Assess the Knowledge and Health Behavior on Osteoporosis among the Older Adult in Selected Community Bhubaneswar

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ABSTRACT

Introduction: This study was done to assess the knowledge and health behaviour regarding osteoporosis in khandagiribari. And to find out the association between knowledge and health behaviour with selected socio- demographic variables.

Methods and material: quantitative experimental approach and non randomized control group design was adopted. 200 people were selected by purposive sampling technique, who were met the inclusion criteria . Self structured interview schedule was used to collect the demographic data and self structured osteoporosis knowledge assessment scale was used to asses the level of knowledge regarding osteoporosis among the age group above age group above 60 of khandagiribari. Health behaviour assessment scale is used to assess the health behaviour . The reliability of Tool II self structured knowledge scale was computed by using cronbachs alpha formula which was found 0.85 which is acceptable. Reliability of Tool III of health behaviour was 0.90 which is acceptable.

Result: The findings showed that majority of samples was 60-70year It was found that there were need to create awareness programme among the people regarding osteoporosis . The chi square value revealed that there was valid association between the level of knowledge and health behaviour with gender, education, occupation.

Conclusion: study concluded that the level of knowledge regarding osteoporosis is good and also positive health behaviour regarding osteoporosis.

KEYWORDS: knowledge , health behaviour, osteoporosis, older adults

INTRODUCTION

India is on the verge of a 5 crore-strong osteoporosis epidemic. Women make up 60% of the population. Osteoporosis affects one in every four Indian women and one in every eight males over the age of 40. The disease, though, can hit at any age. A 50-year-old woman has a 40% chance of suffering an osteoporotic fracture for the remainder of her life. Women, in turn, are the foundation of a family. In the present period, they are stepping out of their homes in great numbers to stroll. [1] Their health is being put under more physical and mental strain as a result of this. Osteoporosis is a serious condition that affects postmenopausal women. Half of the postmenopausal women evaluated had poor bone mass, putting them at risk of osteoporosis-related fractures, according to the national osteoporosis risk assessment research.[2] Osteoporosis is one of the most common causes of fracture in the elderly. It not only causes fractures, but it also leads people to become bedridden, with subsequent complications that can be life threatening. Because osteoporosis causes back discomfort and height loss, preventing the condition and its related fractures is critical for senior people's health, quality of life, and independence.[3]

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Osteoporosis is rarely recognised early since it is asymptomatic until a fracture develops as people get older, resulting in severe morbidity and mortality. Once a fracture occurs as a result of osteoporosis, 20% of patients die prematurely, and 50% do not regain their normal mobility.[4] Education about bone health recommendations is critical for preserving bone health and preventing osteoporosis. Instructions should be provided to the clints in writing. Self-directed learning material is a very useful and valuable teaching aid since it motivates students to learn and provides them with a tool they can use in the future.[5] As a result, self-education using self-instructional modules will be an excellent technique for improving older people's knowledge about osteoporosis. Health professionals can assist in raising awareness among older adults about the need of physical activity in preventing osteoporosis later in life. As a result, the detrimental influence on the quality of life of older adults is reduced. Educating a woman is also the same as educating a family. As a result, a family's health can be improved by a woman's education.[6]

MATERIAL AND METHOD

A quantitative research approach and a descriptive research design were chosen for this study. This study was conducted among 200 people above 60 year of age in khandagiribari .purposive sampling technique was used for this study. The self-structure questionnaires schedule was develop to collect the socio demographic Performa of people above 60 yrs of age living in the community. These tools deals with demographic variables like age, education, occupation, monthly income of the family, food pattern, family history, source of information .Self prepared life osteoporosis knowledge assesment scale was develop to collect data about the knowledge related to this disease .it has total 20 items regarding lifestyle practice. Osteoporosis health behavior scale was developed to get the knowledge about the healthy practices they are adopting. The reliability of the tool was tested by using Cronbach co-efficient formula and it is found to be reliable at 0.82.The tool was validated by various experts. The tool was tested with 10 participants to check the reliability test. Data collection was carried out from dated 21-7-2021 to 27-07-2021 in khandagiribari Bhubaneswar. Permission was taken from ethical committee of Sum Nursing College. The investigator had taken permission from the subject prior to the data collection . the investigator had given questionnaires to the participants. Ensured that there response will be remain confidential and used for research study only . give instruction related to tool were given to facilitated co-operation and is item was repeated to help them to understand and response were recorded by the investigator at the time of obtaining data. The collected data were analyzed using MS Excel. The baseline data (demographic data) were analyzed by frequency and percentage. Under inferential statistics by using chi square analysis the association of knowledge and health behaviour on osteoporosis with selected socio demographic variables will be checked.

