

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. in China (NCT03739944), which will enrol 700 patients allocated to laparoscopic radical hysterectomy or trachelectomy, or laparotomic radical hysterectomy or trachelectomy. Both studies have planned to assess the long-term evaluation of quality of life, the results of which will hopefully provide relevant findings.

We declare no competing interests.

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Impact of the COVID-19 pandemic on the symptomatic diagnosis of cancer: the view from primary care



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For more on the challenges of cancer care during the COVID-19 pandemic see Editorial Lancet Oncol 2020; 21:603

For more on the impact of COVID-19 on cancer diagnosis see Comment page 750

The entire landscape of cancer management in primary care, from case identification to the management of people living with and beyond cancer, is evolving rapidly in the face of the coronavirus disease 2019 (COVID-19) pandemic.¹ In a climate of fear and mandated avoidance of all but essential clinical services, delays in patient, population, and health-care system responses to suspected cancer symptoms seem inevitable.

Screening, case identification, and referral in symptomatic cancer diagnosis have all been affected by the COVID-19 pandemic. UK national cancer screening programmes—accounting for approximately 5% of all cancer diagnoses each year-have been suspended.² Consequently, early diagnoses from screening will be delayed and symptom-based diagnosis of cancer will become more important.³ Unfortunately, postponing screening sends a message to the public and primary care that cancer can wait.

Timely presentation to primary care of patients with symptoms is driven by a combination of appraising symptoms as warranting attention, perceived or actual ability to consult a health-care professional, perceived consequences of seeking help, and priority over competing goals.⁴ It is probable that patients with well recognised red flag symptoms, such as a new lump or rectal bleeding, will continue to present to primary care. With COVID-19 at the forefront, however, vague cancer symptoms such as fatigue, change in bowel habit, and weight loss might be dismissed by the patient as trivial.⁵ Respiratory symptoms, including persistent cough, might be attributed to COVID-19 and not acted on. Patients might be reluctant to present because of fear of interacting with others, limited capacity to use video or teleconsultations, and concerns about wasting the doctor's time.6.7

For family doctors, the COVID-19 pandemic is affecting all aspects of normal working life, including a reduced workforce due to illness and self-isolation, and the reduced availability of appointments and investigations in primary and secondary care. The huge shift to telephone triage and video consultations might result in missed cues, reduced examination findings, and loss of the clinician's gut feeling. Remote consulting might also be less suited to vulnerable patients and individuals from low socioeconomic backgrounds than to patients from high socioeconomic settings, compounding inequalities already apparent in early cancer diagnosis.⁸ If patients with cancer symptoms do present to primary care, there is no consensus on how they should be managed during the pandemic, or safety-netted. When patients are referred, they are likely to be triaged or delayed.⁹ For example, the cancellation of all but emergency endoscopy will inevitably prolong the time to diagnosis of gastrointestinal cancers.

Management and follow-up of patients with cancer is also affected by the COVID-19 pandemic. Many patients with cancer, especially those undergoing chemotherapy, radical radiotherapy, and immunotherapy, are at greater risk from the symptoms and sequelae of COVID-19. The National Health Service quidelines state that patients will want to discuss whether the benefits of continuing active cancer treatment outweigh the risks of potentially being seriously unwell if they contract COVID-19, which is a role that could well fall to primary care.9 The UK cancer charity Macmillan Cancer Support reports that a quarter of calls to its support line are from patients with cancer who are anxious about COVID-19.10 Although cancer charities provide a vital support role, primary care needs to support the physical and mental health of patients for whom potentially lifesaving cancer treatments are being postponed.

Cancer treatments are a priority in the healthcare system, but as health-care become increasingly occupied with caring for patients with COVID-19, these patients will inevitably take precedence. Patients needing immediate care are receiving treatment, but when possible, treatments will be delayed. Guidance to help make these difficult decisions might be variable, inconsistent, and hurried, with the inevitable risk to patient outcomes. In this situation, the psychological effect on patients and clinical staff will be enormous.

The COVID-19 pandemic has implications for primary care and the crisis has highlighted potential solutions for dealing with future global health threats. Although these are unprecedented times, it is probable that the use of remote consultations will grow. Increased flexibility in accessing health care might serve to advantage some population groups, but risks disadvantaging others. If done well, remote consulting could benefit previously underserved patient populations (ie, individuals living in remote areas).

