



Cancer Education in a Changed World

Radoslaw Tarkowski¹

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Generations of nurses, physicians, researchers, psychologists, lecturers, and people involved in primary and secondary prophylaxis have been active for decades in the space of cancer education. Despite some visible successes—e.g., reduction in cervical cancer incidence and mortality following vaccinations and screening, reduced numbers of tobacco users, and better medical service level due to a better understanding of patient needs—there are still many issues to address. The process of education is dynamic, especially during the last 2 years, which have changed the situation greatly. Although there are different areas of conflicts and serious geopolitical problems elsewhere, European eyes, among others, are focused on the war in Ukraine. In addition, the COVID-19 pandemic remains universal for all of the world.

The pandemic has altered cancer education, training, and academic/professional learning, and cancer treatment and care, leading to delays in prevention, screening, and early detection among populations in need [1]. Sixteen of the Organisation for Economic Cooperation and Development (OECD) countries stopped cancer screening temporarily due to the COVID-19 pandemic. Besides the fear of infection, lockdown communication barriers together with social distancing barriers also discouraged people from taking part in suitable screening examinations. In addition, healthcare professionals were seconded to take care for COVID-19 patients instead of following their main activities, and laboratories focused on COVID-19 patient testing.

As a result of these factors, cancer screening rates decreased by about 55% for cervical cancer in Italy, 53% for colorectal cancer in the Czech Republic in early 2020, and 44% for mammography in France in the spring of 2020. Data obtained from 14 countries also show reductions in the number of newly diagnosed cancer cases. For example,

the number of breast cancers diagnosed in Ireland was 30% lower, and the authors explained it as a correlation of decreased screening rates [2].

In Japan, new cancer cases decreased by 5.8% overall in 2020 compared with 2016–2019, with a large decrease noted for stomach cancers (13.8%) [3]. Stomach cancer is more common in Japan than in the Western world, but with the use of screening endoscopies, most gastric cancer cases in Japan are diagnosed early: in 2019, 62% were stage I [4]. However, due to the pandemic, diagnosis of stage I and II gastric cancers fell by > 10% in 2020 compared with 2018 and 2019 [3]. The authors explain the drop as an effect of cancelled screening due to the recommendation of the Japan Gastroenterological Endoscopy Society to postpone examinations in non-urgent cases [3]. The Ministry of Health, Labour, and Welfare subsequently announced on May 26, 2020, that cancer screening should not be postponed any longer [5], and government television advertisements encouraged people to undergo examinations and seek necessary medical help if they were symptomatic.

While some countries have abandoned secondary prophylaxis during the pandemic, interesting initiatives have appeared in others. Self-sampling kits were sent to high-risk populations in Slovenia, the Netherlands, and the USA, allowing these countries to achieve even higher screening rates [2]. Slovenia conducted an in-depth analysis, including cancer stage information and access to cancer screening and care by region and socioeconomic group, to target the aforementioned tool especially to vulnerable groups. Another positive aspect concerns vaccination rates for human papilloma virus, which did not decrease in most OECD countries, except Australia, Mexico, and Chile. Proper cancer education remained an effective tool in addressing this important issue. Telemedicine became another valuable tool in cancer care. Telephone and video consultations replaced some in-person visits for follow-up care in Norway, and a telephone triage system was proposed in the UK for new cancer patient referrals [2].

As a surgical oncologist, I was happy to serve without a break except for delayed breast reconstructions and

✉ Radoslaw Tarkowski
rt@rakpiersi.net

¹ Breast Unit, Department of Surgical Oncology, Regional Specialist Hospital, ul. Iwaszkiewicza 5, Legnica 55-220, Poland

prophylactic mastectomies in patients with mutations but without active cancer. It was hard to provide proper communication when both the patient's and oncologist's faces were behind masks, especially in cases of hearing impairment. The SPIKES protocol (setting, perception, information, knowledge, empathy, strategize) for delivering the news that a patient has cancer [6] has not addressed this aspect of pandemic circumstances.

I heard from the COVID-19 ward staff members about patients asking them to take off their masks, because the dying wanted to see human faces. I remember my friend's mother, a cancer patient admitted to the COVID-19 ward after surgery, when her infection occurred. I remember our farewell and her being surrounded by team members dressed in protective uniforms, double masks, and goggles. She died the next day.

Poland became a front-line country when Russia invaded Ukraine in February 2022. Many cancer patients from Ukraine come to the Polish health service for treatment, which is guaranteed and free for war refugees. Given that we are all required to wear masks in outpatient clinics and wards, it can be hard to communicate not only because of the stress of delivering bad news but also because we do not speak a common language (although the mutual intelligibility of our Slavic languages reaches 32% for Ukrainian and 18% for Russian, the second mother tongue of 50% of Ukrainians, especially from the eastern part of their homeland). We need to think about better cancer education in these languages and encompassing screening as well.

The times they are a-changin' [7], and we must be even more active in cancer education. Some people have abandoned secondary prevention examinations, and others have been afraid to enter crowded corridors before an

examination. Some of them are still absent. *Did anything happen since I haven't come?* they ask.

It is necessary to find them again and focus their attention, and cancer education is a tool for achieving these goals.

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