RESULTS

The result of this study found majority of samples 56.5% in the age group of above 60 and 22.8% in between 71-80 year,14.1% are in between 81-90 year, 6.6% are in between above 90 years.34.3% people are studied in primary,30.3% are in secondary, 22.6% are inhigher secondary and 12.8% are graduate.44% are private employee, 11.7% are retired govt employee,33% are businessmen,11.3% are others employee. 11.5% people income Below 3000, 22.6% people income 3001-5000, 40.1% people income between 5001-10,000, 25.8% people income above 10,000. 45.7% are vegetarian, 54.3%are Non vegetarian 20.8% 0f people having family history fracture is present,79,2% people fracture is absent 45.7% people received information from mass media, 35.1% people received information from health professional, 19.1% people received information from any other sources. Regarding knowledge about osteoporosis 84.5% have good level of knowledge, 15.5%% have average level of knowledge. result linked to health behaviour regarding osteoporosis total 91.5% of people have positive health behaviour on osteoporosis. And 8.5% people are Negative health behaviour Finding related to association between knowledge and health behaviour regarding osteoporosis For age, education ,occupation, family income, food pattern ,family history of fracture chi square value respectively 6.6918 , 2.4601 , 6.0298 , 1.6173 , 0.2098,0.1141 at 0.5 level of significance that all are not statistical significant.

DISCUSSION

In terms of osteoporosis knowledge, 84.5 percent have an excellent level of knowledge, while 15.5 percent have an average level of understanding.
A similar study conducted by Bunker wv in 2013 indicated that people in Bijapur have a strong understanding of osteoporosis. In a similar study conducted in the United States, wengreen HJ,unger RJ discovered that people's knowledge about osteoporosis is average.[7]
Prof. B.V Kathyayani conducted a similar investigation. Knowledge about osteoporosis was assessed. It was a descriptive research project. He used probability sampling to select a study sample of 600 participants. The data was collected using a self-created questioner and analysed using descriptive and interferential statistics. The results of the study revealed that the participants had a strong understanding of osteoporosis.[8] Total 91.5% of people have positive health behaviour on osteoporosis. In total, 91.5 percent of persons exhibit positive osteoporosis health behaviours. And 8.5 percent of people have poor health habits. In a study on osteoporosis in the United States, Tandon, N Marwaha, and Kalra discovered that those with

good health habits are more likely to live longer.[9] The relationship between knowledge, health behaviour, and demographic characteristics is not significant in the current studies.

Similar research conducted by SM, HONG CY, LEE J, and WONG show that all of the parameters have a substantial relationship.[10]

CONCLUSION

According to the survey, residents in the khandagiribari have a rudimentary understanding of osteoporosis. Another section of the study shows that sociodemographic factors including age, education, income, and family history had little bearing on osteoporosis awareness. It is critical to raise awareness about osteoporosis prevention. As a result, the findings of this study can be used to take the essential measurements to raise osteoporosis awareness.

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Ethical Statement: This study was approved by the institutional ethical committee and prior consent was taken from participants.

Conflict Of Interest: The authors declare that there is no conflict of interest.

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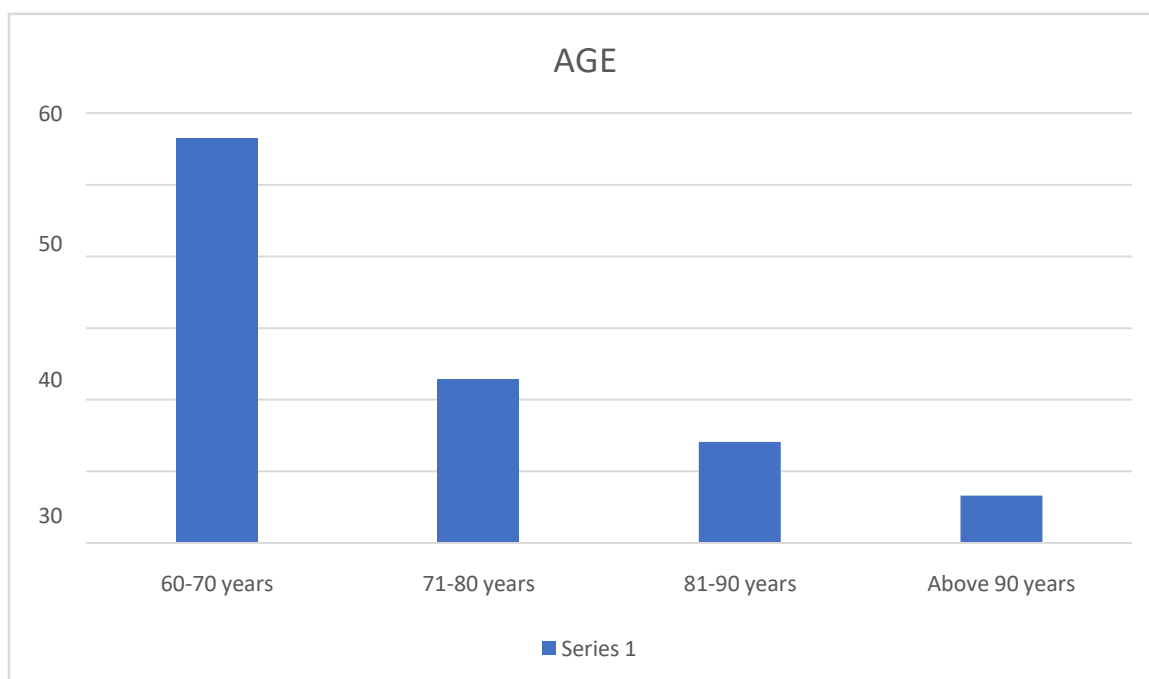
Figure 1: Bar diagram showing description of subject according to age

