VIDEO-BASED APPROACHES IN HEALTH EDUCATION: A REVIEW OF LITERATURE

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ABSTRACT

Video-based approaches have gained significant traction in health education due to their ability to combine visual and auditory learning for enhanced engagement and retention. This article reviews existing literature on the use of videos in health education, examining their effectiveness, implementation, challenges, and future directions. By analysing peer-reviewed studies and case examples, this review highlights the transformative potential of video-based methods in various healthcare contexts.

KEYWORDS: Video-based learning, Health education Video content effectiveness, Health behaviour change.

INTRODUCTION

Health education is critical for promoting public health, preventing diseases, and improving patient outcome.[1] Traditional methods, such as lectures, printed materials, and face-to-face consultations, have long been used to disseminate information.[2] However, the rapid advancement in technology has opened new avenues for delivering health education, with video-based approaches emerging as a powerful tool.[3]

Videos can convey complex medical concepts in an easily digestible manner, appeal to diverse learning styles, and foster greater engagement.[4] This review aims to evaluate the role of video-based approaches in health education, focusing on their effectiveness, application in various settings, and the challenges they pose.

Historical Context and Evolution of Video-Based Health Education

The use of videos in health education dates back several decades, initially employed in professional training for medical students and healthcare providers.[5] Early applications included instructional videos for surgical procedures and patient care techniques. Over time, advances in technology and widespread internet access expanded video use to broader audiences, including patients, caregivers, and the general public.[4,5]

1. Early Applications in Medical Training (1950s–1980s)

The use of videos in health education can be traced back to the mid-20th century. Initially, video content was used for **instructional purposes** within medical schools, hospitals, and healthcare institutions. These videos were primarily designed to train healthcare professionals and medical students on procedures, patient care techniques, and surgical practices. Early formats included 16mm film or VHS tapes, which were primarily shown in clinical training settings.

2. Expanding Reach: Video for Public Health Education (1990s–2000s)

As technology advanced in the late 20th century, video-based health education began to extend beyond professional training to reach broader audiences, including the general public, patients, and their families. With the advent of **affordable video recording equipment** and the spread of **television broadcasts**, health education videos were distributed on a larger scale, particularly by public health organizations and government bodies.

3. The Internet Revolution and Accessibility (2000s–2010s)

The most significant transformation in video-based health education occurred with the rise of the **internet** in the 2000s. The development of platforms like **YouTube, Vimeo, and other streaming services** allowed for an unprecedented level of **accessibility and interactivity**. Videos could now be distributed to a global audience, and content could be easily shared, accessed, and tailored to specific health issues.

4. Mobile Health (mHealth) and Video-Based Education (2010s–Present)

In the 2010s, the proliferation of **smartphones** and **mobile apps** revolutionized video-based health education even further. Mobile health (mHealth) applications, which include educational videos, health tracking, and communication tools, became widely popular. Patients could now access tailored educational content about their specific conditions or treatment regimens directly on their smartphones.

The advent of platforms like YouTube, Vimeo, and mobile applications revolutionized video-based health education, making it more accessible and interactive.[9] Today, video content is tailored for various purposes, such as disease prevention, mental health awareness, chronic disease management, and patient education.[9,10]

Effectiveness of Video-Based Approaches

Numerous studies underscore the efficacy of video-based methods in enhancing knowledge retention, behaviour change, and patient outcomes. Some key findings include:

Improved Knowledge Retention

Videos offer a multisensory experience, which helps learners better retain information compared to text-based materials.[15] A study by Mayer (2014) emphasized the multimedia learning principle, showing that combining visuals and narration enhances understanding.

Behavioural Change

Health education videos have been instrumental in encouraging positive behaviours, such as smoking cessation, improved nutrition, and regular physical activity. For instance, video campaigns for anti-smoking initiatives have shown higher engagement rates and stronger behavioural impact than traditional print media.[19]

Accessibility and Inclusivity

Videos overcome language barriers and cater to individuals with low literacy levels by relying on visual and auditory cues. Subtitles and voiceovers further enhance their accessibility.[21]

Applications in Health Education

Video-based approaches are versatile and can be implemented across various healthcare settings

Patient Education: Explaining diagnoses, treatment options, and post-operative care through video demonstrations.[10]

For example, a study in Patient Education and Counselling (2018) found that surgical patients who watched pre-operative educational videos experienced reduced anxiety and better adherence to post-operative instructions.

Community Health Campaigns

Raising awareness about public health issues like vaccinations, hand hygiene, and disease prevention.

Videos shared on social media platforms have proven effective in reaching larger audiences, particularly during health crises like the COVID-19 pandemic.

Professional Training

Videos are widely used in medical education to teach procedures, patient communication, and ethical practices.

Virtual reality and simulation-based videos are also gaining popularity for immersive learning experiences.

Mental Health Awareness

Video content is used to address stigma, provide coping strategies, and encourage individuals to seek professional help.

