Location, Location:

Does the use of Virtual Reality 360° images of local hospice upon referral improve patients’ perception?

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Abstract

- **Background:** Many patients referred to a hospice may feel anticipatory fear of this unknown environment. Virtual Reality (VR) is a system that allows users to feel present and become immersed in a realistic computer-generated environment and is used for instance by estate agents for house viewings. Velindre Cancer Centre (VCC) in Cardiff uses VR-headsets and 360° photo/video technology on tablet computers to give patients a ‘digital tour’ of local hospices.

- **Aims:** To evaluate whether the use of 360° photo tours of local hospices is acceptable to patients/proxy and implementable within a clinical environment.

- **Method:** 360° filming/photography was undertaken in two local hospices and uploaded to VR headsets and media pads. An online survey was created to assess patients'/relatives' experience of 360° VR hospice. Patients on the VCC ward known to the Palliative Care team, and/or those who had a hospice referral in place, were offered the digital tour and were included in this survey. Staff who used the technology were asked whether it was easy to use.

- **Results:** Of 25 patients/relatives, 90% felt the 360° tour improved their readiness for hospice transfer. Also, 95% of patients/relatives 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, with the latter being more cumbersome to set up.

- **Conclusion:** The technological use of 360° hospice photographic views as an introduction can make a difference to patients/proxy and addresses the fear of an unknown environment. Integration of this innovative technology into the clinical environment is feasible and appears acceptable to patients.
Background

- Hospice transfer
- Fear of the unknown
- Virtual Reality (VR)
- Velindre Cancer Centre (VCC) Cardiff

What did we do? What were our aims?

- Is this acceptable?
- Does it impact perception and willingness?
- Use of VR in a clinical environment

Methods

360° filming and HD photography was undertaken in key areas of two local hospices and uploaded. An online survey was created – assessed patients/relatives experience. Patients on the VCC ward offered the ‘digital tour’ and included in the survey. A 6 month period was observed.

Staff members who used the technology were asked whether it was easy to use.
The view  
https://ths.li/y3vtf

Showed patient 360 views – then completed survey
Results

- 25 people surveyed in total:
  - 19 patients
  - 6 family members

- 72% never been referred to hospice before

- Active hospice referral in place for 76% of patients surveyed
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?

- Very Content
- Content
- Neither content nor discontent
- Discontent
- Very discontent

According to the diagram:

- Very Content: 18 responses
- Content: 4 responses
- Neither content nor discontent: 2 responses
- Discontent: 0 responses
- Very discontent: 0 responses
Having seen the 360 views, do you feel any better about the hospice now?

- **Yes**: 84%
- **No**: 16%
Would you recommend the digital hospice tour to patients being referred to the hospice?
Staff members opinions

“iPad not left on ward so going back to office can affect momentum/timing”

Preferred using the media-pad...easier to set up and patient could zoom around the hospice with me standing next to them for explanation...Helping pt's put on VR headset etc. took longer.

“Straightforward and easy to use”

“Many patients commented that the hospice looked very different to what they imagined...improved their confidence in going there”

“Using it greatly reassured a family about an impending hospice transfer for their relative”
Conclusions

- The technological use of 360° hospice views can make a difference to patients and addresses the fear of the unknown.

- 24 out of 25 patients would recommend the VR/360 images to other patients in the same position.

- Integration of this innovative technology into the clinical environment is feasible.
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