Abstract number: A-12

Abstract type: Poster

Walkthrough Digital Virtual Hospice Tour: A Survey Study to Explore practicality and Acceptability for Patients

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Background: Patients referred to a hospice may feel trepidation about this unknown environment, and the word hospice can carry stigma for some. Virtual Reality (VR) applications allow users to feel present and become immersed in a realistic computer-generated environment and are used for instance by estate agents for house viewings. Our cancer hospital in Cardiff uses 360◦ photo/video technology on tablet computers to give patients a 'digital tour' of two regional hospices.

Aims: To evaluate whether the use of these 360◦ walkthrough tours of local hospices is acceptable to patients/proxy and readily implementable within a clinical environment.

Methods: 360◦ filming/photography was undertaken in two local hospices & uploaded to hospital media pads. An online survey was created to assess patient experience. Patients on the ward for whom a hospice referral was suggested by the MDT were offered this digital tour and were included in this survey. Staff were asked whether it was easy to use.

Results: Of 25 patients, 90% felt the 360◦ tour improved their readiness for hospice transfer. Also, 95% of patients stated they would recommend it to other patients being referred to hospices. All patients/proxy found it acceptable. Staff

felt the 360◦ tour was easily integrated into their work, and preferred using tablet computers over VR headsets.

Conclusion: The technological use of 360◦ hospice photographic views as an introduction to the hospice infrastructure can make a difference to patients and addresses the fear of an unknown environment. Integration of this innovative technology into the clinical environment is feasible and appears acceptable to patients. Creating 360◦ imagery in local hospices was not technologically difficult, but is aided by availability of staff interested in digital media. Furthermore, informal hospice visits ceased during the Covid-19 pandemic, driving up the usage of these virtual tours significantly.

Summary:

Patients being treated in hospitals and cancer centres are sometimes referred and transferred to hospices for symptom management, palliative care, respite or care in the last days of life. Studies have shown that there is a low level of awareness of palliative and hospice care respectively.[1] There is a lack of awareness of what these places and services look like, with many misconceptions about purpose and setup . Out-of-hours admissions can also increase the anxiety felt about going to a hospice [2] . Studies have found that there is a significant lack of awareness of hospices and what they can do, and that explanation can help break down such barriers [3] [4] .Good advance care planning can provide information on a person's preferred places of care and even death.[5] [6] [7] Visiting restrictions to hospices may have had an effect on being able to physically go to the locations for a physical look around.

Virtual Reality (VR) is a system that allows an individual to become immersed in, interact with and explore a computer-generated environment. By creating a 360< photographic or cinematic image or video, it can create an illusion that makes individuals feel present in the environment shown [4].

Velindre Cancer Centre in Cardiff uses Virtual Reality (VR) headsets and 360 degree photo/video technology to give staff, students and patients an experience of radiotherapy and has also used simulation based learning. [8] [9] Previous experience from video learning tools has been very positive from patients and carers alike (9). The hope is that this helps users feel more comfortable in transferring to these settings by allowing the patient to be immersed in this environment and gain an impression. The simple aim of this project was to assess the practicality and applicability of this already-in-use technology in a ward setting, and to evaluate patient/carer and staff views.

Results

Of 25 patients, only one had been referred to a hospice before. 90% of respondents felt 'very content' or 'content' about referral to a hospice after viewing the 360 degree photo tour (Figure 1). The patient who had been referred previously commented positively on the 360 degree photo tour but answered 'neither content/nor discontent' in

