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Group type	Patients characteristics		Patient with ART			
	Number of patients	Patients without ART	Patients with ART	Patients with FF before ART detected by IVD	Patients without FF before ART and not detected by IVD	FN (with significant dosimetric changes)
Group A	22	21	1	1	0	0
Group B	40	33	7	5	2	1
Group C	125	91	34	25	9	6

Digital Poster: Patient care, side effects and communication

PO-1975 The use of mHealth apps in interactive health literacy - perspectives from healthcare professionals.

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Purpose or Objective

The World Health Organisation (WHO) advocates the use of mobile and wireless technologies to support the achievement of health objectives (mHealth). Apps currently focus primarily on the improvement of patient communication, monitoring and education; improving access to health services, clinical diagnosis and treatment adherence. Evidence supporting the effectiveness and impact of mHealth apps is limited but a recent systematic review identified a beneficial impact in chronic disease management. Careviz is a free app that aims to regroup the resources needed during and after treatment. It connects patients with loved ones and the wider patient community and provides a way to keep track of symptoms over time.

The aim of this study was to determine how a mobile app (Careviz) could support the interactive health literacy of users to more effectively manage consultations with their health care providers from the perspective health professionals.

Specific objectives:

- The explore the views of different health professionals on how the app could support communication with patients.

Materials and Methods

A qualitative methodology was utilised to collect data through semi-structured interviews. The study was conducted in collaboration with a local Cancer Centre. Health professionals (n=5) working in oncology were identified through purposive sampling to represent the professionals involved in the patient pathway (oncologist, therapeutic radiographer, clinical nurse specialist, oncology information specialist and brachytherapy specialist). Participants were asked to attend a Careviz launch session showing how the app works, and were then given two weeks to 'play' with the app and determine its usefulness within the oncology setting. Interviews were audio recorded, transcribed and analysed thematically.

Results

Preliminary results showed potential use for mHealth apps in recording signs and symptoms by the patient in preparation for their consultation or follow-up appointments. Thus enabling better communication during consultations. Information useful to clinical care and treatment could be made available through the app; however there is concern over the validity and specificity required for individual patient care and understanding. The sheer volume of information could result in the loss of relevance. It is recognised that the app might not be appropriate for all patient groups within an oncology setting.

Conclusion

Low health literacy is a barrier facing many patients with chronic diseases and low levels of interactive health literacy may impact on effective use of services and health outcomes. Effective communication is a key component of interactive health literacy and interventions aimed at improving patient-doctor communication positively correlate with improved health. mHealth has been presented as offering the potential to improve levels of health literacy, however, research into mHealth as a patient empowerment tool requires further research.

PO-1976 Has the Covid-19 Pandemic increased willingness to engage with remote collection of outcome data?

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Purpose or Objective

Remote healthcare applications have been developing over many years, however clinical implementation has been cautious. As society has embraced technology during the Covid-19 pandemic, the question is: have attitudes towards remote healthcare technology also changed? One particular aspect of healthcare that could be addressed remotely is the collection of patient reported outcome measures (PROMs) using a digital voice assistant (DVA) such as the Amazon Echo (Alexa). This could improve both the frequency and quality of data collected.

Materials and Methods

A questionnaire was developed to evaluate patient and carer opinions on using a DVA to report radiotherapy-related side effects. This was distributed to the adult patients in the radiotherapy department in February 2019 and to the Teenager, Young Adult and Paediatric radiotherapy department in mid 2019. It was redistributed in September 2020, allowing a pre/post Covid-19 comparison. To maximise engagement with the questionnaire, it was decided to ask a small number of simple questions. These four questions sought to ascertain whether the respondent was a patient or carer, respondent age (decade grouping), how knowledgeable they were about

the Amazon Echo, and how willing they would be to participate in a hypothetical study in which they would use an Amazon Echo to record the side effects they experienced as a result of their cancer treatment. A comments box was included to allow participants to convey additional information.

