Virtual reality as a distraction therapy in obstetrics and gynaecology

Harper, AM², Sivanathan, A², Jordan, A¹, Harper, S², Worth, A¹, Lim, T², Denison, FČ¹.

¹Tommy’s Centre for Maternal and Fetal Research, The Queen’s Medical Research Institute, The University of Edinburgh
²Institute of Mechanical, Process and Energy Engineering, Heriot Watt University
³Usher Institute of Population Health Sciences and Informatics, The University of Edinburgh

Background

Virtual reality (VR) is a computer-generated replication or simulation of real or imaginary multi-sensory environments users can explore and/or interact with without physically leaving their current environment. VR technology is emerging as an effective distraction therapy for patients undergoing painful and/or distressing healthcare procedures.

Aim

To explore women’s and obstetric and gynaecology (O&G) healthcare professionals’ views on the acceptability and preferences for VR as distraction therapy within O&G.

Methods

Clinical setting-specific (i.e. obstetric and gynaecology) paper-based questionnaires for both women and professionals were developed to assess views on:

i) VR use in clinical settings (e.g. for labour, during hysteroscopy)
ii) Hardware options (i.e. types of head equipment)
iii) Software options (i.e. content, audio)

Short online questionnaires for women were developed to assess views on VR use in clinical settings from a broader cross section of potential O&G service users.

A consultation meeting was held with women, O&G professionals and VR technologists to enable a real-world insight into the technology.

Results

A total of 247 questionnaires were completed (90 obstetric and 157 gynaecology) (Figure 1).

i) VR use in clinical settings

Obstetrics

Women’s interest in trialling VR during early labour, established labour and perineal repair was predominantly positive (Figure 2a), and professionals were largely supportive of women trialling VR in these settings (Figure 2b).

Gynaecology

Women’s interest in trialling VR during coil insertion/removal and colposcopy/hysteroscopy was predominantly positive (Figure 3a) as was professional support for women trialling VR in these settings (Figure 3b).

ii) Hardware options

Visually, stereoscopic glasses were the most popular head equipment (Figure 4).

iii) Software options

Natural content was preferred by all, beach was the most frequently reported preference of virtual environment. The majority of women and professionals were supportive of accompanying audio.

Conclusions

Women are interested in and healthcare professionals largely supportive of the potential for VR as a distraction therapy within O&G.

Reported hardware and software preferences are presently limited by current VR-technologies.

Future studies should allow participants to experience different VR-technologies, inform design specifications, and ultimately pilot the technology.

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