his response as he/she had already been to the setting and it did not influence his/her decision to go. Also, 95% of patients/relatives stated they would recommend it to other patients being referred to hospices (Figure 2), whilst one person preferred the paper leaflet over the 360 degree images. All staff (n= 6) surveyed felt the 360◦ tour was easily integrated into their work, and preferred using tablet computers over paper leaflets and more cumbersome (in their view) VR headsets, with the latter being more challenging to set up.
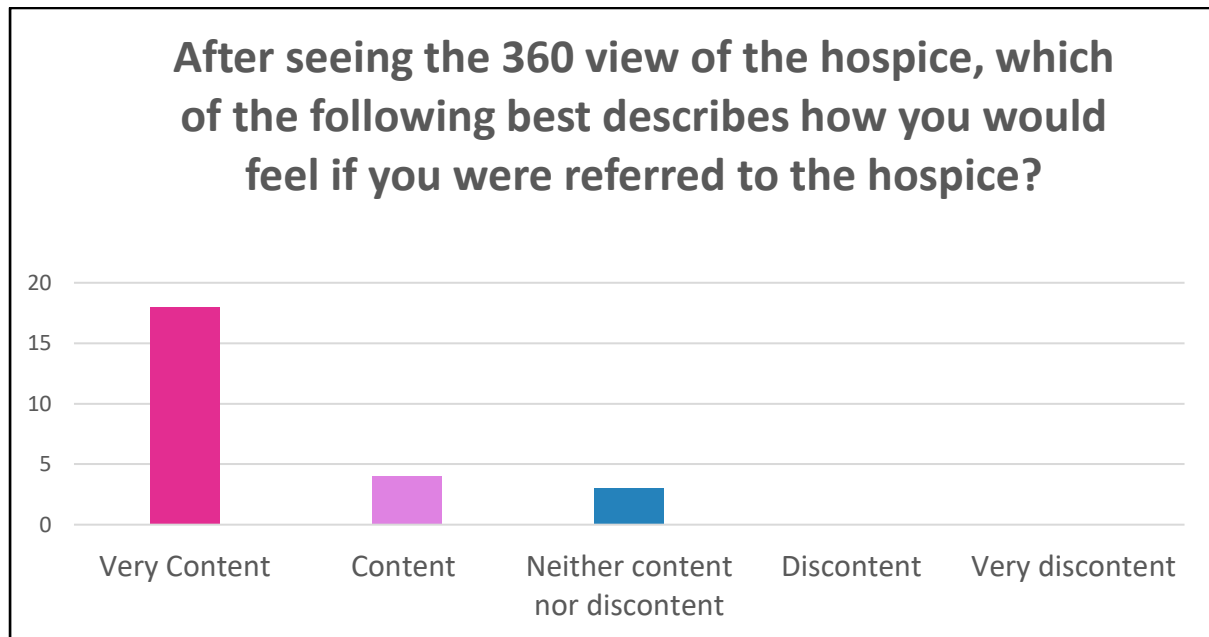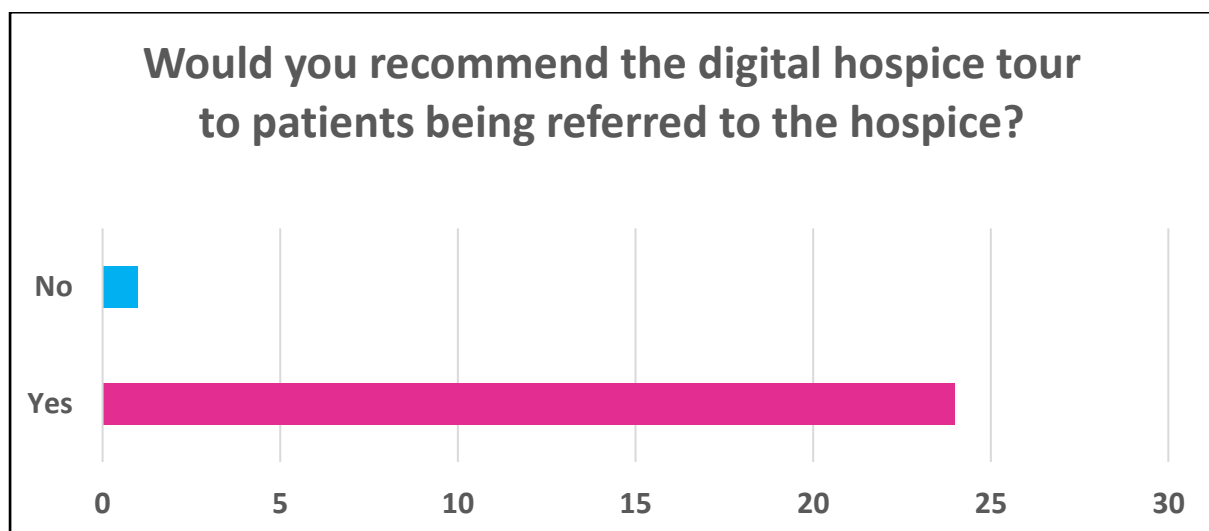
Figure 1:

After seeing the 360 view of the hospice, which of the following best describes how you would feel if you were referred to the hospice?

Figure 2:

Would you recommend the digital hospice tour to patients being referred to the hospice?

Take the tour by accessing this site: https://ths.li/y3vtf (small gallery at bottom gives you different areas to tour around)

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