Results

85 completed questionnaires were collected in 2019 and 43 in 2020. The median age of the initial survey cohort was 60-69 years old whilst for the second cohort was 50-59 years old. The slight difference in median age of the cohorts is likely a reflection on modifications to clinical practice due to Covid-19. 16% of the initial cohort and 19% of the second cohort were carers. 67% of the initial cohort responded that they had some or good knowledge of Amazon Echo, this increased to 84% in the second cohort (fig. 1). Willingness to participate was highest in the group of patients with good knowledge. 44% of the initial cohort were willing to take part in a study using an Amazon Echo to record side effects, increasing to 58% in the subsequent cohort (fig. 2). However, the percentage of respondents who were not willing to take part also increased from 32% to 37% with a reduction in the number of respondents who didn't know (25% to 5%). Willingness to participate varied with age. Comments were diverse and included concerns about using technology and data security but also positive comments on the potential to reduce hospital visits.

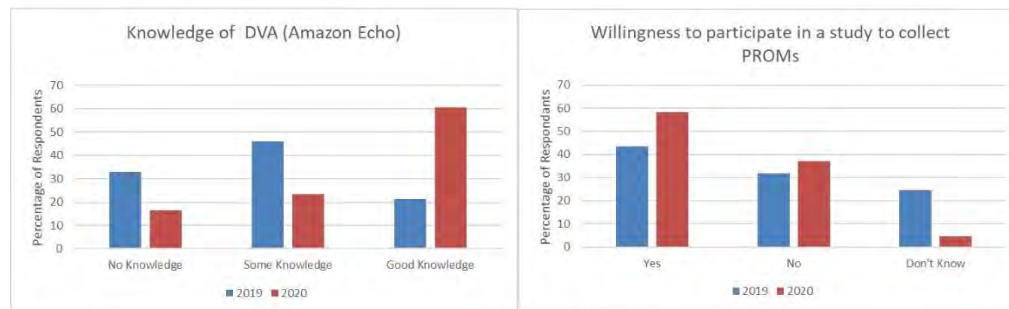


Figure 1

Figure 2

Conclusion

Overall, the survey results indicate an increased knowledge of DVA. There was also an increased willingness to engage with a DVA for remote collection of radiotherapy outcome data following the first wave of the Covid-19 pandemic.

PO-1977 The importance of psycho-social support during radiotherapy treatments

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Purpose or Objective

Our aim is to demonstrate the role of psycho-social support in developing patient compliance. Patient cooperation, as well as patient education and the presence - in the healing team - of a physiotherapist, dietitian, psychologist, stoma nurse, and pastor in both outpatient and inpatient care could significantly increase the effectiveness of modern radiotherapy treatments.

Materials and Methods

In addition to high-quality patient care, the staff provided significant help in psycho-social support for patients. They offered both individual and group therapy sessions, focusing on individual needs and addressing problems like the stress resulting from disease severity, major anxiety, or frequent depression, the reduction of which can greatly increase the probability of compliance and treatment completion. Starting from 2016, we have kept expanding the range of support activities. Between January 1, 2016 and December 31, 2020, we performed radiation therapy on 7,676 patients, which means approximately 50,000 patient encounters per year. These patients were grouped on the basis of the treated region into patients receiving therapy in the brain, head and neck, lung, breast, gynecological, prostate and secondary tumors. The number of skipped fractions was collected from the Record and Verify system; and these data were arranged by the above defined groups, year, and number of skipped fractions.

Results

The rate of incomplete treatments in 2016 and 2020 are presented below by region: brain (11%; and 10%, respectively), head and neck (28% and 15%, respectively), lung (20% and 16%, respectively), breast (5% and 4%, respectively), gynecological (17% and 6%, respectively), prostate (12% and 5%, respectively), secondary tumors (14% and 10%, respectively). Our results show that the number of unfinished treatments decreased with regard to almost all regions, especially in patients with high supportive needs, including patients with head and neck, gynecological, or secondary tumors. As regards the number of skipped fractions, it is the last 1 to 5 fractions that patients most often fail to receive. The prevalence of these skipped fractions in the studied patient groups was as follows: skull (44%), head and neck (62%), lung (56%), breast (79%), gynecological (62%), prostate (78%), and secondary tumors (73%).

Conclusion

Enhancing patient cooperation, that is adherence including persistence as well, is a very complex task; it not only requires constant and conscious effort but significant resources as well, while its results typically appear on the medium-to-long term only. The results of our study revealed that patients' proper cooperation and compliance could considerably reduce the rate of radiation discontinuation or premature discontinuation, as well as the number of unnecessary appointments, the development of side effects, the length of aftercare, the number of unnecessary diagnostic tests.

PO-1978 Chronic and cosmetic toxicity in patients undergoing radiotherapy and breast reconstruction

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