

Preliminary study on multimedia animation for methadone maintenance therapy supplemented by traditional Chinese medicine acupuncture

Wen-Lung Tsai^{1,*}, Yu-Ying Chen ²

¹Department of Information Management, Asia Eastern University of Science and Technology, New Taipei, Taiwan;

² Zhongshan Community College, Taipei City, Taiwan;

*Corresponding author, E-mail: wlt sai@mail.aeust.edu.tw, Tel.:886-2-77388000ext.5325

Introduction:

Heroin addiction may cause physical and emotional trauma. In addition, because they share needles to inject drugs, heroin abusers are at higher risk of developing acquired immunodeficiency syndrome, and 70 to 90% of them have been infected with the hepatitis C virus. This study, in collaboration with a Chinese medicine hospital in Taipei, aims to present, in 3D animation form, the existing sheets, forms, briefings, videos, and data related to drug rehabilitation plans, assessment questionnaires for shared decision-making, and methadone maintenance therapy (MMT).

Literature reviews:

2-1.Methadone

2-2-1.Drug rehabilitation with traditional Chinese medicine

2-2-2.Traditional Chinese medicine acupuncture (TCMA)

2-2-3.The combination of TCMA and MMT

2-3.Comparisons between 2D and 3D animation

2-4.3D animation applications

In general, health education videos are filmed physically. After the digitalization of medical videos, little attention is paid to 3D medical animated health education videos. People generally think that most videos are physically shot. In fact, for RPNs, 3D MLA can present shooting angles and effects not possible in actual filming. In contrast, during the actual filming of RPN operations, it may be impractical to present some details because the lens is fixed. The discussion in this paper focuses on the difference in the learning performance of 3D MLA. While relevant studies have dealt with physically shot videos, this study addresses frame-by-frame animation

Methodology

Step 1: Before making the film, the traditional Chinese medicine (TCM) practitioner walked us around the facility and explained MMT, and then the study group discussed it and made a model.

Step 2: Organize what the TCM practitioner told us and write a script, with narration and characters added.

Step 3: After seeking clinicians' feedback on the script, we used 3ds Max to start making 3D scenes and characters. 3D modeling of the scenes was finalized after several revisions.

Step 4: 2D animation was created with Adobe After Effects.

Step 5: Finally, 3D and 2D animation were incorporated, and subtitles and voice-over were added to finish the product.

Results