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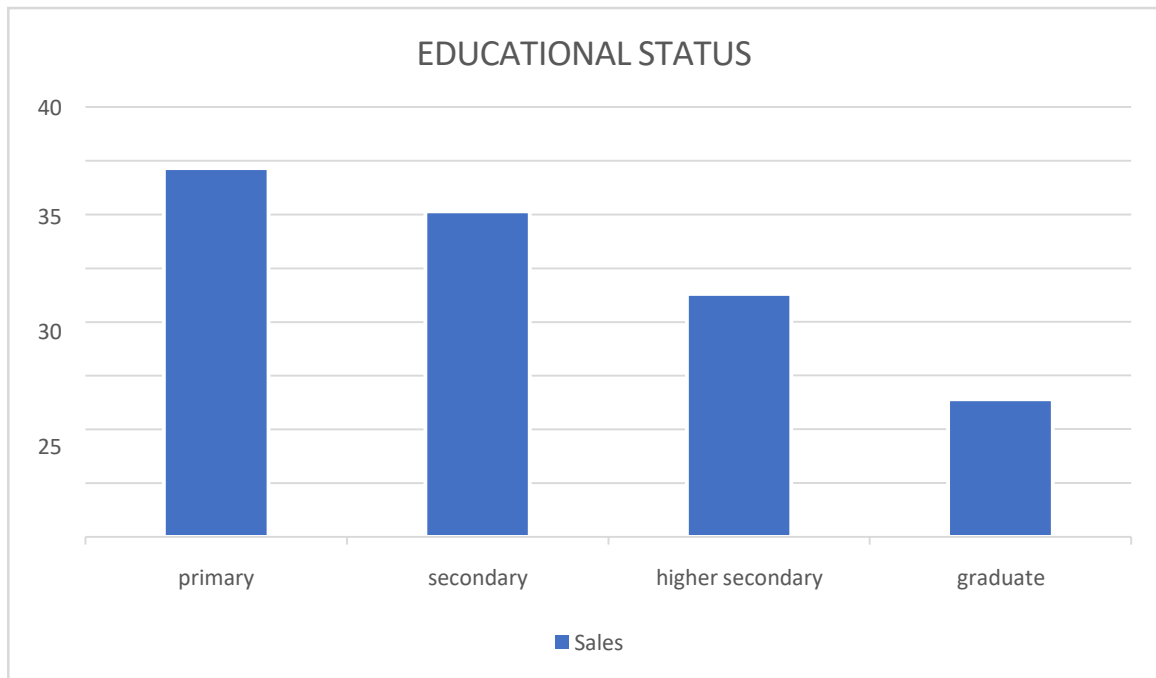

