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A Study to Assess the Knowledge and Prevalence of Obesity among Reproductive Aged Women's of Akkamahadevi Women College of Bagalkote

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Abstract **Original Research Article**

Background*:** Obesity has become a major public health concern worldwide, affecting people across all age groups, especially women in their reproductive age. It is defined as abnormal or excessive fat accumulation that presents a risk to health. The increasing prevalence of obesity is mainly due to sedentary lifestyle, unhealthy dietary habits, stress, and lack of physical activity. ***Methods*:** A Cross-sectional research design, was used for present study. 100 reproductive age women (15-49 yrs) was selected through simple random technique method. The data was analyzed by using descriptive and inferential statistics. ***Results: Findings of the study revealed that mean age of the study population was 11.64 yrs. The knowledge of obesity among women in reveals that out of 100 highest percentage (30%) of women had good knowledge, (52%) of women Average knowledge, (18%) of women had poor. The prevalence of obesity among women reveals that out of 100 women, highest percentage (66%) of women had Mild obesity, (24%) of women had moderate obesity and 14% of women had severs obesity. ***Conclusion*:** The study concludes that majority percentage (66%) of women had mild obesity, highest percentage (66%) of women had Mild obesity, (24%) of women had moderate obesity and 14% of women had severs obesity. This indicates that family mental health history plays an important role in influencing obesity among adolescents, while other background variables do not have a significant impact.

Keywords: Assess, Obesity, Reproductive Aged, Knowledge and Prevalence.

INTRODUCTION

Healthy eating is one of the foundations of a healthy lifestyle. A proper diet yields numerous benefits, preventing a variety of diseases and helping people stay physically fit and live longer. In fact, many health agencies such as American Heart Association (AHA), American Cancer Society (ACS), and community-based programs recommend a healthy diet as a preventive measure and treatment for obesity, diabetes (type-1, type-2), cardiovascular disease, and various cancers [1]. Obesity is a pressing global public health issue. Over the past three decades, the prevalence of obesity has doubled or tripled in many countries, most likely due to sedentary lifestyles, urbanization, and the rising consumption of processed foods with high calorie content. According to the World Health Organization (WHO), overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. In 2016, an estimation of more than 1.9 billion adults worldwide was overweight [2]. As reported in the World Obesity Atlas 2024 by the World Obesity Federation, the projections for 2035 suggest that more than 1.77 billion people will be overweight, and 1.53 billion people will be affected by obesity. This will represent 54% of all adults worldwide. A significant proportion of these individuals will be in low- and middle-income countries. In 2024, more than 1 billion people live with obesity, and 1 of 8 deaths attributed to non-communicable diseases are driven by overweight or obesity, mostly due to diabetes, stroke, coronary heart disease, and cancer [3].

MATERIALS AND METHODS

Research approach quantitative research approach. The present study is non-Experimental research Design. A simple random technique were used to select of 100 women's through randomization of subjects to the random sampling technique by lottery method. From Akka Mahadevi women's Bagalkot. Written consent was taken from participants for the study. Self-structured questionnaires for Socio

demographic variables, were used as tool for data collection. The data was analyzed by using descriptive and inferential statistical.

Study Design: The study design adopted for this study was descriptive research Design.

Setting of the study: The present study was conducted in Akka Mahadevi college of Bagalkot.

Participants: In the present study participant were women's who are have studying Akka Mahadevi college of Bagalkot. who met the inclusion criteria were selected as sample for the study.

Instruments: The study was conducted using a Structured Questionnaires with items related socio demographic data.

DESCRIPTION OF DATA COLLECTION INSTRUMENTS

Part I: Questionnaires to assess socio-demographic data of reproductive age women's.

PART II: structured knowledge Questionnaires to assess the knowledge of obesity among reproductive age women's.

