Osteoporosis Awareness among Saudi Females in AL-Ahsa City, Saudi Arabia. 2017 (Cross – Sectional Survey)

Abdulhameed Ibrahim Al-Abdulhadi[1], Abdullah Hisham Al-Mulla[2],
Mohammed Zafer Al-Qarni[3], Naser Ali Al-Julayfan[4], Mohammed Jammal Alofaisan[5],
Naushad Ahmed Abid[6], Muthana Abdullah al Sahlawi[7], Abdulrahman Ahmad Al Naim[8],
Adel Nasser Al Bargi[9], Sayed Ibrahim Ali[10*]

[1,2,3,4,5]Medical Student at College of Medicine, King Faisal University, Saudi Arabia
[7]Demonstrator, College of Medicine, King Faisal University, Saudi Arabia
[6,8,9,10*]Assistant Professor, College of Medicine, King Faisal University, Saudi Arabia

Abstract: **The assessment of awareness was done in 150 Saudi female in Al-Ahsa above 18 years age, without osteoporosis. The mean score of the total score of the questionnaire was 6,9 out of 13 questions . There is a need for educational intervention programs to increase the awareness about this health problem. Purpose: Osteoporosis is preventable disease and its affect the female more the male. Our study aimed to assess the awareness about Osteoporosis among Saudi females.**

Keywords: **osteoporosis, health problem, preventable disease, female.**

1.   INTRODUCTION

Osteoporosis is preventable silent disease. It's the most common type of bone disease. It is a condition characterized by a decrease in the density of bone, decreasing its strength and resulting in fragile bones.

Due to osteoporosis prevalence worldwide, osteoporosis is considered as a serious public health concern. According to the National Osteoporosis Foundation (NOF), 10 million Americans have osteoporosis. Another 34 million have low bone mass, which leaves them at increased risk for osteoporosis. In the United States, 1.5 million osteoporotic fractures occur each year. Of these, 700,000 are spinal fractures; 300,000 are hip fractures; and 200,000 are wrist fractures.

Also, osteoporosis is serious and growing problem faced by thousands of Saudi Arabian citizens each year. Despite the fact that post-menopausal women are considered a high risk group in term of osteoporosis, awareness of the disease still remains low. Nearly half the women in Saudi are at risk of developing osteoporosis, and already have the warning signs, Such as low bone density levels.

Globally, osteoporosis is by far the most common metabolic bone disease, and it is estimated to affect over 200 million people worldwide. An estimated 75 million people in Europe, the United States, and Japan have osteoporosis. Approximately 1 in 2 women and 1 in 5 men older than 50 years will eventually experience osteoporotic fractures. By 2050, the worldwide incidence of hip fracture is projected to increase by 240% in women and 310% in men.

Because osteoporosis is preventable disease it is good to have enough knowledge about it and how to get a prevention of osteoporosis. The purpose of this study is to check the knowledge of osteoporosis prevention and the prevalence among Saudi female.

2. MATERIALS AND METHODS

Cross sectional questionnaire based study. A questionnaire derived from Osteoporosis Knowledge and Assessment tool (OKAT) was distributed among Saudi females admitted or visiting King Fahad hospital in AL-Hofuf, Saudi Arabia. The researchers have collected the demographic characteristics and 13 questions about the osteoporosis. The researchers have done the questionnaire to 150 individual among Saudi female

Inclusion criteria:

Saudi females admitted or visiting king Fahad Hospital in AL-Hofuf, Female medical

Ward who were free from apparent illness studied, age group from 18 and above.

Data Collection:

We collected basic sociodemographic; medical history and lifestyle information from each participant (see Table 1). We evaluated current knowledge about osteoporosis using Osteoporosis Knowledge and Assessment tool (OKAT).

We collected the data at King Fahad Hospital in Al-Hofuf between 14 and 17 April 2013. Participants are scored from 0 to 13 based on their correct responses to each question (true, false or do don't know). For purposes of this study, 13 out of the 20 questions were adapted and used to evaluate knowledge among Saudi females. Questions not-applicable to this population were not included in the study.

(Table 1)

Demographic characteristics (N=150)	n	%
Age		
19-35	73	48.7
36-47	42	28
48-56	35	23.3
Education		
illiteracy	23	15.3
Less than secondary	25	16.7
secondary	55	36.7
University	47	31.3
Relative history of osteoporosis		
Yes	80	53.3
No	70	46.7

Analysis:

Analysis was conducted using SPSS version 17. Descriptive characteristics were obtained to record demographic data, educational level and life style characteristics of Saudi female.

3. RESULTS

The mean age was 37.07, the minimum age was 19 and the maximum age is 56. The education level of the respondent was 36.7 % having secondary, 31.3% having college level education, illiteracy was 15.3%, primary 10% and elementary education was 6.7%. Approximately 53.3% have family history of osteoporosis. 40 % have been involved in regular exercise and 60% have been regularly in diary intake per day. The percent of the total correct answer was 53.3%. The Minimum score of Osteoporosis knowledge and Assessment tool (OKAT) in our questionnaire was 4; maximum score was 10 and a mean score of 6.9 out of 13 questions.

The highest score result was from the age group 19-35. (The table 2) shows the significant difference between the age groups and the total correct score of the questionnaire.

(Table 2)

Crosstab					
		Age group			Total
		19-35	36-47	48-56	
Score	4	2	1	1	4
	5	6	8	2	16
	6	14	12	17	43
	7	30	12	5	47
	8	6	2	1	9
	9	9	5	7	21
	10	6	2	2	10
Total		73	42	35	150

Level of Knowledge					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not enough knowledge	37	24.7	24.7	24.7
	acceptable	90	60	60	84.7
	adequate knowledge	23	15.3	15.3	100
	Total	150	100	100	

Exercise					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	60	40	40	40
	No	90	60	60	100
	Total	150	100	100	

4. DISCUSSION

The purpose of this study was to assess the knowledge of osteoporosis prevention among Saudi female. The prevention of the osteoporosis is important because it's preventable disease.

Our findings that the education intervention increases knowledge and become more awareness as our study showed the female who have the university and secondary education level had the highest score in the questionnaire (university education level) . Also, the Chi-Square Tests show the age group 19-35 has a better awareness and knowledge about osteoporosis.

Our results indicate that majority of the patients have limited knowledge about this health issue as indicated by low scores in OKAT and that is need for health education intervention. There is no study from Saudi Arabia assessing the awareness about osteoporosis among females. Educational intervention had been shown to improve knowledge about the osteoporosis (2).

5. CONCLUSION

Osteoporosis is common but unrecognized problem. There is lack of awareness among Saudi female about this problem. There is a need for educational intervention programs to increase the awareness about this health issue to be aware about the osteoporosis and its prevention, risk factors and complications.

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