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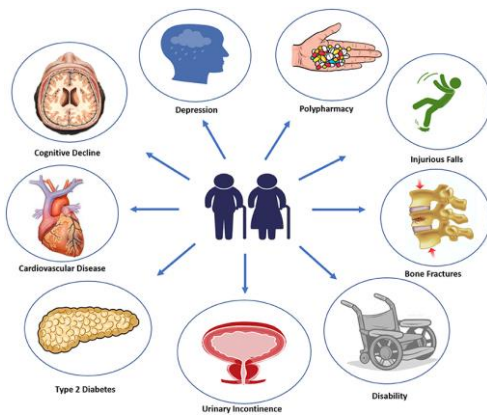
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Blog 1

The Impact of TV on Diabetes Health Promotion

Introduction

Diabetes has emerged as a global health problem. A digital technology that is accessible to a broad audience, television (TV) has become an excellent medium for the transmission of health information and the promotion of good living choices (Iacoella et al., 2022). This blog critically assesses the role of television in diabetic health promotion.



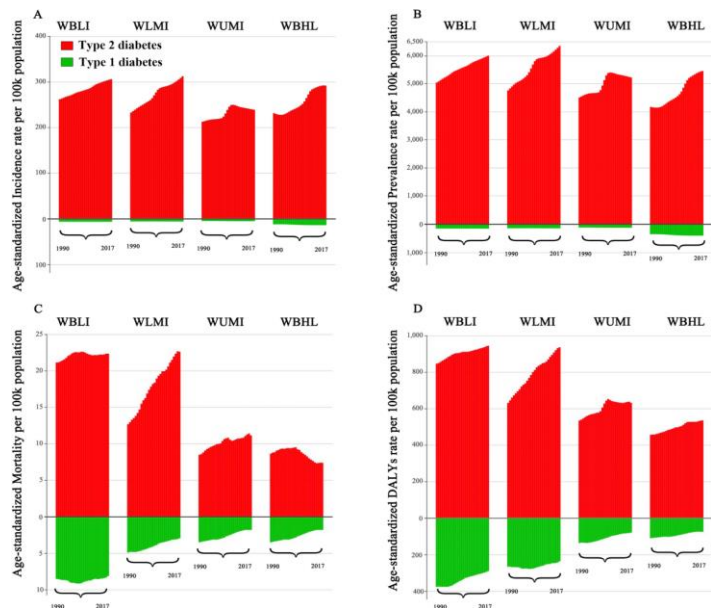
(Longo et al., 2019)



Source: Sherrell, (2022)

Diabetes as a Public Health Problem

The global diabetes prevalence in 2019 is expected to be 9.3% (463 million people), increasing to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045 (Saeedi et al., 2019). Diabetes UK (2019) predicts that 4.8 million individuals in the UK are living with the condition, with an additional 1 million people remaining undiscovered. The quality of life of persons with diabetes is greatly damaged by such health effects like heart disease, kidney failure, and vision loss.



Source: Lin et al., (2020)

TV as a Digital Technology in Diabetes Health Promotion

TV-based therapies, such as public service announcements (PSAs) and educational programs, can raise understanding of diabetes risk factors, prevention methods, and management techniques (Viswanath et al., 2012). Diabetes UK has used TV advertising to improve diabetes awareness and persuade individuals to analyze their risk of developing the condition. TV series featuring interviews with healthcare specialists and individuals living with diabetes may present viewers with authoritative knowledge and similar experiences. The visual component of TV permits the effective transmission of health information, making it easier for viewers to acquire and retain essential ideas (Albury et al., 2020).

Evidence of TV's Impact on Diabetes Health Promotion

Studies have explored the impact of TV in health promotion interventions. (De Groot et al., 2021; Anderson et al., 2022) discovered that TV-based therapies led to large gains in diabetes knowledge, self-care practices, and glycemic control among viewers internationally. Alemayehu et al., (2020) also found that it considerably boosted participants' knowledge and understanding of diabetes treatment. These findings underline the potential of TV to educate and encourage individuals to take responsibility for their diabetes care.

