World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-11, June 2022
ISSN: 2749-3644

EPIDEMIOLOGICAL CORRELATION OF BREAST CANCER WITH CERVICAL CANCER

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Article history:

Received: April 14th 2022
Accepted: April 14th 2022
Published: June 26th 2022

Abstract:

Breast and cervical cancers are often regarded as a most dangerous malignancies in terms from both prevalence and death among women globally. Screening test knowledge and experience have an essential role in early diagnosis, resulting in reduced morbidity and death. Objective: To study the proportion of female diagnosed with both cancers in Iraq for the year 2022, their place of residence in the city or the rural area, and associated risk factors such as alcohol and smoking. The results indicated that older women, who lived in the city and who used more alcohol and smoking, were more likely to develop breast and cervical cancer.

Keywords: Breast & cervical cancers, city , rural area ,risk factors , Iraq.

INTRODUCTION

Cancer has become one of the primary causes of death and morbidity., which is becoming more widely acknowledged . Global cancer mortality is expected to increase by 45 percent between 2008 and 2030, according to the World Health Organization (WHO) [1]. The two most prevalent types of cancer in female, both of breast & cervical cancers are on the rise quickly and steadily, killing more women in developing countries than any other type of cancer [2].

Statistics show that, there are respectively each year, 527,624 and 1,671,149 new cases of cervical and breast cancer are diagnosed. India contributes around 122,844 instances of cervical cancer and 144,937 cases of breast cancer [3].

Female in India have a 1.6 % total chance of developing cervical cancer and a 1.0 % heaped up risk of dying from cervical cancer, for almost one-third of all cervical cancer fatalities globally. Similarly, the cumulative chance of developing breast cancer is 2.7 %, whereas the cumulative risk of death is 1.5 %. [4].

Cervical cancer used to be the majority prevalent cancer in the country, Nevertheless, the prevalence of breast cancer has since exceeded it and is now the top death cause [5]. The percentage of people who are screening-eligible within a group that has been asked to be screened as well as had a sufficient checking within a given time frame is referred to as screening uptake, on the other hand [6]. Effective people testing programs will fast lower cervix and breast cancer subsidence, according to experience from the industrialized world. Such therapies can also lower the mortality rates from breast and cervical cancer [7, 8].

Several socioeconomic, demographic, biomedical, and residence-related factors have been linked to the Cervical and breast checking in several previous studies, the majority of which were carried out in developed country settings. The possibility that a female will undergo a Pap test or a clinical breast checkup is affected by a variety of variables, inclusively her marital status, age level of income, degree of learning, and state of health. Women are more prone to use cervical & breast cancers checking programs if they have higher levels of education, income, and insurance coverage [9].

Studies on cervical and breast screening demonstrate that women who have wellness access more easily, as in those who have health coverage, choose to undergo checking tests [10, 11]. Long-term oral, number of live births contraceptive usage, and smoking are additional risk factors for cervical cancer [12]. Alcohol, obesity, prolonged oral contraceptive usage, the onset of menstruation early in life, and other factors are risk factors for breast cancer in addition to socioeconomic and demographic factors [13].

Additionally, research has shown that screening habits for cervical and breast cancer are influenced by Health-care policy and the standard of the healthcare system [14, 15].

The majority of research on malignancies in females focuses exclusively on cervical and breast cancer incidences and death rates, despite the fact that the frequency of cancer in the female population has increased.

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MATERIALS AND METHOD

Study design

A survey of breast cancer with cervical cancer in Iraqi females during 2018-2022 in Baghdad/ Iraq. Version 23.0 of SPSS Statistics was used and excel 2016 was used to draw

RESULTS AND DISCUSSION

The W.H.O reported that in 2020 the results showed Prevalence of breast cancer and cervical cancer Percentage , the number of new cases 7515,286 (22.2, 0.84%) deaths 3019,193 (15.3,0.98%) and prevalence for 5 years for all ages Number 20354,704 and prevalence rate per 100000 (102.46,3.54) , respectively as seen in figure (1)

