

## **Cancer Patients' Satisfaction with Virtual Clinics in Ireland During COVID-19**

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### **Abstract**

#### ***Aim***

To measure cancer patients' satisfaction with telephone consultations during the COVID-19 pandemic.

#### ***Methods***

Cancer patients on active treatment or surveillance in an Irish University hospital were invited to complete a questionnaire issued via "Survey Monkey". It comprised ten questions and assessed patients concerns including preference to continue with virtual consultations. Patients recorded what was absent from the current environment when compared with previous clinics.

#### ***Results***

This survey was issued to 180 cancer patients with a median age of 65 (range 20 – 92) years. Fifty-four patients (30%) completed this anonymised questionnaire. Over 96% (n=52) of cancer patients agreed/strongly agreed their concerns were addressed satisfactorily and similarly 93% (n=50) felt reassured after this consultation. One-third of patients (n=18) would prefer for all out-patient consultations to revert to those in the pre COVID-19 era and 11% (n=6) agreed all future consultations should continue virtually. The remaining, 30 patients (56%) agreed with the later though only in certain circumstances. Twenty-eight patients missed (56%) missed the face-to-face interaction and reassurance provided by a physical examination.

#### ***Conclusion***

This is the first Irish oncology study which examined cancer patients' perspective of Health Service Executive directed virtual outpatient clinics. Face-to-face consultations are crucial for optimal cancer patient care and cannot be eliminated completely.

## **Introduction**

The COVID-19 pandemic has led to an unprecedented lockdown of Ireland and significant challenges to the national healthcare system, with the closure of elective day case procedures and outpatient department (OPD) clinics. In accordance with the national Health Service Executive (HSE) recommendation, all cancer related activities were transferred from public to private hospital facilities to reduce patient risk of exposure to COVID-19<sup>1</sup>. Cancer patients are a vulnerable group and data from the first Chinese national study<sup>2</sup> identified those treated with anti-cancer therapies had almost a five-fold increased risk of death or need for intensive care unit (ICU) requirements when exposed to COVID-19. Accordingly, the decision to continue or stop cancer therapies were based on risk assessments as per international (American Society of Clinical Oncology & European Society of Medical Oncology) & national (National Cancer Control Programme NCCP) guidelines<sup>3</sup>. National guidelines recommended reducing hospital visits by postponing all routine outpatient department (OPD) visits. In order to continue to deliver a medical oncology service, we continued all return patient OPD visits virtually by telephone.

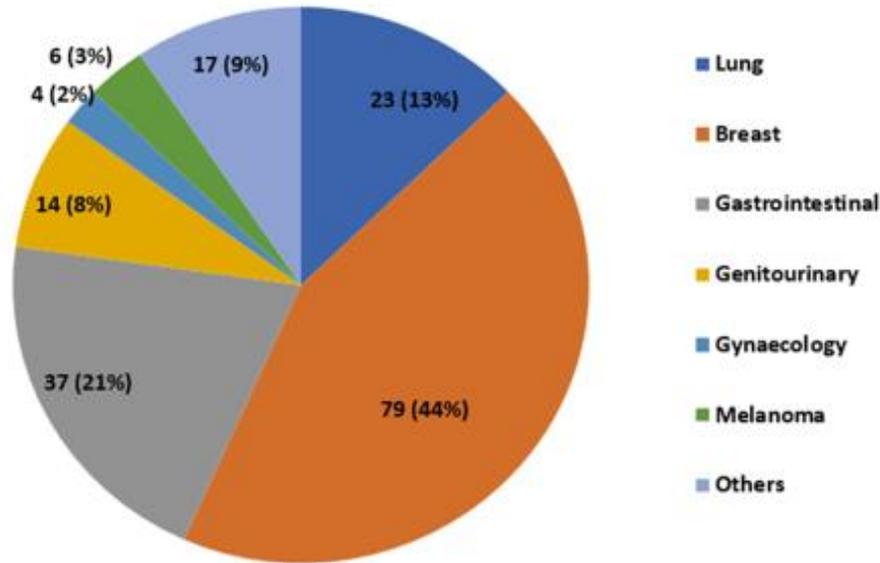
## **Methods**

Cancer patients on active cancer treatment or surveillance (post treatment) in University Hospital Waterford (UHW) were invited to complete an online questionnaire (Survey Monkey). The study aims were to measure patient satisfaction with virtual (telephone) clinics when compared with previous OPD clinic reviews. Full ethical approval was granted by National Research Ethics Committee for COVID-19-related Research (NREC COVID-19) in May 2020. Verbal consent was obtained during/following these virtual consultations. Patients were also required to confirm consent prior to completing this study questionnaire. This comprised of ten questions, which were structured as a statement, with answers ranging from two to five options. It assessed whether patients' concerns were addressed, if they had sufficient time to address their concerns and their preference to continue with virtual consultations. The final question enabled cancer patients to document what was absent from virtual clinics when compared with traditional OPD clinics.