Online platforms like YouTube host thousands of videos on topics ranging from stress management to therapy techniques.[18]

"Harnessing the Power of Video-Based Health Education to Combat Misinformation"

In today's digital age, health misinformation is a significant challenge, often spreading faster than accurate information. Video-based health education has emerged as a crucial tool in addressing this issue, offering a powerful way to present reliable, evidence-based health information in an easily digestible and engaging format. With the growing prevalence of platforms like YouTube, TikTok, and Instagram, videos have become a primary source of information for many people seeking health advice.

Videos are uniquely effective in combating misinformation because they allow healthcare professionals to explain complex concepts in simple, visual terms, making it easier for viewers to understand and trust the content. For instance, videos can be used to debunk common myths about vaccines, clarify misconceptions about mental health, or provide accurate guidance on nutrition and exercise. With the ability to add subtitles, annotations, and graphics, videos ensure that the message reaches a broad audience, regardless of language barriers or literacy levels.

As misinformation continues to spread online, video-based health education is an essential tool in the fight for public health. By promoting accurate, accessible, and engaging content, videos are empowering individuals to make informed decisions and take control of their health.

Challenges of video-based approaches

- **Digital Divide**: Not all populations have access to the internet or digital devices, limiting the reach of video-based health education.

- **Quality and Credibility:** The abundance of user-generated content raises concerns about the accuracy and reliability of health information in videos.

- **Cultural Sensitivity**: Videos need to be tailored to specific cultural contexts to ensure relevance and effectiveness.

- **Engagement Fatigue**: Overexposure to video content can lead to reduced attention spans and engagement, particularly in younger audiences.

