Schaschl H, Baruah T, et al. Reproductive health status in India: comparison of NFHS-IV and NFHS-V findings. *J Health Manag*. 2024. doi:10.1177/2277436X241282596.
5. Jungari S, Chauhan BG. Caste, wealth and regional inequalities in health status of women and children in India. *Contemp Voice Dalit*. 2017;9(1):87-100. doi:10.1177/2455328X17690644.
6. Kaur et al. (2021), prevalence of anaemia and nutritional problems among women of reproductive age. 100712 <https://doi.org/10.1016/j.cegh.2021.100712>
7. Rafique and Al-Sheikh (2018), Prevalence of menstrual problems and their association with psychological stress in young female students studying health sciences Saudi Medical Journal 39(1):67-73, DOI: 10.15537/smj.2018.1.21438
8. Sivertsen et al. (2019), Insomnia, sleep duration and academic performance: a national survey of Norwegian college and university students, 100005 <https://doi.org/10.1016/j.sleepx.2019.100005>
9. Patel et al. (2020) Naturally-occurring cholesterol analogues in lipid nanoparticles induce polymorphic shape and enhance intracellular delivery of mRNA, DOI: 10.1038/s41467-020-14527-2