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LEVEL OF AWARENESS OF THE ASSOCIATION BETWEEN SMOKING AND BLADDER CANCER AMONG POPULATION OF ALHASA, EASTERN REGION, SAUDI ARABIA.

Medicine

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ABSTRACT

Bladder cancer considered as the ninth most common cancer worldwide. Studies suggested that bladder cancer influenced by environmental factors, such as cigarette smoking and chemicals. Smoking is well established as one of the strongest risk factors of bladder carcinoma. It is reported that awareness about smoking and bladder cancer risk is poor. This cross-sectional study conducted to assess level of awareness of the risk of smoking on bladder cancer in Alhasa population. 373 participants were selected randomly. Data analyzed by SPSS version 23. Only (20%) of smokers aware about the effects of smoking on bladder cancer. While, (37.5%) have a low level of awareness. To conclude, the knowledge of awareness in Al-Ahsa population is low. There is a need for health education to prevent complications.

KEYWORDS

bladder cancer,smoking,awareness.

INTRODUCTION:

Bladder cancer considered as the ninth most common cancer worldwide .It is the most common cancer of the urinary tract, in 2012 there was estimation of 430 000 new cases. More than 60% of all bladder cancer cases and half of all the 165 000 bladder cancer deaths occur in the less developed regions of the world. (1)

Bladder cancer is significantly more common in men than in women, but still almost 60,000 women are diagnosed with the disease every year worldwide (2) A three-quarters of all bladder cancer cases occurring in men, A strong male predominance is observed (1)

The incidence of Genito-urinary cancer (GUC) in the Kingdom of Saudi Arabia (KSA) increases with age and is 5-fold higher in men than in women. Genito-urinary cancer accounts for only 9.2% of all cancers in KSA, while the rate in the United States of America (USA) is as high as 24.1%. An epidemiological search on GUC in KSA revealed a relatively low incidence compared to developed countries. The most common GUC in KSA is bladder, followed by the prostate, kidney, and testicular cancer. Penile cancer is extremely rare. Genito-urinary cancer is not among the 10 most common cancer in KSA, however, bladder cancer ranking tenth.7

Studies suggested that bladder cancer influenced by environmental factors, such as cigarette smoking and exposure to industrial chemical; Moreover, smoking increases the risk of bladder cancer as the second smoking-associated cancers among survivors of kidney, head and neck, and stage I lung cancers (3), smoking cigarette is well established as one of the strongest risk factors associated with the development of bladder carcinoma, increasing a person's risk by at least threefold. (4) It is expected that 30-50% of all bladder cancer is caused by cigarette smoking. (5)

It is reported that awareness about the association between tobacco use and bladder cancer risk is poor: only 25% to 36% of the general population is aware of the correlation, and active smokers in US.6

These results prompted us to investigate This study aims to assess the level of awareness of association between smoking and bladder cancer risk in the population of Alhasa, Eastern region, Kingdome of Saudi Arabia.

Methods:A cross-sectional study of patient knowledge of smoking as a risk factor for bladder cancer. The study was conducted in Al-Ahsa region, Kingdom of Saudi Arabia, from December 2017 to September 2018. 373 participants were selected randomly from Al-Ahsa region, aged from 20 years and above using simple random sampling in order to assess the level of awareness toward association between smoking and bladder cancer risk. Data collection was validated by Electronic questionnaire. The study population was randomly selected from the population in Al-Ahsa region . Participants were recruited randomly and informed consent was taken before filling the questionnaire, which consisted of two parts, i.e. demographic data, such as age, gender, and educational level as well as questions regarding knowledge, perception regarding risk factors for bladder cancer, particularly factors increased the risk of bladder cancer, including increasing age, a high fat diet, a low fiber diet, smoking, family history, also regarding patient smoking habits, including the number of cigarettes smoked daily. that consisted of 20 closed- ended questions in Arabic Language.

STATISTICAL ANALYSIS

Data were analyzed using the Statistical Package for Social Sciences (SPSS, version 23, SPSS, Chicago, IL, U.S.A.). Descriptive statistics, i.e. mean and standard deviation were used for continuous variables while frequency and percentage were applied for categorical variables. Chi-square test was used to explore the association between socio-demographic data and knowledge items, and a p value <0.05 was considered statically significant.

RESULTS:

Table 1 : Demographical data (N=372) N (%)

Age	
24 (8.3)	<20
176 (74.5)	20-50
71 (17.2)	>50
Gender	
264 (71.2)	Male
106 (28.8)	Female
Marital status	
107 (28.5)	Single
252 (68.0)	Married
16 (3.5)	Divorced

Educational level	
(3.5) 14	Primary
67 (18.3)	Secondary
290 (78.2)	Academic

Table 2 : Awareness

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not aware	159	42.5	42.5	75.0
	aware	134	37.5	32.5	32.5
	highly aware	69	20.0	25.0	100.0
	Total	373	100.0	100.0	

Table 4: The responses of different statements related to the awareness of bladder cancer

Statement	Yes	No	I don't know
Smoking is a one of major cause of bladder cancer ?	196 (52.7)	76 (20.4)	100 (26.9)
Is Blood in the urine (hematuria) a sign of bladder cancer?	171 (46.0)	183 (49.2)	18 (4.8)
If you are smoker, has your doctor ever talked to you about your risk for developing bladder cancer?	51 (13.7)	113 (30.4)	207 (55.6)
Do you know what are the different methods to check about bladder cancer ?	114 (30.6)	148 (39.8)	109 (29.3)
Do you think there are effective ways to prevent bladder cancer?	186 (50.0)	51 (13.7)	134 (36.0)
Do you think you will notice the symptoms of bladder cancer?	54 (14.5)	117 (31.5)	201 (54)

A total of 373 smokers were included. Aged between 18 and 60. More than half of them were (20-50). Females were 106 (28.8) males 264 (71.2).

