Original Research Paper

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TO FIND THE LEVEL OF PHYSICAL ACTIVITY AMONG HOUSEWIVES AND WORKING WOMEN.

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ABSTRACT **Background:** Physical activity is defined as any body movement created by the muscles that move the skeletal system, which results in the expenditure of power. While housework, stair climbing, and daytime walking are typically classified as unstructured physical activities, structured physical activities include things like fitness or gymnastics exercises, sports lessons conducted under the guidance of a trainer. Women tend to report low participation in regular activity and little to no engagement in vigorous activity. Women employed in offices frequently spend lengthy hours in front of computers. Many housewives believe household chores constitute significant physical activity, which is a misconception. The study aimed to understand the pattern of physical activity in housewives and working women as it can help in understanding the health risk and benefits associated with different lifestyles. Comparing these can reveal how employment status affects physical activity. **Method:** The study enrolled 126 participants (63 housewives and 63 working women). The International physical activity questionnaire (IPAQ) was used to assess physical activity level. **Result:** According to IPAQ 33.9% housewives and 22.1% working women were inactive and 61.3% of housewives and 65.1% of working women 65.1% were minimally active. HEPA active, included 12.7% working women and 4.8% housewives. When comparison of MET was done, findings indicated that working women exhibited higher mean values for total, moderate, and vigorous physical activity (MET-min/week). **Conclusion:** The study concluded that, the comparison of physical activity level among housewives and working women showed $p > 0.05$ i.e. difference between the two groups was statistically non-significant.

KEYWORDS : Physical Activity, Housewives, Working women.

INTRODUCTION

Physical activity is defined as any body movement created by the muscles that move the skeletal system, which results in the expenditure of power. Physical activity refers to all movement, including during leisure time, for transport to get to and from places, or as part of a person's work or domestic activities. While housework, stair climbing, and daytime walking are typically classified as unstructured physical activities, structured physical activities include things like fitness or gymnastics exercises, sports lessons conducted under the guidance of a trainer, and using the stairs.[1]

According to U.S. Department of Health and Human Services, regular physical activity is linked to lower rates of death and morbidity from heart disease, colon cancer, complications from being overweight or obese, and improvements in emotional well-being.[2] However, despite these well-documented benefits, women tend to report low participation in regular activity and little to no engagement in vigorous activity.[2]

The usage of computers in the workplace is steadily rising as a result of global technological advancement. Women employed in offices frequently spend lengthy hours in front of computers. According to earlier studies, office employees spend 10.6 hours a day sitting, and extended sitting is linked to major health issues. [3]

Housewives typically engage in activities such as cooking, cleaning, shopping, and childcare. These activities can be physically demanding, but they might not always provide a consistent level of aerobic exercise or structured physical activity. Many housewives believe household chores constitute significant physical activity, which is a misconception.[4]

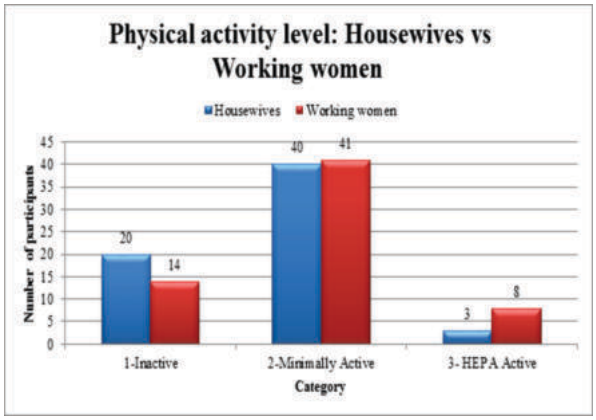
MATERIAL AND METHODS

The cross-sectional study was conducted in 126 participants (63 housewives and 63 working women) in Pune region. The subjects were recruited on the basis of inclusion and exclusion criteria. The study was explained and consent was taken from the participants. To find the physical activity level, the International physical activity questionnaire (IPAQ) was used and demographic data was collected. The IPAQ short form is a self-administered questionnaire that measures physical activity across walking, moderate-intensity, and vigorous-intensity domains, expressed in MET-minutes per week. The data was collected and entered into Microsoft Excel 2019 for statistical analysis. Comparisons between housewives and working women were carried out using the independent samples t-test to determine significant differences between the two groups. A p-value < 0.05 was considered statistically significant. The results were presented in the form of tables, graphs, and interpretations to highlight differences in physical activity levels of housewives and working women.

RESULTS

The research was conducted to find the physical activity level in housewives and working women. A total was 126 participants were included, 63 housewives and 63 working women.