Continuous variables were reported as medians with the corresponding range. Categorical variables were reported as frequencies and respective percentage. The cumulative positive (agree) and negative (disagree) result was calculated by combining agree with strongly agree responses and disagree with strongly disagree responses, respectively.

## **Results**

This survey was issued to 180 cancer patients including 65 (36%) men and 115 females (64%) with a median age of 65 (range 20 – 92) years. This included 79 (44%) breast cancer patients, 37 (21%) gastrointestinal and 23 (13%) lung cancer patients (Figure 1). Fifty-four patients (30%) completed this anonymised questionnaire and the median duration was 3 min 34s.



**Fig.1** Frequency of cancer diagnosis. Numbers depicted as n (%)

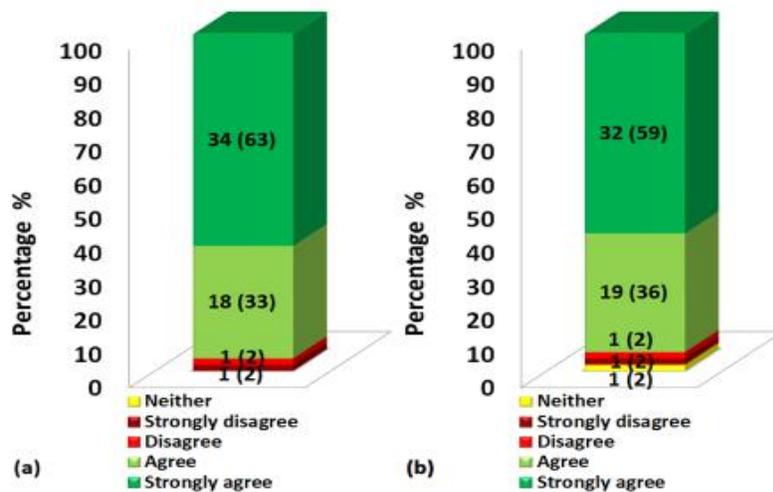
Over 98% (n=53) of patients identified the clinician introduced themselves and explained why the virtual clinic was taking place. Almost 70% (n=37) received prior notice of this clinic and over one-fifth, 21% (n=11) were not familiar with the clinician conducting this clinic. Almost seven in every ten patients knew their follow-up plan, 69% (n=37) and over 94% (n=51) had the oncology department contact details. The below summaries the findings from the structured statements with multiple choice options and patients selected the best option.

*Question 1: I felt my concerns and questions were addressed.*

Over 96% (n=52) agreed / strongly agreed their concerns were addressed (Figure 2a).

*Question 2: I felt there was enough time to address my concerns.*

Almost 95% (n=51) agreed/strongly agreed sufficient time was given to address their concerns and 2% (n=1) neither agreed nor disagreed with this statement (Figure 2b).



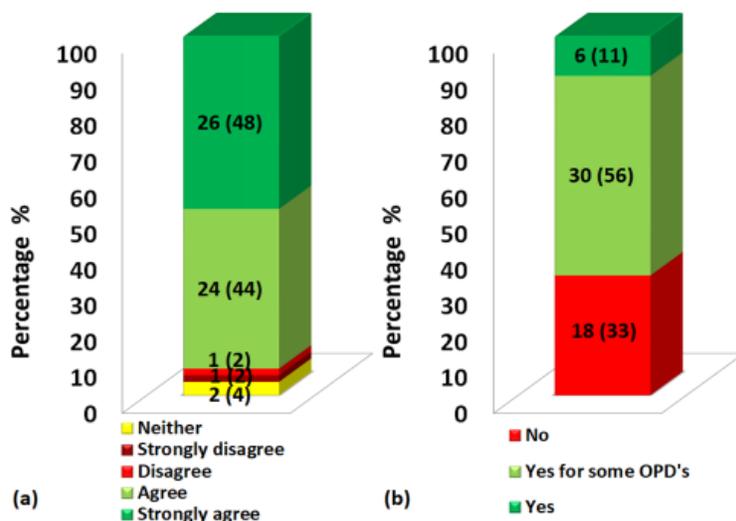
**Fig.2(a) Concerns addressed (b) Sufficient time.** Numbers depicted as n (%)  
 Note: Upon rounding of percentages, all total may not add to 100%

*Question 3: I felt reassured after the consultation.*

Over 92% (n=50) agreed / strongly agreed with reassurance following the virtual consultation. The remaining four patients reported: 4% (n=2) neither agreed nor disagreed and 4% (n=2) disagreed/ strongly disagreed with such reassurance (Figure 3a).