Figure 2: clustered column showing description of subject according to the educational status
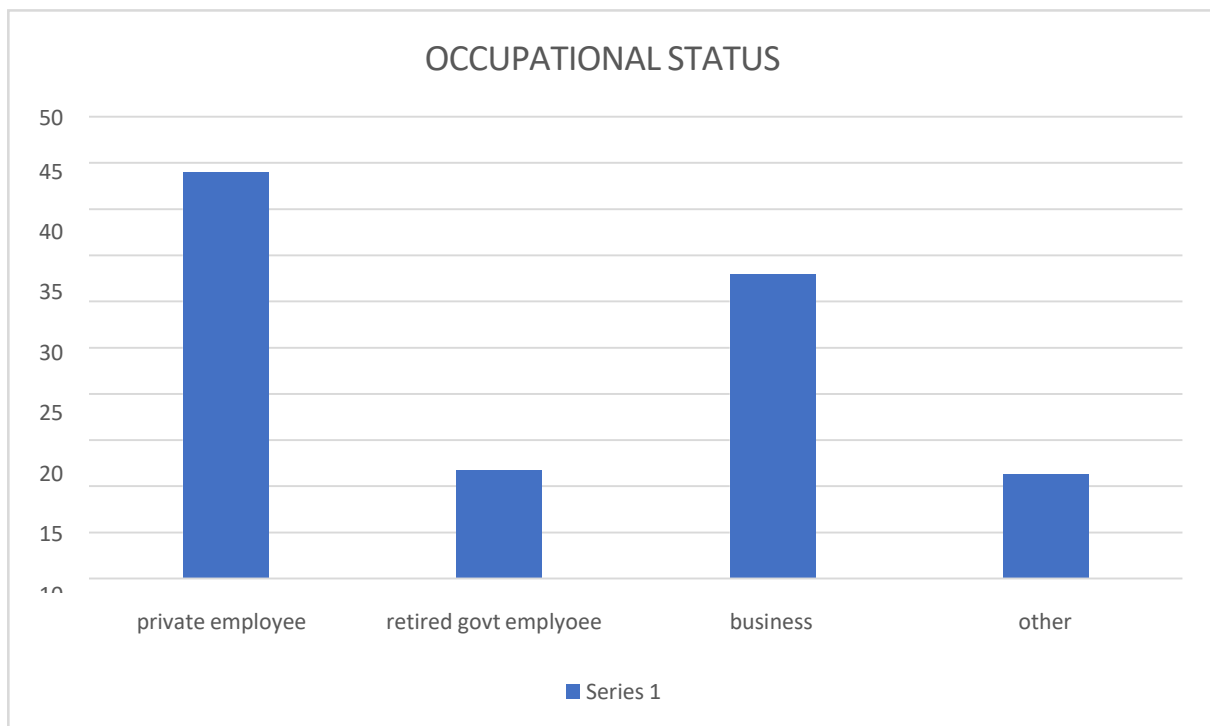

Figure 3 : clustered column showing description of subject according to occupational status

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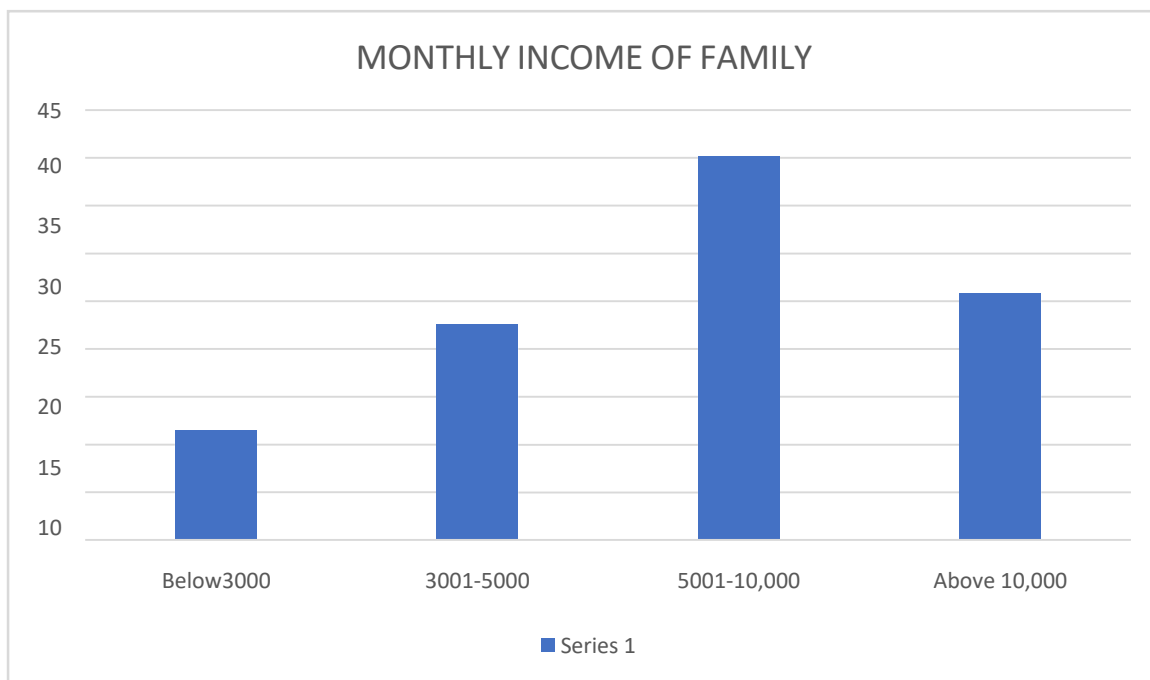