Behavioural interventions to encourage the timely symptomatic diagnosis of cancer are important. Public awareness campaigns should signal that early helpseeking is welcome and legitimate, and might use social media and community networks that have grown in response to COVID-19. Clinicians should be aware of so-called diagnostic overshadowing from COVID-19 and remember that patients might have markedly delayed presentation already and need additional support navigating the next steps in terms of their referral and safety-netting.

If cancer is suspected, clinicians should not be deterred from referring patients urgently because of COVID-19 or other future global health threats. However, healthcare professionals might have to accept triage and risk stratification of patients with potentially serious disease. Biomarker and machine-learning approaches might support prioritisation of patients who are at greatest risk, diverting health-care resources towards managing patients who are seriously ill.

When patients are diagnosed with cancer, or are living with or beyond cancer, providers of primary care might have to accept enhanced roles in supporting decisions on cancer treatment, palliative care, and advanced planning around resuscitation and preferred places of care.

When normal service resumes at a population and health-service level, there will be a huge backlog of patients with potential cancer symptoms needing urgent assessment. Planning for recovery should commence as soon as possible.

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Fewer cancer diagnoses during the COVID-19 epidemic in the Netherlands

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For more on the challenges of cancer care during the COVID-19 pandemic see Editorial Lancet Oncol 2020; 21: 603

For more on the **impact of COVID-19 on cancer diagnosis** see **Comment** page 748 See Online for appendix The dreadful consequences of coronavirus disease 2019 (COVID-19) put an unprecedented pressure on health-care services across the globe.¹ The Netherlands, a country with 17.4 million inhabitants that provides its citizens with universal access to essential health-care services—with the general practitioner as the gatekeeper to secondary care—is no exception in this regard.

The first patient with COVID-19 in the Netherlands was confirmed on Feb 27, 2020, in the southern part of the country.² Thereafter, the disease spread rapidly throughout the country. Subsequently, strict social distancing policies were implemented by the Dutch government as of March 15, 2020, to mitigate the spread of COVID-19.³⁴

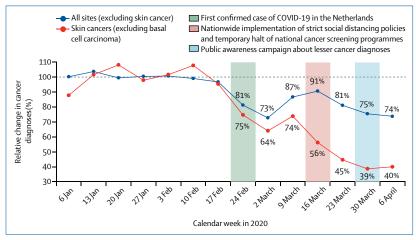


Figure: Number of cancer diagnoses by week in the Netherlands in the period between Jan 6, 2020 (calendar week 2) and April 12, 2020 (calendar week 15)

Basal cell carcinoma of the skin is not included in the statistics. The point estimates for the change in cancer diagnoses per calendar week are based on the mean total number of cancer diagnoses in the calendar weeks from 2 to 8; that is, the period before the COVID-19 outbreak in the Netherlands. Approximately 3400 malignancies were notified per week to the Netherlands Cancer Registry in the calendar weeks from 2 to 8. Of note, these figures do not yet include cases diagnosed in one of the 74 hospitals in the Netherlands. COVID-19=coronavirus disease 2019.

The mayhem caused by COVID-19 has brought about substantial changes in cancer diagnosis in the Netherlands. Data from the nationwide Netherlands Cancer Registry in the period between Feb 24, 2020, and April 12, 2020-which are based on initial case ascertainment through pathological cancer notifications from the Nationwide Network of Histopathology and Cytopathology—show that there is a notable decrease in cancer diagnoses when compared with the period before the COVID-19 outbreak. This effect was most pronounced for skin cancers (figure) and observed across all age groups and geographical regions, and almost all cancer sites (appendix). Several arguments might explain this decrease. First, individuals with potential, non-specific symptoms of cancer might have barriers to consulting a general practitioner, including moral concerns about wasting the general practitioner's time for non-COVID-19-related symptoms, assumptions about insufficient capacity for essential non-COVID-19-related health-care services, and anxiety about acquiring COVID-19 in a health-care setting. Second, most of the general practitioner consultations for non-acute issues are transitioned to telehealth. A general practitioner might, therefore, postpone initial investigations for symptoms that do not immediately hint towards a potential cancer diagnosis, resulting in delayed or postponed hospital referrals. Third, hospitals might have postponed diagnostic evaluation or have longer turnaround times for diagnostic evaluation because many hospital-based resources are being allocated to tackle COVID-19. Lastly, national screening programmes for breast, colorectal, and cervical cancer are temporarily halted as of March 16, 2020, to alleviate the demand on the health-care system due to COVID-19.