Critical Discussion on TV's Impact on Diabetes Health Promotion

TV programs give broad information that may not meet the unique wants and concerns of each viewer (Spilker et al., 2018). The passive nature of TV viewing may hinder the level to which viewers actively engage with and apply the health information presented (Kim et al., 2021). The effectiveness of TV-based health promotion may be influenced by the quality and relevance of the information, the timing and frequency of broadcasts, and the viewer's attention span and sensitivity to health messages (Santos et al., 2022).

Addressing the Shortfalls

Personalized help from healthcare specialists, such as diabetes educators and nutritionists, may supply patients with tailored guidance and fulfil their individual needs.

The NHS conducts diabetes education programs, such as the "Diabetes and You" course, which equip patients with comprehensive information and aid for managing their disease. Interactive digital solutions, such as mobile apps and websites, may augment TV-based therapies by giving supplementary materials, monitoring capabilities, and opportunities for interaction.

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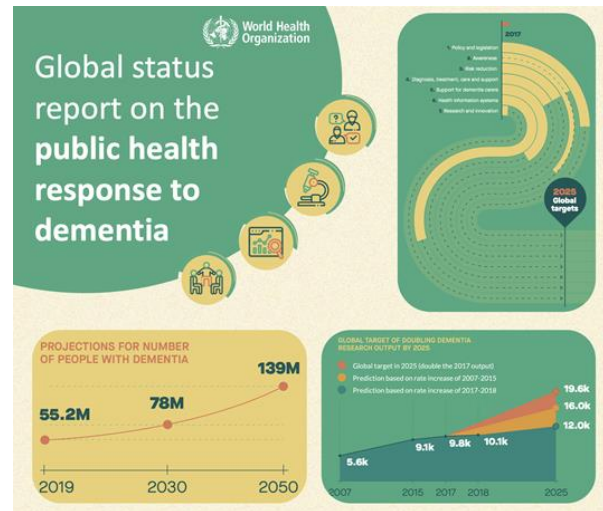
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Blog 2

Designing a Digital Technology for Dementia Health Promotion

Introduction

Dementia has become a global public health concern, affecting millions of individuals globally (World Health Organization, 2021). There is an urgent need for creative programs to promote dementia awareness, support, and care. This blog post evaluates the prospects of a created digital technology, especially a smartphone application called "MindMate," for dementia health promotion.



Source: World Health Organization, (2021)

Dementia as a Public Health Problem

According to WHO (2021), dementia affects over 50 million adults globally, with over 10 million new cases diagnosed every year. In the UK, there are an estimated 900,000 persons living with dementia, and this number is predicted to reach 1.6 million by 2040 (Alzheimer's Society, 2021). Individuals with dementia have various concerns, including memory loss, communication difficulties, and changes in behaviour, which may drastically disrupt their daily lives. Caregivers of patients with dementia also report considerable levels of stress, worry, and melancholy (Cheng, 2017).

Description of the Designed Digital Technology

MindMate is a full mobile application created to support adults with dementia and their caretakers. The program includes several features and functionality suited to the needs of individuals with dementia, including cognitive stimulation activities, recollection

therapy, and customized reminders. MindMate's cognitive stimulation activities, such as puzzles and memory games, strive to engage and challenge the user's mind, perhaps slowing down cognitive decline (Boyle et al., 2020). The app's remembrance therapy feature allows users to create and share digital life tales, boosting social connection and emotional well-being. MindMate sends tailored reminders for medicine, appointments, and routine activities, helping individuals with dementia keep their independence and minimizing caregiver strain.

How the Designed Digital Technology Addresses Dementia

MindMate promotes dementia awareness and help by giving accessible and engaging tools for individuals with dementia and their caregivers. The app's cognitive stimulation activities and memory treatment aspects strive to increase cognitive function and emotional well-being, perhaps boosting the quality of life for people with dementia (Brooker et al., 2020). MindMate empowers adults with dementia to preserve their independence and decreases the stress on caregivers by offering tailored reminders and support. The program also increases discussion and social interaction between persons with dementia and their loved ones, generating a sense of connection and diminishing feelings of isolation.

Critical Discussion on the Designed Digital Technology's Impact

The app's accessibility and user-friendly design make it easy for anybody to engage with the information and features. The personalized nature provides tailored help and interventions, fitting the special needs of each user. However, the effectiveness of MindMate may be hampered by factors such as the user's experience with technology, the degree of their dementia, and the availability of aid from caregivers or specialists.