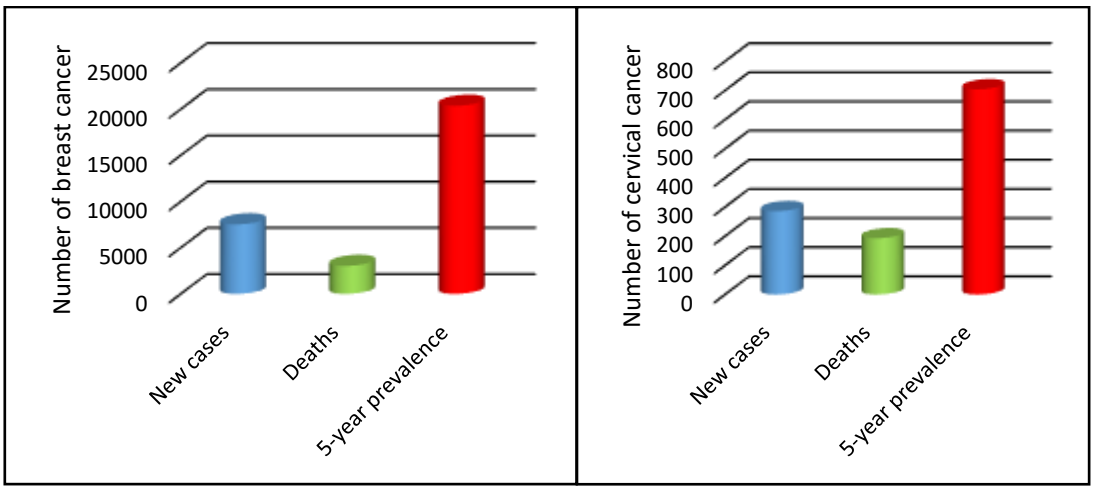

Figure (1): Number of prevalence of breast cancer and cervical cancer in Iraqi woman

As shown in Figure 2 breast screening , the age ratio (40-65) years (80%), in the city (78%) ,in the rural(62%) ,alcohol(14%) and Tabaco (40%).

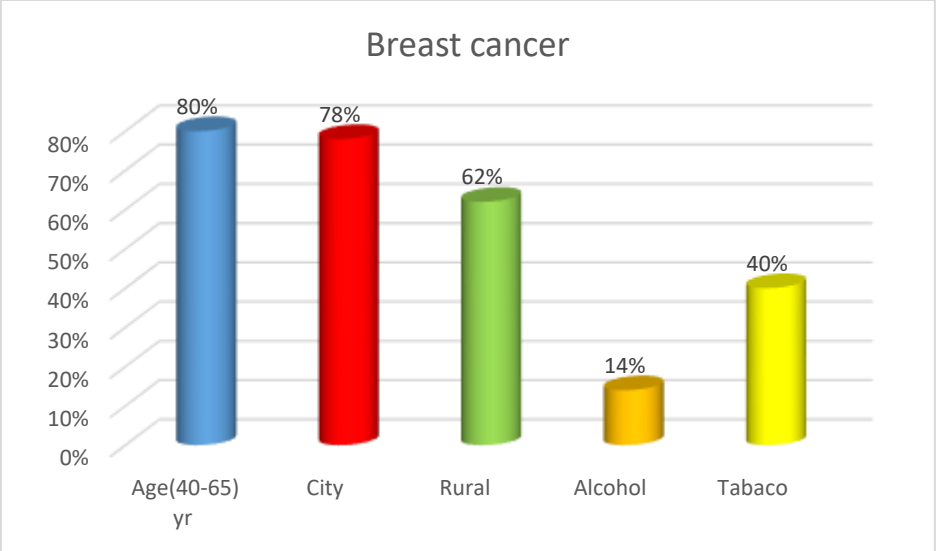

Figure (2): Factors influencing Breast Screening

While Cervical Screening , the age ratio (40-65) years (67%),in the city (82%) ,in the rural(16%) ,alcohol(6%) and Tabaco (38%), as seen in figure(3).