- **Cost and Resources:** Producing high-quality videos requires significant investment in terms of time, money, and expertise.
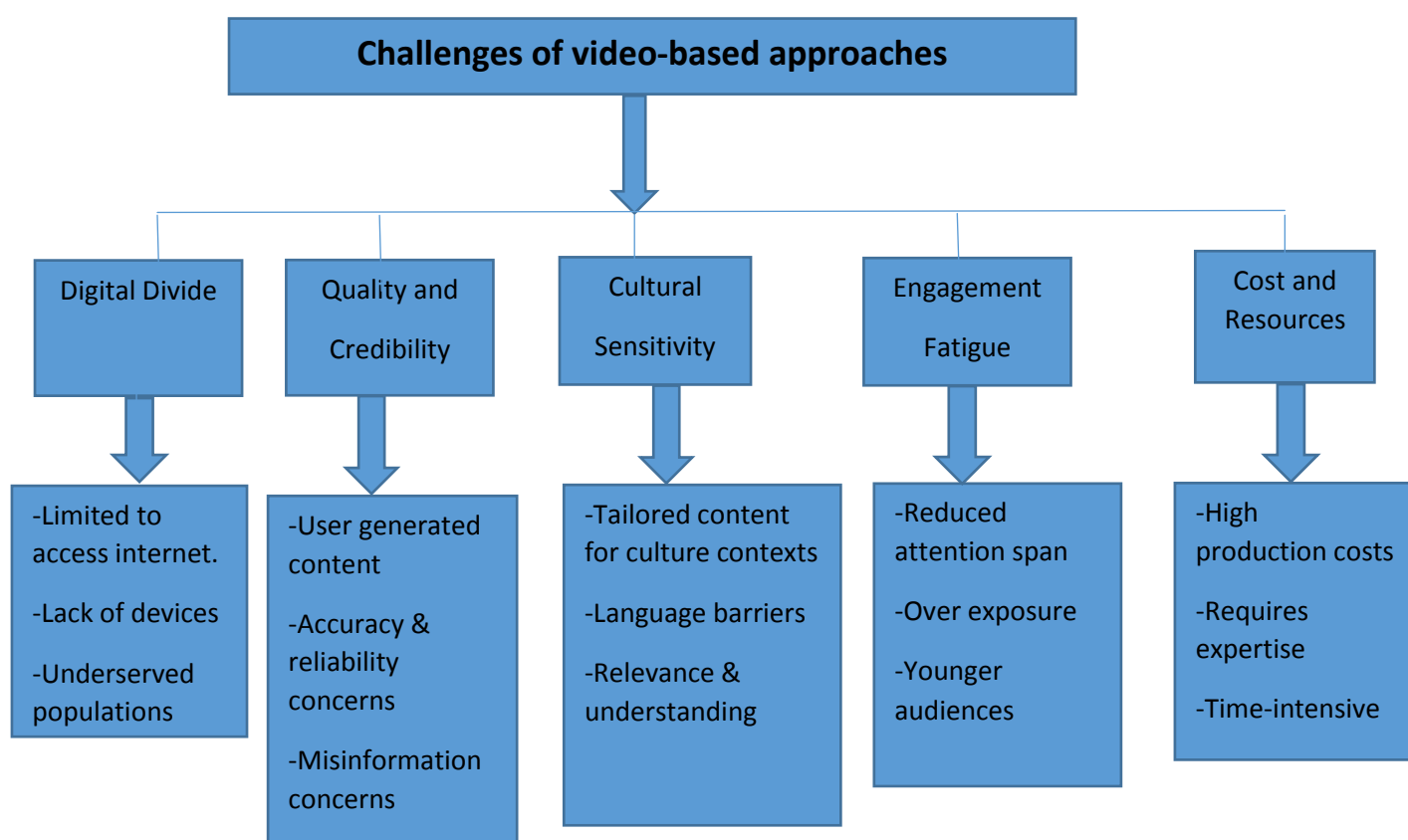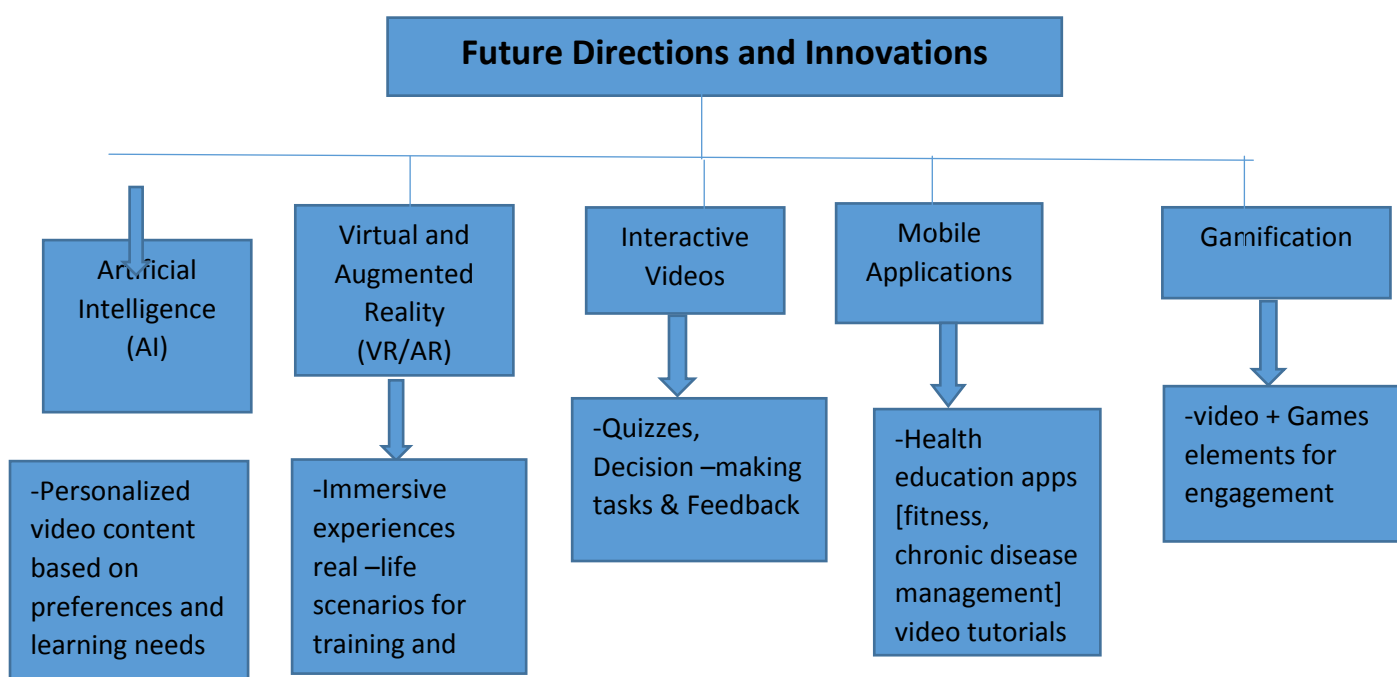

(Figure: 1)

Future Directions and Innovations

Emerging technologies are expected to further enhance video-based health education

- **Mobile Applications:** Apps dedicated to health education, such as fitness tutorials or chronic disease management guides, are increasingly relying on video content.

- **Gamification:** Combining videos with game-like elements can make learning more engaging and enjoyable.[18]

- **Artificial Intelligence (AI):** AI-powered tools can personalize video content based on individual preferences and learning needs.

- **Virtual and Augmented Reality (VR/AR):** Immersive video experiences can simulate real-life scenarios for professional training and patient education.

- **Interactive Videos:** Incorporating quizzes, decision-making tasks, and feedback mechanisms into videos can boost learner engagement.

(Figure: 2)

CONCLUSION

Video-based approaches have revolutionized health education by making it more accessible, engaging, and effective. While challenges like the digital divide and quality concerns persist, advancements in technology and innovative strategies hold promise for addressing these issues.[1] By integrating video-based methods with traditional approaches, healthcare providers and educators can create comprehensive and impactful learning experiences.[2,3]

Future research should focus on evaluating the long-term outcomes of video-based health education and exploring ways to optimize its implementation in diverse settings.[3] As technology continues to evolve, video-based approaches are poised to play an even greater role in shaping the future of health education.

This article can be expanded or adjusted with additional case studies and specific examples as needed. Let me know if you'd like further refinements.

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