Addressing the Shortfalls

To overcome the limitations of MindMate, it is important to provide intensive training and help for users and their caregivers. This requires giving tutorials, helplines, or in-person assistance to ensure that users can effectively navigate and utilize the app's features.

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Promoting Diabetes Health through a TV-based Intervention: Applying Health Promotion Principles and Behavioral Change Theory

Background

Diabetes has become a global health concern, impacting millions of persons globally. According to the International Diabetes Federation (2019), over 463 million people today live with diabetes, and this figure is anticipated to climb to 700 million by 2045. In the United Kingdom (UK), the incidence of diabetes is as worrying, with a projected 4.8 million people diagnosed with the ailment and an additional 1 million persons going undiagnosed (Diabetes UK, 2021). Diabetes is connected with several health consequences, including cardiovascular disease, renal failure, and eyesight loss, which greatly damage the quality of life of afflicted persons (World Health Organization, 2021). Moreover, the economic impact of diabetes is enormous, with an anticipated worldwide cost of \$760 billion in 2019 (International Diabetes Federation, 2019) and an annual cost of £10 billion to the National Health Service (NHS) in the UK (Diabetes UK, 2021).

Given the scope and significance of the diabetes epidemic, there is an urgent need for effective interventions to increase diabetes awareness, prevention, and treatment. Public health measures, both digital and non-digital, have been launched to address this problem. Digital technology treatments, such as smartphone applications, wearable devices, and telemedicine platforms, have showed potential in improving diabetic self-management and health outcomes (Kebede & Pischke, 2019). Non-digital interventions, such as community-based education programs and peer support groups, have also proved beneficial in raising diabetes awareness and self-care practices (Carey et al., 2018). This poster focuses on a TV-based digital health intervention meant to increase diabetic health among the community. Television, as a widely accessible and entertaining medium, has the ability to reach a huge audience and convey relevant health messages.

Behavior Change Theory

The selected behavioral change theory is Social Cognitive Theory (SCT). This theory is a well-established paradigm for explaining and fostering behavior change (Bandura, 1986). SCT maintains that behavior is the product of a dynamic interaction between personal variables (e.g., knowledge, attitudes, and self-efficacy), environmental effects (e.g., social norms and support), and behavioral factors (e.g., skills and reinforcement). According to SCT, people acquire new behaviors by watching others, and their desire to adopt and sustain these behaviors is impacted by their beliefs about their own capabilities and the expected effects of their actions (Bandura, 2004).

Debate on utilizing the behavioral change theory to provide the TV-based intervention

Modeling and observational learning

The TV-based diabetic intervention will use the power of modeling and observational learning, important components of SCT. The intervention will include realistic characters or real-life persons with diabetes who exhibit successful self-management practices, such as good food, frequent exercise, and medication adherence. By viewing these models, viewers may acquire new skills and techniques for controlling their diabetes (Tougas et al., 2015). The intervention will also illustrate the good results associated with these habits, such as better glycemic control and higher quality of life, to urge viewers to adopt similar practices.

Self-efficacy and skill growth

SCT highlights the relevance of self-efficacy, or an individual's confidence in their capacity to do a certain activity, in encouraging behavior change (Bandura, 1997). The TV-based intervention will try to boost viewers' self-efficacy by offering clear, step-by-step instruction on diabetes self-management skills, such as blood glucose monitoring, healthy meal planning, and stress management. The intervention will also highlight success stories and testimonials from persons with diabetes who have overcome barriers and accomplished their health objectives, illustrating that positive change is feasible (Allegre et al., 2019).

Reinforcement and motivation

Reinforcement, both internal and external, has a critical role in driving and sustaining behavior change (Bandura, 2001). The intervention will combine components of positive reinforcement by stressing the advantages of efficient diabetes self-management, such as higher energy levels, lower risk of complications, and enhanced self-confidence. The intervention will also inspire viewers to establish reasonable objectives and celebrate their achievement, offering a feeling of accomplishment and intrinsic drive. Additionally, the intervention may contain interactive aspects, such as quizzes or challenges, that give external incentives or acknowledgment for participating in favorable health habits.