Regarding the educational level, the primary level was found in 14 (3.5), 67 (18.3) had secondary, and 290 (78.2) had academic educational level. The demographic characteristics shown in Table 1 .

The highest awareness level (26.8%) was found in the age group (21-50) compared to the other age groups. Another finding was level of awareness between males and females. (50%) of female was aware compared with (17.5) in male.

Also,(2.4) was aware in primary educational level compared with (11.3) in secondary school , (43.5) in academic educational level .

The responses of all the participants related to the awareness of bladder cancer are shown in Table 3 .

Regarding the classification of participants among smoking, "nonsmoker" was 21 (6.5%) of the participants . 308 (82.8%) were " current smoker ". Rest were "ex-smoker". Most of the participants discovered they were starting smoking between (15-30) years which equal to 194 (52.2%) . Others were variable , 82 (22.6%) started smoking in age between (30-50) years and 92 (24.7%) were starting smoking above 50 years .

The mean score of the level of awareness was 6.1 ± 3.3. However, number of the participants who know that smoking can cause bladder cancer are 135 (22.8%) . 219 (71.6%) were not aware of the association between smoking and bladder cancer. 19 (6.1%) of the participants did not hear about bladder cancer .

Only 69(20%) of smoker are aware about the effects of the smoking on their bladder. While, 134(37.5%) of participants have a low level of awareness about the disease.

DISCUSSION:

Bladder carcinoma is a common cancer in Saudi Arabia. Smoking is well established as one of the strongest risk factors of bladder carcinoma with a major impact on the health. Awareness of relationship between smoking and bladder carcinoma can prevent the increasing of incidence.

This study aims to assess the awareness of association between smoking and bladder cancer risk in Alhasa, Saudi Arabia.
We evaluated level of awareness about smoking and bladder cancer risk. There is no significant difference between males and females in the level of awareness.

Most of the participants in study were in 20s and 50s years. We attribute that this age group is the active age of life. Usually, people at this age are well educated and mindful about health. However, no significant difference was found between the age groups in the level of awareness.

We find in our study that those participants who have academic educational levels had higher awareness level about the importance and the impact of the educational intervention to smokers about bladder cancer.

The study showed high discrepancy in the level of awareness between those who educated about bladder carcinoma by healthcare providers and those who did not. As the Chi-square (P = 0.001) showed that patients who have been informed by the physicians have a higher level of awareness level than the others.

As the bladder cancer considered the tenth cancer in our population, healthcare providers have to encourage awareness campaigns toward the risk factors of the disease. We find in our study that the level of knowledge and awareness has to be increased among population.
Unfortunately, the majority of population in Al- Ahsa region were not appropriately aware about association between smoking and bladder cancer risk.

A study conducted Michael's Hospital in Toronto, Ontario, Canada. A 16-item multiple choice, self-reporting questionnaire was developed and distributed to 150 patients at both clinics during a 1-month period between January and February 2011showed that awareness of the association between smoking and bladder cancer is poor. Although if we compared our study which was done in selected region of Saudi Arabia and limited patients with other studies that conducted widely in different countries. We found that the knowledge score 6.7 % is low.

According to results, we suggest that population have to be educated about smoking and all the possible consequences related to bladder cancer. The responses of different statements related to the awareness of smoking related to bladder cancer are shown in Table 3.

Applying strategies that target all population "with specific emphasis for smokers population" require fundamental social changes and may necessitate major public health initiatives.

CONCLUSION:

Bladder carcinoma is common and growing problem worldwide. The general knowledge level of awareness in Al-Ahsa population about Bladder carcinoma and its relation to smoking is low.To reduce the lack of awareness among Saudi population about this complication, there is a strong need for health and educational intervention programs about the bladder cancer as well as the necessity of screening and periodic followup programs. That will lead to increase the knowledge level and awareness about this disease and prevent its major complications.

REFERENCES:

1- GLOBOCAN 2012 v1.0, cancer incidence and mortality worldwide: IARC CancerBase No. 11. International Agency for Research on Cancer Web site. http://globocan.iarc.fr.
2- Steward BW, Kleinhaus P (2003) World Cancer Report. WHO-IARC, Lyon Shiels MS, Gibson T, Sampson J, Albanes D, Andreotti G, Beane Freeman L, et al. Cigarette smoking prior to first cancer and risk of second smoking-associated cancers among survivors of bladder, kidney, head and neck, and stage I lung cancers. J Clin Oncol. 2014;32:3989-95.
3- Pashos CL, Botteman MF, Laskin BL et al: Bladder cancer: epidemiology, diagnosis, and manage- ment. Cancer Pract 2002; 10: 311.
4- Howlader N, Noone AM, Krapcho M et al: SEER Stat Fact Sheets: Bladder. Available at http://seer. cancer.gov/statfacts/html/urinb.html. Accessed February 8, 2013.
5- Nieder AM, John S, Messina CR, Granek IA, Adler HL. Are patients aware of the association between smoking and bladder can- cer? J Urol. 2006;176(6 pt 1):2405-2408; discussion 2408.
6- Mohammed S. Abomelha, Genito-urinary cancer in Saudi Arabia, Saudi medical journal 25(5):552-6 · June 2004