

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

European Journal of Obstetrics & Gynecology and Reproductive Biology

journal homepage: www.journals.elsevier.com/european-journal-of-obstetrics-and-gynecology-and-reproductive-biology

EBCOG position statement on Inequalities in screening for cervical and breast cancer

Márcia Vieira-Coimbra^{a,*}, Nuno Nogueira-Martins^a, Rafal Zadykowicz^b, Hugo Rodrigues Gaspar^c, Jean Calleja-Agius^d, Maja Pakiz^e, Sambit Mukhopadhyay^f, Tahir Mahmood^g

^a Department of Gynaecology and Obstetrics of Centro Hospitalar Tondela-Viseu EPE, Viseu, Portugal

^b Department of Obstetrics, Perinatology and Gynaecology, Medical University of Warsaw, Poland

^c Department of Gynaecology and Obstetrics of Hospital Central do Funchal, Madeira, Portugal

^d Department of Anatomy, Faculty of Medicine and Surgery, University of Malta, Malta

^e Department for Gynaecologic and Breast Oncology, University Medical Centre Maribor, Slovenia

^f Department of Obstetrics and Gynaecology, Norfolk and Norwich University Hospital, Norwich, UK

^g Visiting Consultant Gynaecologist Spire Murrayfield Hospital, Edinburgh, Scotland and Chair Standing Committee on Standards of Care and Position Statements of EBCOG, UK

ARTICLE INFO

Keywords:

Screening
Gynaecology
Cancer
Cervix
Breast
HPV
National policy
Cancer detection
Prevention
Population
Health inequalities
EBCOG
Europe
Survey

ABSTRACT

Gynaecological cancers, namely breast and cervical cancer represent a high burden in women's health. It is well established that cervical and breast cancer screening programmes are effective in reducing morbidity and mortality. It is of the most importance to define strategies to provide a universal access to screening. In European countries, significant progress has been made over the past years concerning screening strategies, namely the choice of screening test, its frequency as well as the age to start and stop the screening. Introduction of Human Papillomavirus vaccination programmes is also making a measurable impact to reduce cervical cancer prevalence and mortality. Our survey has shown a variation among European countries in delivery of cervical and breast cancer screening programmes. These variations can be due to organizational, economic or cultural reasons. The European Board and College of Obstetrics and Gynaecology calls for an implementation of a unified policy of prevention, screening and early detection of cervical and breast cancer across Europe to optimize clinical outcomes and reduce variations.

Breast and cervical cancers are the most common cause of cancer related mortality in women [1,2]. Organized screening programmes play an important role to decrease the incidence, morbidity and mortality of these cancers by allowing early diagnosis and treatment of precancerous lesions or early-stage cancers [3,4].

Health inequalities are avoidable, unfair and systematic differences in health across population and different groups of people in the society. Differences in the way health care is provided across countries may have an impact on health outcomes and result in inequalities. The European Board & College of Obstetrics and Gynaecology (EBCOG) aims to improve the health of women by promoting the highest possible standards of care. It has published standards of care in 2014 which were

launched at the European parliament in 2014. These gynaecology standards of care provide clear guidelines of what is currently considered generic and specific standards for gynaecology care and screening for cervical and breast cancers [5].

Cervical cancer

Based on the recent survey conducted by EBCOG, inequalities exist in service provision for prevention and screening for cervical cancer. There is lack of presence of a national screening programme for cervical cancer screening in some countries. Discrepancy also exists in Human Papillomavirus (HPV) vaccination programme at a national level. Important

* Corresponding author.

E-mail address: 8507@hstviseu.min-saude.pt (M. Vieira-Coimbra).

<https://doi.org/10.1016/j.ejogrb.2023.08.386>

Received 18 August 2023; Received in revised form 18 August 2023; Accepted 18 August 2023

Available online 30 August 2023

0301-2115/© 2023 Elsevier B.V. All rights reserved.

differences persist regarding choice of test, frequency of screening and the age to start and stop cervical cancer screening.

It is established that HPV testing is the most cost-effective method of screening [6–8]. There is a wide variability (21–29) in the age of commencement of screening [6,9]. Whilst implementation of health policy depends on economic resources, evidence-based approach is the most cost-effective way of improving clinical outcomes. Based on the current evidence, the EBCOG recommends that cervical cancer screening should commence at 25 years of age using liquid-based cytology technique and repeated every 3-year. In countries with high prevalence of cervical cancer or in women with considerable risk factors for it, screening may start at 21 years of age. After the age of 30, HPV testing should be performed at least every 5 years.

HPV vaccination reduces cervical cancer prevalence and mortality [10]. The EBCOG supports WHO recommendation of integration of HPV vaccination in national screening programme. The major benefit on HPV vaccination is achieved if administered before the beginning of sexual activity [8,11]. Therefore, EBCOG recommends the inclusion of HPV vaccination in national programmes for both adolescent girls and boys, before the age of 15 [11]. Recently, the effectiveness of HPV immunization on reducing cervical cancer was highlighted [12,13].