*Question 4: Would you be happy to receive another virtual OPD instead of a face-to-face OPD?*

One-third of patients (n=18, 33%) opted to meet a clinician for all future OPD clinics. Over 11% (n=6) would prefer all OPD reviews to take place in the virtual setting. The remaining 56% (n=30) favoured the virtual clinic for some OPD clinic reviews (Figure 3b).



**Fig. 3(a) Reassurance following OPD (b) Preference to continue with virtual OPD** clinics. Numbers depicted as n (%)

The final question asked patients to document what was absent from the virtual OPD when compared with the traditional OPD clinic. Fifty patients (93%) answered this question. As per Table 1, 30% (n=15) identified advantages by avoiding hospital OPD clinics, including 6% (n=3) reduced risk of COVID-19 exposure and 4% avoiding ancillary costs (n=2). There were more patients, 66% (n=33), who identified challenges with the new virtual clinic. Over one-third of patients (n=17) missed the face-to-face interaction with the clinician. There were 22% (n=11) who identified the lack of physical examination as a challenge. The remaining patients found it easier to understand information in the traditional OPD setting (n=3, 6%) and identified (n=2, 4%) the lack of support from meeting other patients as a challenge.

**Table 1:** Comparison of pre-COVID-19 OPD clinics with virtual OPD clinics.

Response	n	%
Face-to-face interaction	17	34
Physical examination	11	22
Nothing	10	20
Glad not to attend during Covid-19	3	6
Easier to understand information in OPD's	3	6
Did not miss clinic delays/parking costs	2	4
Support from meeting other patients	2	4
Other	2	4

## Discussion

To the best of our knowledge this is first Irish study to assess the opinions of cancer patients in Ireland using telemedicine during COVID-19. We identified most patients were in, agreement / strong agreement that there was sufficient time to answer questions and were adequately addressed (95%) with over 92% reassurance with this clinic. However, 66% expressed concerns with continued use of telemedicine when compared with the traditional face-to-face OPD setting.

The merit of OPD clinic cancellations is obvious through avoiding potential iatrogenic COVID-19 exposure, needs to be balanced with patients' needs<sup>(4)</sup>. Only 6% (n=3) identified this as a justifiable measure to reduce such exposure. One third of patients (n=18) in this study wanted *all* further OPD clinic visits to be held in a face-to-face setting and an additional 22% felt reassured by a physical examination at these clinics. The latter also poses a challenge for clinicians; the previous social cues acquired from a face-to-face interaction to further explore potential patient concerns are absent. Similarly, a surveillance scan can offer reassurance within the imaging field though any new palpable mass clinically identified is no longer possible. In the event of extending telemedicine to include video, challenges are presented by poor room lighting<sup>(5)</sup> and General Data Protection Regulation (EU GDPR) compliance.

In a rapidly expanding area of research, different outcomes for patients with cancer who have had COVID-19 are being reported. Fortunately, recent data from the UK Coronavirus Cancer Monitoring Project (UKCCMP) did not identify any increased mortality from COVID-19 cancer patients on systemic therapy when compared with those not on active systemic therapies <sup>6</sup>. This was a prospective observation study which included 800 cancer patients and included 43% metastatic cancer patients and 58% on chemotherapy, endocrine/targeted-therapy or immunotherapy within four weeks of a COVID-19 diagnosis. Particular concerns have been expressed with the use of anti-PD-L1 therapy and potential cytokine storm risk in the current era, however use of such therapy in lung cancer patients did not result in more severe COVID-19 illness <sup>7</sup>.

There are limitations to this study, including a low response rate. Participation in health surveys are known to be on the decline since the 1980's when a participation rate of 80% was possible <sup>8</sup>; nowadays participation rates of 40 – 50% are the norm. However, one would expect higher rates in patients with chronic illness to voice their concerns, though perhaps COVID-19 fatigue a contributing factor. This survey required access to a smartphone which have limited patient uptake of this survey in an older cohort of patients. As this study was GDPR compliant there is no way to identify the individual patient concerns and examine if there are any differences between the gender, age or cancer subtype. This is a voluntary study; it does not capture the responses of those who opted out or why these opted out.

It is too early to determine if the current OPD clinics may lead to delays in recurrent cancer or metastatic cancer diagnoses. It is encouraging more recent cancer patient treatment does not identify any significant increase in mortality with COVID-19, when on active treatment. There may be an opportunity to continue with virtual clinics for a cohort of cancer patients without compromising health outcomes and yielding a more efficient cancer OPD clinic service.

**Acknowledgements:**

Participating cancer patients.

**Ethics Approval & Consent to Participate:**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

**Declaration of Conflicts of Interest:**

The authors declare that they have no conflict of interest.

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