

Journal Pre-proof

Cancer nurses, are we really contributing to reduce burden via cancer prevention?

Paz Fernández-Ortega, Celia Diez de los Ríos de la Serna

PII: S2347-5625(22)00124-X

DOI: <https://doi.org/10.1016/j.apjon.2022.04.005>

Reference: APJON 66

To appear in: *Asia-Pacific Journal of Oncology Nursing*

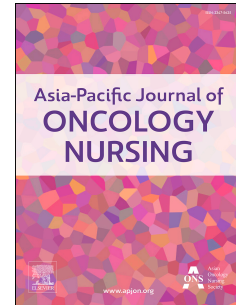
Received Date: 5 April 2022

Accepted Date: 6 April 2022

Please cite this article as: Fernández-Ortega P, de los Ríos de la Serna CD, Cancer nurses, are we really contributing to reduce burden via cancer prevention?, *Asia-Pacific Journal of Oncology Nursing*, <https://doi.org/10.1016/j.apjon.2022.04.005>.

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2022 Published by Elsevier Inc. on behalf of Asian Oncology Nursing Society.



Editorial

Cancer nurses, are we really contributing to reduce burden via cancer prevention?

Paz Fernández-Ortega, Celia Díez de los Ríos de la Serna

School of Nursing, Faculty of Medicine and Health Sciences, Bellvitge Campus, Barcelona University. Barcelona, Spain

Corresponding author: Paz Fernández-Ortega

E-mail: paxfernandez2010@ub.edu

From the wisdom of experience and years, our grandparents used to say: "Prevention is better than cure". Nurses also want to prevent rather than cure cancer and follow that old said.

Cancer is one of the leading causes of mortality in the world and the incidence is expected to keep increasing every year.^[1] And while there is an improvement in cancer survival due to developments on treatments; the diagnosis, treatment and survivorship entails a high burden for patients, for communities and for health systems.

Prevention is better than cure; cancer prevention and early detection have been proven to be more effective than treatment development.^[2] With an estimate of around 30-50% of the cancers as preventable by avoiding risk factors such as lifestyle behaviours, infections, radiation or pollution,^[3] cancer prevention is the most cost-effective strategy for cancer control, and including prevention and early detection into the countries' cancer plans should be a priority worldwide.

While there is extensive evidence supporting the relationship of many preventable causes and cancer,^[3] the lack of progress on research and actions on this important topic should be noted. There are many efforts made by organisations, (like the European Code Against Cancer or the WHO) to increase awareness into these important topics but, still is not sufficiently addressed.

Nowadays, there is a lot of talk about empowering patients, and empowering citizens in general to cope cancer, certainly that means giving them rigorous information. Healthcare providers, educators and governments do fail into targeting population and community and incorporate these as a potential cancer risk-reduction strategy to reduce cancer burden. General population, even those with a high risk of cancer are misinformed about cancer risk factors with low awareness of the influence of lifestyles on cancer risk^[4]. Promoting awareness and increasing health literacy can have a big impact in reducing known risk factors and therefore avoiding the morbidity and mortality of some diagnosis^[2].

Cancer risk factors are often enhanced and impacted by socio-economic status. There are clear differences in between countries that shows the burden of cancer is much higher in low- and middle-income countries but even in a same country and city the outcomes differ depending on where the individual lives as well as their socio-economic status age and education.^[5]

Inequities in access to prevention and resources for screening and cancer care, are affecting for example elderly people, people with disabilities, and/or underserved or unrepresented minority groups.^[5]

Social Ecological Model has demonstrated to be a useful model to cover gaps and to include a global perspective of factors intervening in prevention. The model includes to pay attention those aspects that have been barriers as: the lack in access; limited resources regarding cancer screening for many populations, for minorities and for countries; lack of an understanding of cultural and psychosocial beliefs on preventive care or policy-level barriers.^[6]

Equally, inequalities influence on the modification of healthy lifestyles so health promotion efforts need to focus on the needs of those disadvantaged groups to reduce health inequalities in access to prevention and resources for screening and cancer care and improving their physical health by looking into their mental health also.

For individuals to engage in successful cancer prevention actions, they need to be better informed about both, the risk factors and evidence-based risk-reduction actions. General practitioners, nurses and other healthcare providers are often unaware of the appropriate risk assessment and risk communication which can affect results. Offering information to the population about the cancer risks can increase individuals' attendance to cancer screening as well as a most accurate risk perception that is one of the keys associated with health behaviour change.