Breast cancer

WHO launched the Global Breast Cancer Initiative (GBCI) in 2021 to reduce global breast-cancer mortality. The strategies adopted are based on early detection, which includes early diagnosis as well as screening programmes [14]. An organized mammography-based screening programme for early detection of breast cancer in asymptomatic women is recommended [15]. There is variation in the age of commencing (40–49) mammography and subsequent screening intervals [16–18]. The EBCOG calls for a most cost-effective screening programme to reduce variation in service delivery across Europe. It supports performing a mammography every 2 years, starting at age at 50 years old and ending at 70, accordingly to comorbidities and life expectancy.

Although significant progress has been made over the past years towards improving cervical and breast screening, it is important to acknowledge that this process still faces multiple barriers and a considerable amount of work still needs to be done. Based upon the recent EBCOG survey, organizational issues as well as economic and cultural concerns are common barriers for most countries.

The EBCOG strongly recommends universal national screening programmes for breast and cervical cancers. A unified approach of screening and prevention based on high quality of evidence should be incorporated at national level to improve population health by improving outcomes of cervical and breast cancers.

The EBCOG calls upon the EU commission to take note of the findings of our scientific survey which has reported considerable variations in cancer screening delivery programmes. We urge upon the EU health commissioner to set up a strategic multi-disciplinary working group to define a European wide screening programmes for both cervical and breast cancers. EBCOG Council would be looking forward to working with it this working group.

This position statement has been peer reviewed by members of the

EBCOG standing committee on standards of care and position statements electronically and approved.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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;71(3):209–49.
- [2] Ferlay JEM, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, et al. Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. 2020. Available from: <https://gco.iarc.fr/today>, accessed [26 September 2022].
- [3] Schiffman JD, Fisher PG, Gibbs P. Early detection of cancer: past, present, and future. *Am Soc Clin Oncol Educ Book* 2015;(35):57–65.
- [4] Loud JT, Murphy J. Cancer screening and early detection in the 21(st) century. *Semin Oncol Nurs* 2017;33(2):121–8.
- [5] Gynaecology EBaCoOa. Standards of Care for Women's Health in Europe 2014 4th April 2022. Available from: <https://eeca.unfpa.org/sites/default/files/pub-pdf/Standards%20of%20Care%20for%20Gynaecology%20Services.pdf>.
- [6] Kyrgiou M, Arbyn M, Bergeron C, Bosch FX, Dillner J, Jit M, et al. Cervical screening: ESGO-EFC position paper of the European Society of Gynaecologic Oncology (ESGO) and the European Federation of Colposcopy (EFC). *Br J Cancer* 2020;123(4):510–7.
- [7] Bhatla N, Aoki D, Sharma DN, Sankaranarayanan R. Cancer of the cervix uteri: 2021 update. *Int J Gynaecol Obstet* 2021;155(S1):28–44.
- [8] von Karsa L, Arbyn M, De Vuyst H, Dillner J, Dillner L, Franceschi S, et al. European guidelines for quality assurance in cervical cancer screening. Summary of the supplements on HPV screening and vaccination. *Papillomavirus Res* 2015;1: 22–31.
- [9] Partridge EE, Abu-Rustum N, Giuliano A, Massad S, McClure J, Dwyer M, et al. Cervical cancer screening. *J Natl Compr Canc Netw* 2014;12(3):333–41.
- [10] Wilailak S, Kengsakul M, Kehoe S. Worldwide initiatives to eliminate cervical cancer. *Int J Gynaecol Obstet* 2021;155(S1):102–6.
- [11] Verheijen RHM, Mahmood T, Donders G, Redman CWE, Wood P. EBCOG position statement: Gender neutral HPV vaccination for young adults. *Eur J Obstet Gynecol Reprod Biol* 2020;246:187–9.
- [12] Falcaro M, Castañon A, Ndlela B, Checchi M, Soldan K, Lopez-Bernal J, et al. The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study. *Lancet* 2021;398(10316):2084–92.
- [13] Lei J, Ploner A, Elfström KM, Wang J, Roth A, Fang F, et al. HPV vaccination and the risk of invasive cervical cancer. *N Engl J Med* 2020;383(14):1340–8.
- [14] Global Breast Cancer Initiative Implementation Framework: assessing, strengthening and scaling-up of services for the early detection and management of breast cancer. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.
- [15] European Commission Initiative on Breast Cancer. Organising breast cancer screening programmes. Available at: <https://healthcare-quality.jrc.ec.europa.eu/ecibc/european-breast-cancer-guidelines/organisation-of-screening-programme> (Accessed on April 5, 2023). [.]
- [16] European Commission Initiative on Breast Cancer. Screening ages and frequencies. Available at: <https://healthcare-quality.jrc.ec.europa.eu/ecibc/european-breast-cancer-guidelines/screening-ages-and-frequencies> (Accessed on April 5, 2023). [.]
- [17] Cardoso F, Kyriakides S, Ohno S, Penault-Llorca F, Poortmans P, Rubio IT, et al. Early breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Ann Oncol* 2019;30(10):1674.
- [18] Network NCC. Breast Cancer Screening and Diagnosis (Version 1.2022) 2022 [Available from: https://www.nccn.org/professionals/physician_gls/pdf/breast-screening.pdf.