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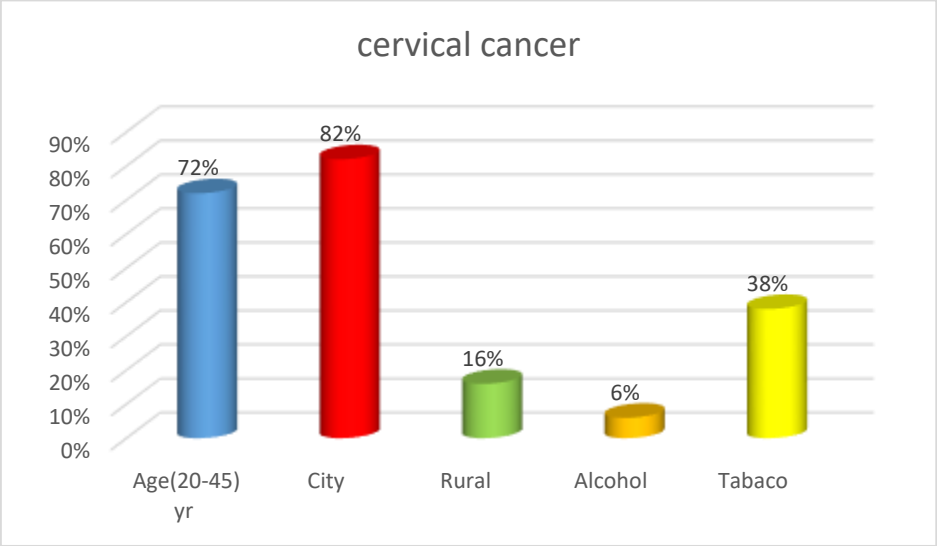

Figure (3): Factors Influencing Cervical Screening

Age is a risk agents for cancer. The American Cancer Society has produced preventive and early detection guidelines diagnosis of breast cancer, and they advise female with medium to higher risks of acquiring the disease to start getting regular mammograms at age 45 [15].

Numerous risk assessment models exist, including the Gail. The Gail Model, which determines Breast cancer has both a 5-year and a lifetime risk, is the most popular risk model. Age, menarche age, first child age, family history, and the total number from biopsies a woman has undergone are used to calculate her risk [16]. The Gail Model is widely utilized in many research as a means of evaluate breast cancer-related risk because it has been verified in various nations [17].

The Gail Model states that women who are older have a higher danger from developing breast cancer; this risk rises with age. This was confirmed by our findings, as the danger was greatest for older age groups. This pattern resembles those of the nations nearby. We discovered that Iraq had the highest breast cancer risk of any nation, which may be a result of the sociopolitical conditions there (chemical warfare, bombs, etc). [18].

The purpose of this study is to evaluate the incidence of cervical cancer among women in Baghdad and its risk factors. Cancer is more likely to affect women over the age of 50. In comparison to research from England [19] and India[20], our findings show that 72% of cervical cancer cases occur in people who are over 50 years old.

Breast cancer is not more likely to affect rural communities. There is evidence to show that the prevalence of breast cancer rises with urbanization. According to the findings of several research, rural women are more frequently given a diagnosis of advanced BC. In Guatemala, women among the ages of 38 and 40 report lifetime cervical cancer screening at rates that are lower for indigenous and rural women [21]. Smoking and alcohol consumption are two behavioral risk agents for the development from breast and cervical cancer [22].

CONCLUSION:

This study revealed that despite the fact that the majority from women have strong knowledge of both two cancer, similar to studies conducted in developing nations. With mammography and Pap smears, the majority exercise rate was, however, modest. In order to improve awareness among women over 40, particularly rural women at Iraq, and to make them aware of the risk factors, the screening program needs to be activated in primary health care and teaching hospitals.

REFERENCES

1. World Health Organization. (2018). Latest global cancer data: Cancer burden rises to 18.1 million new cases and 9.6 million cancer deaths in 2018. International agency for research on cancer. Geneva: World Health Organization.
2. World Health Organization (WHO). Cancer factsheet; 2020. https://www.who.int/cancer/resources/keyfacts/en/. Accessed 25 Apr 2020.
3. Ferlay, J., Soerjomataram, I., Dikshit, R., Eser, S., Mathers, C., Rebelo, M., ... & Bray, F. (2015). Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. International journal of cancer, 136(5), E359-E386.
4. World health Organization (WHO). International Agency for Research on Cancer.

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India factsheet. Lyon: IARC; 2018. https://gco.iarc.fr/today/data/factsheets/populations/356-india-fact-sheets.pdf. Accessed 25 Apr 2020.

5. Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2021). Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: a cancer journal for clinicians*, *71*(3), 209-249.
6. Kaarthigeyan, K. (2012). Cervical cancer in India and HPV vaccination. Indian Journal of Medical and Paediatric Oncology, 33(01), 7-12.
7. Beining, R. M. (2012). Screening for cervical cancer—An exploratory study of urban women in Tamil Nadu, India (Doctoral dissertation, The University of Iowa).
8. Herrmann, C., Vounatsou, P., Thürlimann, B., Probst-Hensch, N., Rothermundt, C., & Ess, S. (2018). Impact of mammography screening programmes on breast cancer mortality in Switzerland, a country with different regional screening policies. BMJ open, 8(3), e017806.
9. Roman, L., Meghea, C., Ford, S., Penner, L., Hamade, H., Estes, T., & Williams, K. P. (2014). Individual, provider, and system risk factors for breast and cervical cancer screening among underserved Black, Latina, and Arab women. *Journal of Women's Health*, *23*(1), 57-64.
10. Lin, S. J. (2008). Factors influencing the uptake of screening services for breast and cervical cancer in Taiwan. The journal of the Royal Society for the Promotion of Health, 128(6), 327-334.
11. Mishra, R. (2020). An epidemiological study of cervical and breast screening in
12. Zhang, S., Xu, H., Zhang, L., & Qiao, Y. (2020). Cervical cancer: Epidemiology, risk factors and screening. *Chinese Journal of Cancer Research*, *32*(6), 720.
13. Centers for Disease Control and Prevention (CDC). What are the risk factors for breast cancer? 2018. https://www.cdc.gov/cancer/breast/basic_info/risk_factors.htm. Accessed 25 Apr 2020.
14. Akinyemiju, T. F., McDonald, J. A., & Lantz, P. M. (2015). Health care access dimensions and cervical cancer screening in South Africa: analysis of the world health survey. BMC public health, 15(1), 1-8.
15. Runowicz, C. D., Leach, C. R., Henry, N. L., Henry, K. S., Mackey, H. T., Cowens-Alvarado, R. L., ... & Ganz, P. A. (2016). American cancer society/American society of clinical oncology breast cancer survivorship care guideline. *CA: a cancer journal for clinicians*, *66*(1), 43-73.
16. Ewaid, S. H., & Al-Azzawi, L. H. A. (2017). Breast cancer risk assessment by Gail Model in women of Baghdad. *Alexandria journal of medicine*, *53*(2), 183-186.
17. Hashim, H. T., Ramadhan, M. A., Theban, K. M., Bchara, J., El-Abed-El-Rassoul, A., & Shah, J. (2021). Assessment of breast cancer risk among Iraqi women in 2019. *BMC Women's Health*, *21*(1), 1-9.
18. Cortesi, L., Canossi, B., Battista, R., Pecchi, A., Drago, A., Dal Molin, C., ... & Cascinu, S. (2019). Breast ultrasonography (BU) in the screening protocol for women at hereditary-familial risk of breast cancer: has the time come to rethink the role of BU according to different risk categories?. *International Journal of Cancer*, *144*(5), 1001-1009.
19. Strander, B., Andersson-Ellström, A., Milsom, I., & Sparén, P. (2007). Long term risk of invasive cancer after treatment for cervical intraepithelial neoplasia grade 3: population based cohort study. *Bmj*, *335*(7629), 1077.
20. Kalliala, I., Athanasiou, A., Veroniki, A. A., Salanti, G., Efthimiou, O., Raftis, N., ... & Kyrgiou, M. (2020). Incidence and mortality from cervical cancer and other malignancies after treatment of cervical intraepithelial neoplasia: a systematic review and meta-analysis of the literature. *Annals of oncology*, *31*(2), 213-227.
21. Brinton, L. A., Figueroa, J. D., Awuah, B., Yarney, J., Wiafe, S., Wood, S. N., ... & Clegg-Lamptey, J. N. (2014). Breast cancer in Sub-Saharan Africa: opportunities for prevention. *Breast cancer research and treatment*, *144*(3), 467-478.
22. Shankar, A., Rath, G. K., Roy, S., Malik, A., Bhandari, R., Kishor, K., ... & Singh, R. (2015). Level of awareness of cervical and breast cancer risk factors and safe practices among college teachers of different states in India: do awareness programmes have an impact on adoption of safe practices?. *Asian Pacific Journal of Cancer Prevention*, *16*(3), 927-932.