Exploring Obese Adults' Preferences for a Physical Activity Chatbot: Qualitative Study

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Abstract. Social media chatbots could help increase obese adults' physical activity behaviour. The study aims to explore obese adults' preferences for a physical activity chatbot. Individual- and focus group interviews will be conducted in 2023. Identified preferences will inform the development of a chatbot that motivates obese adults to increase their physical activity. The interview guide was tested in a pilot interview.

Keywords. Obesity, Physical activity, Social media, Chatbot, Qualitative research

1. Introduction

Regular physical activity is effective in managing obesity, which is estimated at about 23% among Norwegian adults [1]. Social media chatbots (i.e. chatbots integrated into a social media platform) could be an innovative way to increase regular physical activity in the adult population [2]. Our previous research confirms the importance of user involvement when developing a chatbot for physical activity [3]. Thus, we aim to explore obese adults' preferences for a social media chatbot for increasing their physical activity.

2. Methods

Individual and focus group interviews are scheduled for March 2023. Obese adults (≥18 years; body mass index > 30) will be recruited via posters and brochures distributed at

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Evjeklinikken, a specialist clinic for treating morbid obesity in Norway. The study protocol was declared exempt after assessment by the Norwegian Regional Ethics Committee (Ref: 351357). The University Hospital of North Norway's Data Protection Officer has approved the study (Ref: 2022/6610).

We will conduct 10 to 12 individual interviews using a semi-structured interview guide to explore obese adults' needs for features and functions of a physical activity social media chatbot. Two focus group interviews will be conducted with 10 to 12 participants each to discuss preferences for chatbot features and functions and receive feedback on the development of the chatbot using the paper prototype method. All interviews will be recorded, fully transcribed, anonymised, and analysed within an inductive content approach [4] using NVivo 12 Pro. In December 2022, we tested the interview guide in a pilot interview with a volunteer from Evjeklinikken.

3. Results and Discussion

The pilot interview with a 62-year-old female lasted for approximately 30 minutes. Reported preferences included: using a chatbot on either Facebook or Snapchat; adding physical activity challenges; using Norwegian language; clear and precise messages delivered 2-3 times per week; integrating a step counter; and a human chat option. Preliminary results of the interviews and focus groups will be available in April 2023.

The participant's preferences were based on recent experiences with social media platforms, activity-tracking devices, chatbots, and physical activity in general. Involving obese adults in the chatbot development process creates a sense of ownership and increases their interest and engagement with the resulting intervention [5]. Identifying obese adults' preferences for features and functions will inform the development of a chatbot that can motivate the users to increase their physical activity.

Acknowledgement

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