Environmental and social factors

SCT acknowledges the importance of environmental and social variables on behavior change (Bandura, 1998). The TV-based intervention will address these impacts by establishing a supportive social environment for persons with diabetes. The intervention will urge viewers to seek help from family members, friends, and healthcare experts in their diabetic self-management efforts. It will also include information on community services, such as local diabetic support groups or educational programs, that may provide extra assistance and encouragement. By promoting a feeling of social connectivity and highlighting the value of a supportive environment, the intervention seeks to boost viewers' motivation and potential for persistent behavior change.

Expected Outcome

The integration of the Social Cognitive Theory (SCT) in the TV-based diabetes intervention is projected to provide considerable favorable effects for patients with diabetes. By using the concepts of modeling, self-efficacy, reinforcement, and social support, the intervention attempts to enhance diabetes knowledge and awareness among viewers. Through observational learning and clear, practical instructions, persons with diabetes will obtain a greater awareness of their illness and the need of good self-management (Allegre et al., 2019). The intervention's emphasis on skill development and self-efficacy will boost viewers' capacity to undertake critical diabetic self-care activities, such as blood glucose monitoring, healthy food, and regular exercise (Bandura, 2004).

As a consequence, persons with diabetes will be empowered to take charge of their health and make educated choices about their treatment. The intervention will encourage viewers to participate in health-promoting behaviors. The focus on environmental and social impacts will develop a supporting network for persons with diabetes, further boosting the maintenance of good habits over time. Ultimately, the intervention seeks to eliminate health inequities and improve health outcomes for persons with diabetes. By offering accessible, evidence-based information and support, the TV-based intervention has the potential to reach and benefit a large audience, including those who may encounter challenges to receiving standard diabetes education and treatment (Wallerstein et al., 2019). Through the use of SCT principles, the intervention attempts to empower persons with diabetes to lead healthier, more satisfying lives, lowering the burden of diabetes on individuals, families, and healthcare systems.



Health Promotion Values and Principles

Health promotion is governed by a set of basic beliefs and ideas that strive to enable people and communities to take responsibility of their health and well-being. These values and principles include empowerment, equality, engagement, and evidence-based practice (World Health Organization, 2021). Empowerment refers to the process of empowering people to obtain control over the elements that impact their health. Equity ensures that health promotion programs are accessible and customized to the needs of various populations, especially those who are most vulnerable or disadvantaged. Participation entails actively involving people and communities in the conception, implementation, and evaluation of health promotion programs.

The suggested TV-based digital health intervention for diabetes conforms with these basic health promotion ideals and concepts. The intervention will deliver accessible and practical information about diabetic self-care, helping viewers to make educated choices about their health. To achieve equality, the intervention will be tailored to address a varied audience, taking into consideration aspects such as language, culture, and socioeconomic level. The material will be presented in a straightforward and intelligible way, making it accessible to audiences with varied degrees of health literacy. Participation will be promoted via interactive features within the TV-based intervention, such as quizzes, surveys, and chances for viewers to contribute their experiences and ideas. This interactive method generates a feeling of ownership and participation within the target audience, boosting the chance of effective behavior modification. The intervention will also be founded in evidence-based practice, drawing upon the latest research on effective diabetes prevention and treatment measures. The material will be produced in consultation with healthcare providers, diabetes educators, and behavioral change specialists to ensure that the information offered is accurate, relevant, and successful in encouraging favorable health outcomes.



Conclusion

The suggested TV-based digital health intervention for diabetes, built on the Social Cognitive Theory (SCT), has substantial implications for policy, education, and future research. The effectiveness of this intervention in boosting diabetes awareness, self-management skills, and healthy behaviors may inspire the creation of policies that enable the wider deployment of comparable digital health initiatives. This intervention may inspire policymakers to dedicate resources and financing towards the production and distribution of accessible, evidence-based health material via mass media channels (Wakefield et al., 2010). In terms of teaching, the intervention's emphasis on modeling, skill development, and self-efficacy corresponds with best practices in health education and promotion (Nutbeam, 2019). The effectiveness of this intervention may motivate the incorporation of SCT concepts and digital media into diabetes teaching initiatives, both in community settings and within the hospital system.

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