Data Collection Procedures:

Data collection was done for about 1 Months from date 04/02/2026 to 9/03/2026 at akka mahadevi women's college, Bagalkot. A formal Permission was obtained from the Principal of Sajjalashree Institute of Nursing Sciences Navanagar, Bagalkot. Then permission was obtained from the principal of Akka Mahadevi women's college, Bagalkot. The purpose of the study was explained to the principal of Akka Mahadevi women's collage l. The investigator given self-introduction and explained the purpose of data collection to the subjects and subject's willingness to participate in the study was ascertained. The subject was assured the anonymity and confidentiality of the information provided by them. Knowledge questionnaires was administered to assess the basic level of knowledge of obesity along with BMI scale to assess the prevalence of obesity.

Variable under Study: In this study variable refers to knowledge and prevalence of obesity.

Sociodemographic Variables:

Age, Religion, Education Level, Occupation, Family monthly income, Marital status, Area of Residence, Height (cm), Weight (kg), Body Mass Index (BMI), Family history of obesity, Source of information about obesity.

Statistical Analysis:

The obtained data were statistically examined in terms of the objectives of the study using descriptive and inferential statistics. A master sheet was prepared with responses given by the study participants. Frequencies and Percentage was used for the analysis of demographic data, and The Chi square(x^2) test to find out the association between prevalence of obesity and selected socio-demographic variable among reproductive aged women's.

Ethical Clearance: A certificate of ethical permission was obtained from ethical committee of the institution and written consent was taken from each participant.

RESULTS

Part I. Description of Socio- Demographic Variables

In this study the highest percentage (70%) of reproductive aged women in the age group of 18 years - 26 years, 22% of reproductive aged women in the age group of 27 years – 35 years, 8% of reproductive aged women in the age group of 36 year-45year the majority 42% of parents have completed their education as degree and above, only 5% of parents have no formal education. The highest percentage (54%) of reproductive aged women belonging to Hindu religion, 24% of reproductive aged women belonging to Muslim, 21% of reproductive aged women belonging to Christian, and 1% of reproductive aged women belonging to others. The highest percentage (58%) of reproductive aged women are unmarried, 31% of reproductive aged women are married, 6% of reproductive aged women are divorced, 3% of reproductive aged women are widowed, 2% of reproductive aged women are separated the, highest percentage (38%) of family members had an income between RS 30,001 to RS 50,000, (32%) of reproductive aged women with income less than RS 10000, (23%) of reproductive aged women had an income between RS.10001 and RS 30000, and lowest percentage 7% of reproductive aged women had an income between more than RS 50000. It shows that majority (38%) of reproductive aged women under this study had income between RS 30001 to RS 50000The highest percentage (60%) of reproductive aged women comes under the nuclear family, 40% of reproductive aged women comes under the joint family. The, higher percentage (71%) of reproductive aged women were urban, whereas 29% of reproductive aged women were rural highest percentage (38%)of reproductive aged women comes under the 161cm-170cm, 33% of reproductive aged women comes under the 151cm-160cm,17% of reproductive aged women comes under the 140cm-150cm, 9% of reproductive aged women comes under the 171cm-180cm, 5% of reproductive aged women comes under the others the majority 79% of parents were belongs to Hindu religion. The highest percentage (32%)of reproductive aged women comes under the 50kg-60kg, 25% of reproductive aged women comes under the 60kg-70kg, 20% of reproductive aged women comes under the 40kg-50kg, 12% of reproductive aged women comes under the less than 40kg, 8% of reproductive aged women comes under

the70kg-80kg, 2% of reproductive aged women comes under the more than 90 kg, 1% of reproductive aged women comes under the 80kg-90kg The highest percentage (49%) of reproductive aged women belonging to 18.5-24.9kg/m2, 24% of reproductive aged women belonging to 25-30kg/m2, 20% of reproductive aged women belonging to 10-15kg/m2, and 7% of reproductive aged women belonging to above 30kg/m2.

Part II Assessment of knowledge regarding of obesity among reproductive aged women of Akka Mahadevi college Bagalkote.