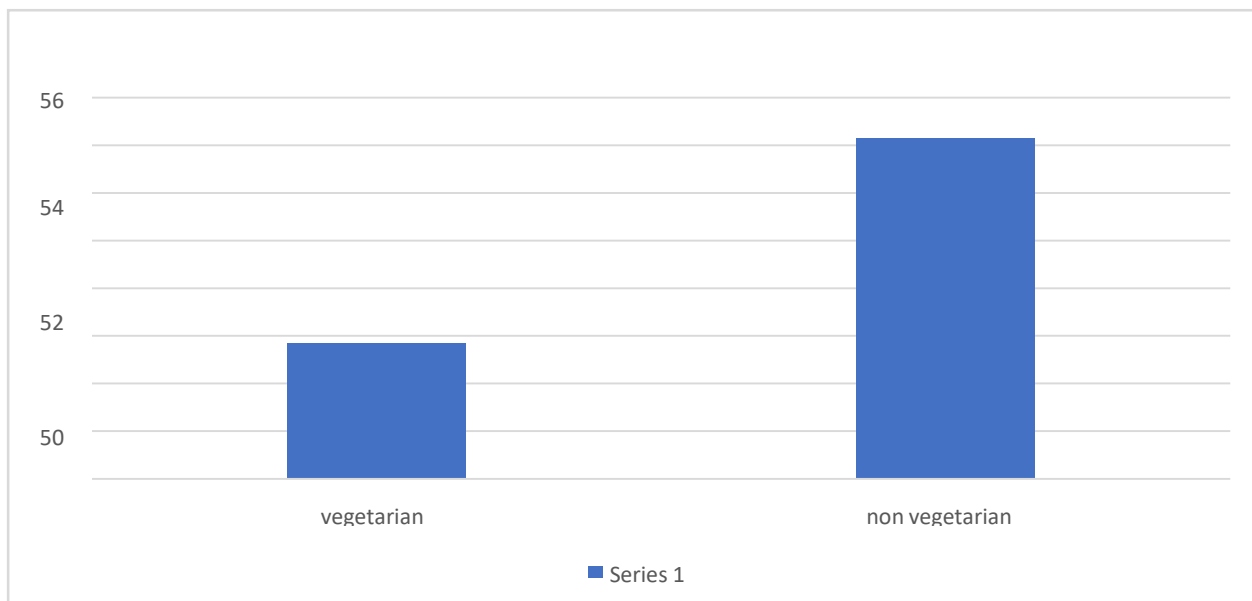**Figure 4: The clustered column showing description of subject accordingto monthly income of the family.**

Figure 5: clustered column showing description of subject according thefood pattern.

Table 1: table showing the frequency and percentage of level of knowledgeand on osteoporosis

		FREQUENCY (f)	PERCENTAGE(%)
LEVEL OF KNOWLEDGE ON OSTEOPOROSIS	GOOD	169	84.5%
	AVERAGE	31	15.5%
	POOR	0	0

Table 2: table showing descriptive statistics to find out the level of Healthbehaviour Regarding osteoporosis

LEVEL OF HEALTH BEHAVIOUR	SCORE	LEVEL OF HEALTHBEHAVIOUR	
		FREQUENCY(F)	PERCENTAGE(%)
YES	21-40	183	91.5%
NO	1-20	17	8.5%

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Table 3: showing association between selected socio demographic variablesand level of knowledge and health behaviour on osteoporosis.

DEMOGRAPHIC VARIABLE	CHI SQUARE VALUE	DEGREE OF FREEDOM	P VALUE	INFERENCE
AGE	6.6918	3	0.0823	NS
EDUCATION	2.4601	3	0.482544	NS
OCCUPATION	6.0298	3	0.110168	NS
FAMILY INCOME	1.6173	3	0.65548	NS
FOOD PATTERN	0.2098	1	0.646897	NS
FAMILY HISTORY OF FRACTURE	0.1141	1	0.735496	NS
SOURCE OF INFORMATION REGARDING OSTEOPOROSIS	1.5029	2	0.471677	NS