1. Comparison of Physical Activity Level According to IPAQ: Housewives vs Working women.

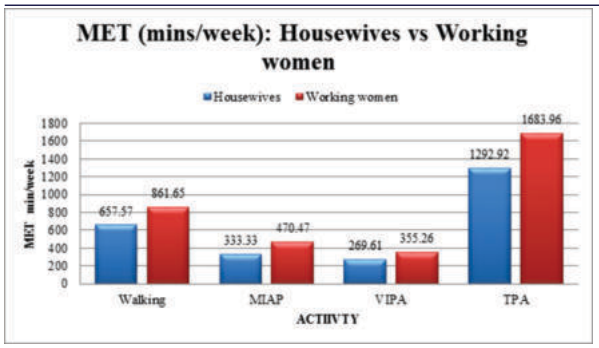


Graph No:1

Interpretation

The graph shows that 20 housewives (33.9%) and 14 working women (22.1%)were inactive. Most participants in both group were minimally active, with 40 of housewives (61.3%) and 41 of working women (65.1%) falling in this category. Only a small proportion were HEPA active, with 8 working women (12.7%) and 3 housewives (4.8%) falling in this category.

2. Parameters of IPAQ in MET(mins /week): Housewives vs Working Women



Graph No: 2

Interpretation

The mean MET values for housewives were 657.57 for walking, 333.33 for moderate-intensity physical activity (MIPA), 269.61 for vigorous-intensity physical activity (VIPA), and 1292.92 for total physical activity (TPA). For working women, the mean MET values were 861.65 for walking, 470.47 for MIPA, 355.26 for VIPA, and 1683.96 for TPA.

When comparison of MET was done between housewives and working women using Independent t-test findings indicated that although working women exhibited higher mean values for total, moderate, and vigorous physical activity (MET-min/week), the difference between the two groups was statistically non-significant ($p > 0.05$).

DISCUSSION

This cross-sectional study was conducted to assess and compare the physical activity levels of housewives and working women using the International Physical Activity Questionnaire (IPAQ). A total of 126 participants were enrolled, comprising 63 housewives and 63 working women. Demographic findings indicated that housewives show mean age of 36.30 years than working women 31.12 years. The age difference indicates that housewives may engage less in physical activity due to family responsibilities, while younger working women benefit from more movement through work and social environments. The housewives had a slightly higher BMI (24.04 kg/m²) than working women (23.52 kg/m²), though the difference was not significant. This implies that increased physical fitness is not always the result of professional engagement, even though it may promote activity. [5]

The findings indicated that although working women exhibited higher mean values for total, moderate, and vigorous physical activity (MET-min/week), the difference between the two groups was statistically non-significant ($p > 0.05$). The absence of a significant difference may be attributed to several factors. First, both groups are likely to participate in similar levels of moderate-intensity exercise throughout the day, but in different ways: working women via their jobs and commutes, and housewives through domestic chores and caregiving responsibilities. Second, differences in domestic duty among housewives and differences in job type among working women (e.g., sedentary office work versus physically demanding occupations) could balance out total energy consumption across both groups. The working women are more likely to engage in intentional activities like commuting or leisure exercise, even though their overall levels of physical activity are similar to those of homemakers. [6]

According to WHO (2014) and The Lancet Global Health (2022), over 50% of Indian women do not exceed the recommended 600 MET-min/week level, indicating an increase in physical inactivity. This is consistent with the results of the current study, which showed that only a tiny portion of individuals (12.7% of working women and 3.2% of housewives) were categorized as HEPA active. These findings highlight a public health concern about women's inadequate physical exercise, irrespective of their employment level.[4]

The statistically significant difference observed in sitting time is because office-based workers spend extended hours sitting (up to 10 hours daily), leading to sedentary behavior and related health risks. The extended periods of sitting without sufficient breaks worsen musculoskeletal pain and lower general physical well-being. This corroborates the current study's finding that, although having higher MET levels for physical activity, working women's inactive hours were significantly higher, indicating an imbalance between activity and rest patterns.[7][8]

Furthermore, regular physical exercise improves health outcomes and lowers long-term musculoskeletal problems, highlighting the need of encouraging regular movement among working and housewives. These results demonstrate how incorporating physical activity into daily living can greatly enhance musculoskeletal and metabolic health outcomes, whether through organized exercise, ergonomic work practices, or active household routines. [9]

Overall, the study's findings show that while working women often engage in more physical activity overall, they also exhibit more sedentary behavior as a result of extended periods of sitting. Despite being less sedentary, housewives mostly participate in low-to-moderate unstructured activities. The inability of both groups to reach ideal HEPA levels highlights the necessity of focused public health initiatives promoting organized and prolonged physical activity among women, irrespective of their line of work.

CONCLUSION

The comparison of physical activity level among housewives and working women showed that the difference between the two groups was statistically non-significant ($p > 0.05$) thus implying that employment status did not have direct influence on variation in physical activity level in both groups. Hence, target strategies are essential to encourage regular, health-enhancing physical activity.

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