Table 1: Percentage wise distribution of reproductive aged women according to level of knowledge N=100

Test	Level of knowledge	Number (f)	Percentage (%)
I	Good	30	30%
II	Average	52	52%
III	Poor	18	18%

Table 1 Assessment of knowledge and prevalence of obesity among women in pre-test reveals that out of 100, highest percentage (30%) of women had good knowledge, (52%) of women Average knowledge, (18%) of women had poor Hence it reveals that majority percentage (52%) of women have Average knowledge.

Table 2: Percentage wise distribution of reproductive aged women according to level of prevalence in test N=100

Sl No	Level Obesity	Number (f)	Percentage (%)
I	MILD	66	66%
II	MODARATE	24	24%
III	SEVERE	14	14%

Table 2 Assessment of prevalence of obesity among women in post-test reveals that out of 100 women, highest percentage (66%) of women had Mild obesity, (24%) of women had moderate obesity and 14% of women had severs obesity. Hence it reveals that majority percentage (66%) of women had mild obesity.

Table 3: Mean, SD and range knowledge scores of reproductive aged women regarding the obesity N=100

Description	Mean	SD	Range
KNOWLEDGE	**11.64**	**3.32**	**11**

Table 3 shows that Revealed that the mean and Standard Deviation on as the calculated 'mean of knowledge 11.64 and SD 3.34 range 11 among adolescents women's.

PART III: Association between post-test knowledge and prevalence score of obesity among reproductive aged women scores with their selected socio-demographic variables.

Table 4: Association between knowledge and prevalence score of obesity among reproductive aged women scores with their selected socio-demographic variables N=100

Sl no	Socio-Demographic Variables	DF	Chi-square	Table value	Association
1	Age	1	1.84	3.84	Not significant
2	Religion	1	1.56	3.84	Not Significant
3	Marital status	1	1.84	3.84	Not Significant
4	Family Income	1	1.10	3.84	Not Significant
5	Type of Family	1	4.20	3.84	significant
6	Place of Residence	1	1.42	3.84	Not Significant
7	Height	1	1.76	3.84	Not Significant
8	Weight	1	1.78	3.84	Not Significant
9	Body Mass Index	1	1.38	3.84	Not Significant
10	Family History	1	5.2	3.84	Significant
11	Source Of Information	1	1.28	3.84	Not Significant

Table 4 The present study concludes that obesity among adolescents does not show a statistically significant association with most of the selected socio-demographic and personal characteristics such as age, gender, type of family, religion, Type of Family, Weight, Place of Residence, Height, family monthly, income, Body Mass Index, Source Of Information, parents' education, parents' occupation, living arrangement, ($P > 0.05$).However, a highly significant association was observed between family history ($\chi^2 = 5.2$, $P < 0.01$) and family monthly income ($\chi^2 = 4.2$ $P < 0.01$). Knowledge among adolescents ($\chi^2 = 5.2$ $P < 0.01$). Therefore, the

research hypothesis H2 is accepted only for family history and family monthly income, and rejected for all other socio-demographic and personal characteristics. This indicates that family mental health history plays an important role in influencing obesity among adolescents, while other background variables do not have a significant impact.

DISCUSSION

The findings of the present study are discussed in light of previous scientific studies in this chapter and discussion regarding findings of the study is presented in Assessment of knowledge and prevalence of obesity among women in pre-test reveals that out of 100, the highest percentage (30%) of women had good knowledge, (52%) of women had average knowledge, (18%) of women had poor Hence, it reveals that the majority percentage (52%) of women have Average knowledge. Assessment of prevalence of obesity among women in post-test reveals that out of 100 women, highest percentage (66%) of women had Mild obesity, (24%) of women had moderate obesity and 14% of women had severs obesity.

Limitations: The study limited to the sample of 100 women's who are studying in akka Mahadevi womens college, Bagalkot.

CONCLUSION

The study concludes that Assessment of prevalence of obesity among women in post-test reveals that out of 100 women, highest percentage (66%) of women had Mild obesity, (24%) of women had moderate obesity and 14% of women had severs obesity.

DECLARATION BY AUTHORS

Ethical Approval: Institutional ethical clearance approved.

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Conflict of Interest: The authors declare no conflict of interest.

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