



Awareness of breast cancer among medical students of Dubai, United Arab Emirates.

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Citation this Article: Dr Rabbia Khan, Dr Muhammad Umar Younis, Anas Zahid, Dr Annett-al-hamadi, “Awareness of breast cancer among medical students of Dubai, United Arab Emirates.”, IJMSIR- September - 2020, Vol – 5, Issue - 5, P. No. 112 – 115.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Introduction

Breast cancer is a malignancy that starts in the cells of the breast. The most frequent form of breast cancer is ductal carcinoma, which represents 85-90% of all breast cancers and it starts in the cells lining the ducts. It is a global healthcare burden affecting both developing and developed countries with an estimate of over 508,000 women dying worldwide as a result of breast cancer in 2011¹. Various risk factors have been studied and implicated in the pathogenesis of this disease and include family history, genetic mutation, senility, obesity, early menarche, late menopause and use of hormone replacement therapy among others². Recent data projections have indicated the rise of incidence of breast cancer among the population in the United Arab Emirates³, which emphasizes the importance of instituting relevant screening methods and organizing awareness among the general community. Healthcare professionals are at the helm of patient interaction and consultation, and future medical practitioners are bound to play a central role in the education and service of the society which makes it

imperative that they have the requisite knowledge to carry out such a responsibility.

Materials & Methods

Study Design & Study Population

This was a cross sectional study done to evaluate the knowledge and attitude of breast cancer among medical undergraduate students of Mohammed Bin Rashid University of Medical Sciences (MBRU), Dubai, UAE. This survey was conducted only in one university, however results may vary among different medical colleges.

Sample Size

A total of 61 respondents from the university participated anonymously for the study. The survey was sent out to around hundred students, of them only 61 responded.

Study Tool & Data Collection

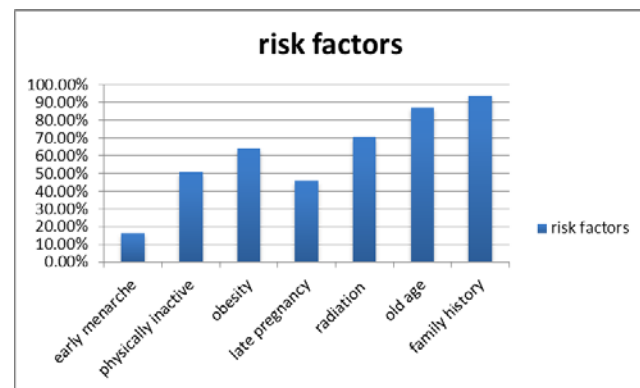
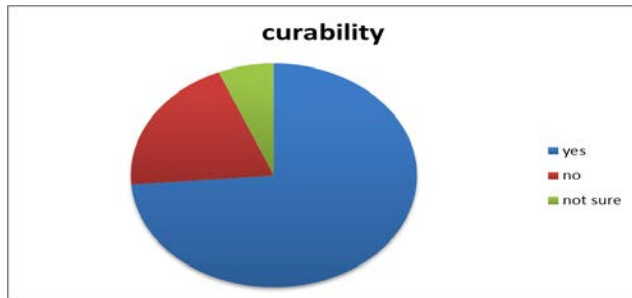
Data was collected by a pre-tested specifically designed questionnaire using the online resource tool (Survey Monkey™) the link for which was distributed to the medical students through the students’ services department. The questionnaire consisted of 10 questions assessing the awareness of participants

regarding breast cancer and their risk factors. Data collected was analyzed using frequency distribution statistics.

Ethical consideration

Approval was obtained prior to data collection from the MCME Research and Ethics Committee and confidentiality of data was preserved and ensured.

Results



After reviewing the data, it was found that 20% of the students think that breast cancer is an incurable disease. With respect to the risk factors they have fair knowledge about the possible etiology. In another question, 52.4% of the participants declined awareness about any prevalent cancer comprehensive centers in the city of Dubai, which comes out as a shock considering their clinical rotation in one during fourth year of medical school. All this evidence points towards the need to incorporate a much needed revision in the prevailing knowledge atmosphere and the students need to be encouraged with tools and information in a palatable manner so they may prove

useful vectors in the transmission of required wisdom in the society.

Discussion

Breast cancer is the most common malignancy observed in the United Arab Emirates and is a growing cause of concern for public health in this region. GLOBOCAN estimates a figure of 39.9% of new cases of breast cancer in females reported in the UAE in 2018³. The prevalence of breast cancer among all cancers diagnosed in Abu Dhabi reached 20.3% in 2014, with an associated mortality rate of 12.2%⁴. Other figures quoted from a systematic review by Hadia et al puts the incidence of female breast cancer at 17.1 per 100,000 women in the UAE⁵.

Despite the significant burden of disease, it has been observed that patients exhibit a delay in presentation, which may lead to an increase in morbidity and mortality. Yosra et al concluded that late presentation and late diagnosis of breast cancer in the UAE is due to lack of transmissible knowledge and inadequate information available about screening programmes⁶. We carried out this study as a cross sectional survey involving undergraduate medical students in order to determine knowledge gaps among them. Medical students were chosen as a sample population because of their future role as healthcare providers who ought to have precise and sufficient knowledge about breast cancer to ensure adequate community education and awareness towards the disease.

The respondents in our current study did believe that breast cancer was a curable phenomenon (73.7%) but unfortunately only 42% knew about the existence of a cancer comprehensive center in the city. While participants were significantly aware of the risk factors including radiation, senility, obesity and positive family history, only half of them believed having an early

menarche also put one at risk of having breast cancer. These results were consistent with other studies carried out involving medical students and is expected of them as well as it is included in the core curriculum of undergraduate medical education⁷⁻⁹.

Health information dissemination requires an update in selection of platform that may be most ideal for the target audience. Social media platforms and instructional apps may be needed to induce a behavioral change and influence prevalent knowledge. Involving medical students will help in raising their confidence in providing precise information and creating a positive attitude among family and friends, thereby guiding the community as well.

Conclusion

This study concludes that the medical students in Dubai needed to further augment their knowledge regarding breast cancer, as it is a growing strain on the healthcare system in the UAE. Various awareness campaigns should be run in-house and via portals agreeable to the students' sensibility so as to create a positive approach to dealing with this disease.

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