A systematic review of health promotion interventions to increase breast cancer screening in countries as different continents from Asia, America, Middle East and Europe proved that positive outcomes were achieved after health promotion interventions, including women's perceptions of breast screening, breast self-examination and knowledge of breast screening.^[7] As the largest group of health care providers, nurses interact more than any other profession with people throughout their lifespan. They are also a very trusted profession for patients and families. They do have the capacity to act as a central role addressing health literacy, as information providers on cancer prevention and risk reduction strategies and to empower individuals to take control and participate in their care. Nurses can therefore reach more people in an individual level while they do care for them. But they also have a key role promoting patient centered organizations and to lead policies to be more inclusive.

However, that does not mean that nurses themselves always have the adequate training or feel confident enough to take up on this role. Nurses need to be prepared to provide this care. A recent Chinese study assessed the knowledge of pregraduate nurses about human papillomavirus (HPV) infection and cervical cancer prevention among young nurses and only 9.7% knew how infection causes cancer and how vaccines protect populations.^[8]

Several models have demonstrated efficacy to target groups with cancer risk. Although is still not commonly used; nurses using the Health Belief Model (HBM) and Health Promotion Model (HPM) on breast cancer behaviours have showed efficiency pre and postoperatively.^[9]

Beliefs and knowledge have clear correlation. If health-care professionals plan some HBM-based educational interventions, the women's knowledge and beliefs about cancer and the warning

signs of cancer improves after nurses' educational interventions leading to preventive actions and improving self-efficacy over time. ^[10]

The well-known telemedicine or tele-health, that has reached its highest due to the COVID pandemic, may be very useful to bring nursing and care to those who do not have the capacity or the healthcare support due to where they live or their situation but also to keep healthcare professionals united and to share knowledge no matter where we are always bearing in mind that the any device must be accompanied by a nurse care activity to be effective.

Oncology nurses it is time for action; to leader and demonstrate our unequivocal role in prevention!

Declaration of competing interest

None declared.

References

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA Cancer J Clin*. 2021 May;71(3):209–49
2. Wild CP, Espina C, Bauld L, Bonanni B, Brenner H, Brown K, et al. Cancer Prevention Europe. *Mol Oncol*.13(3):528–34. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/1878-0261.12455>
3. Whitman DC, Wilson LF. The fractions of cancer attributable to modifiable factors: A global review. *Cancer Epidemiol [Internet]*. 2016;44(2016):203–21. Available from: <http://dx.doi.org/10.1016/j.canep.2016.06.013>.
4. Denny L, Jemal A, Schubauer-Berigan M, Islami F, Vilahur N, Fidler M, et al. Social inequalities in cancer risk factors and health-care access. *Reducing Soc inequalities cancer Evid priorities Res [Internet]*. 2019; Available from: <https://www.ncbi.nlm.nih.gov/books/NBK566202/>
5. Cha EY, Chun H. Barriers and Challenges to Cervical Cancer Screening, Follow-Up, and Prevention Measures among Korean Immigrant Women in Hawaii. *Asia Pac J Oncol Nurs*. 2021 Jan 29;8(2):132-138. doi: 10.4103/2347-5625.308302.
6. Bull ER, McCleary N, Li X, Dombrowski SU, Dusseldorp E, Johnston M. Interventions to Promote Healthy Eating, Physical Activity and Smoking in Low-Income Groups: a Systematic Review with Meta-Analysis of Behavior Change Techniques and Delivery/Context. *Int J Behav Med* 2018 256 [Internet]. 2018;25(6):605–16. Available from: <https://link-springer-com.sire.ub.edu/article/10.1007/s12529-018-9734-z>
7. Agide FD, Sadeghi R, Garmaroudi G, Tigabu BM. A systematic review of health promotion interventions to increase breast cancer screening uptake: from the last 12 years. *Eur J Public Health*. 2018 Dec 1;28(6):1149-1155. doi: 10.1093/eurpub/ckx231.
8. Pu J, He M, Pu Y, Liu Z, Le L, Wang H, Du X. Knowledge about Human Papillomavirus and Cervical Cancer Prevention among Intern Nurses. *Asia Pac J Oncol Nurs*. 2020 Nov 21;8(1):46-50. doi: 10.4103/apjon.apjon_45_20

9. Ersin F, Bahar Z. Effect of health belief model and health promotion model on breast cancer early diagnosis behavior: a systematic review. *Asian Pac J Cancer Prev.* 2011;12(10):2555-62
10. Sharifikia I, Rohani C, Estebarsari F, Matbouei M, Salmani F, Hossein-Nejad A. Health Belief Model-based Intervention on Women's Knowledge and Perceived Beliefs about Warning Signs of Cancer. *Asia Pac J Oncol Nurs.* 2019 Oct-Dec;6(4):431-439. doi: 10.4103/apjon.apjon_32_19

Journal Pre-proof