Knowledge of Preventable Risk Factors and Beliefs about Cancer: A Cross-sectional Study

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Introduction

Cancer is a deadly illness and one of the major causes of death. Moreover, the annual death incidence due to cancer has enlarged globally and yet is further expected to rise with the late-stage of the illness, the inadequate participation in the screening initiatives, and the unhealthy living. Many unhealthy living behaviours are related to cancer. In high-income nations, obesity, smoking, overly consuming alcohol are exceptionally affecting community health and deemed to be the most prevalent cancer’s risk factors. Therefore, a deficiency in awareness regarding the risk factors of cancer would minimize the probability of adhering to healthy living for preventing this illness worldwide (Al-Azri et al., 2016).

Consequently, a crucial element of cancer control programs for the expanding burden in Egypt is public awareness of preventable risk factors. The research on public knowledge about cancer risk factors is rising but relatively little is known about beliefs regarding cancer (Vineis & Wild, 2014). The study explores the knowledge of preventable risk factors and beliefs about cancer among adults attending a primary healthcare centre in an urban area of Alexandria.

Methods

The researcher conducted a single point, descriptive cross-sectional study on 85 adults aged ≥18 years attending a primary healthcare centre in an urban area of Alexandria in February 2019 using a semi-structured questionnaire to gather data regarding the knowledge and beliefs about cancer through the face-to-face interviewing method. The data were analyzed by descriptive statistics to explore the respondents’ level of knowledge with respect to preventable risk factors and beliefs about cancer. High level of both knowledge and true beliefs about cancer were assigned as ≥75% of the total score.

Results

Respondent's mean age was 43.6 years and about 64.7 % were female. The mean score for knowledge about preventable cancer risk factors among respondents was 62.9% with about 22.3% standard deviation. About 74.1% of respondents (80 % of males and 69.1 % of females) had poor knowledge score of cancer preventable risk factors (scored below 75%). The mean score for beliefs about cancer was 70% with about 24.9 % standard deviation. About 38.8% of respondents (53.3% of males and 30.9% of females) had some false beliefs about cancer (scored lower than 75%).

Results (Continued)

Table 1. Knowledge of cancer preventable risk factors.

Item	Response	Male n (%)	Female n (%)	Total n (%)
Excessive exposure to sun radiations	Yes	9 (30.0)	31 (56.4)	40 (47.1)
	No	21 (70.0)	24 (43.6)	45 (52.9)
Pollution	Yes	16 (53.3)	32 (85.2)	48 (56.5)
	No	14 (46.7)	23 (41.8)	37 (43.5)
Physical inactivity	Yes	20 (66.7)	27 (49.1)	47 (55.3)
	No	10 (33.3)	28 (50.9)	38 (44.7)
Alcoholic Spirits	Yes	25 (83.3)	47 (85.8)	72 (84.7)
	No	5 (16.7)	8 (14.5)	13 (15.3)
Smoking	Yes	30 (100.0)	50 (90.9)	80 (94.1)
	No	0 (0.0)	5 (9.1)	5 (5.9)
Low vegetables and fruits consumption	Yes	9 (30.0)	29 (52.7)	38 (44.7)
	No	21 (70.0)	26 (47.3)	47 (55.3)
Overweight and obesity	Yes	22 (73.3)	25 (45.5)	47 (55.3)
	No	8 (26.7)	30 (54.5)	38 (44.7)

Table 2. Beliefs about cancer.

Item	Response	Male n (%)	Female n (%)	Total n (%)
We cannot prevent cancer	Yes	12 (40.0)	9 (16.4)	21 (24.7)
	No	17 (56.7)	44 (80.0)	61 (71.8)
	I don't know	1 (3.3)	2 (3.6)	3 (3.5)
There are no signs or symptoms for cancer	Yes	13 (43.4)	25 (45.5)	38 (44.7)
	No	17 (56.7)	25 (45.5)	42 (49.4)
	I don't know	0 (0.0)	5 (3.1)	5 (5.9)
Healthcare is available for cancer patients	Yes	24 (80.0)	49 (89.1)	73 (85.9)
	No	5 (16.7)	5 (9.1)	10 (11.8)
	I don't know	1 (3.3)	1 (1.8)	2 (2.4)
Cancer patients need psychological support	Yes	19 (63.3)	42 (76.4)	61 (71.8)
	No	11 (36.7)	11 (20.0)	22 (25.9)
	I don't know	0 (0.0)	2 (3.6)	2 (2.4)

Discussion and Conclusions

The study population had poor knowledge of lifestyle-related cancer preventable risk factors; however, raised awareness is required especially for low vegetables and fruits consumption and excessive exposure to sun radiations as well as some beliefs need to be corrected. There is a significant demand to support a high knowledge of preventable cancer risk factors by raising public awareness that may lead to less vulnerability to these risk factors and larger protection against cancer.

References

Al-Azri, M., Al-Maskari, A., Al-Matroushi, S., Al-Awisi, H., Davidson, R., Panchatcharam, S. M., & Al-Maniri, A. (2016). Awareness of Cancer Symptoms and Barriers to Seeking Medical Help Among Adult People Attending Primary Care Settings in Oman. *Health Services Research and Managerial Epidemiology*, 3, 2333392816673290. <https://doi.org/10.1177/2333392816673290>

Vineis, P., & Wild, C. P. (2014). Global cancer patterns: Causes and prevention. *The Lancet*, 383(9916), 549–557. [https://doi.org/10.1016/S0140-6736\(13\)62224-2](https://doi.org/10.1016/S0140-6736(13)62224-2)