

Body composition and motivations for accessing an innovative, digital community health engagement tool in socially deprived areas

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Obesity remains a critical public health challenge which adversely impacts health expectancy, quality of life, mortality and morbidity. The effects are even more pronounced in individuals living in socially deprived circumstances⁽¹⁾. Engaging individuals within the community using novel and person-centred approaches remains a critical pathway to prevention and improving the health of individuals living with overweight and obesity. Limited research has explored the motivations of individuals living with obesity to engage with community health and engagement services as an alternative to general practice services. The aim of this study is to assess the associations between body composition and the use of a novel community health engagement tool in socially deprived communities.

Data for this study was collected as part of the larger Adding to Social capital and individual Potential In disadvantaged Regions (ASPIRE) study⁽²⁾ using the Interactive Health Kiosk⁽²⁾. The Health Kiosk is an interactive health and wellbeing engagement tool based on validated measures which allows users to do a health MOT, by measuring body composition and other health and wellbeing metrics. Data on demography, body composition and motivation for using the Health Kiosk, were extracted for this analysis.

A total of 2473 participants, 59.7% female, mean age of 48 ± 18.6 years were included in this analysis. Average BMI was 28.0 ± 6.0 kg/m², with the majority of participants in the pre-obesity category (34.8%). Motivations for using the Health Kiosk included the following: Worried about health (18.8%), Not able to see doctor (5.2%), Encouraged by family/friend (6.8%), Encouraged by staff at hub (23.9%), Health conscious (13.0%), More convenient than visiting doctor (3.5%) and Other (28.9%). Participants' motivations for using health kiosk differed according to age, sex and employment status ($p < 0.001$).

Post-hoc analysis indicated that individuals who were worried about their health (53.3 ± 17.6 years) or with limited access to a doctor (53.9 ± 17.4 years) were older compared to individuals encouraged by family/friends (46.1 ± 17.9) or hub staff (37.8 ± 16.4) or health conscious. Participants motivations for using health kiosk indicated significant differences in BMI ($p < 0.001$) and BFC ($p < 0.001$). BMI for health-conscious individuals (26.4 ± 5.2 kg/m²) while still in the overweight category, was significantly lower compared to individuals who were worried about their health (28.9 ± 6.1 kg/m²), encouraged by family/friends (28.8 ± 6.6 kg/m²) or encouraged by hub staff (28.2 ± 7.3 kg/m²). Similarly, health-conscious individuals ($30.9 \pm 8.6\%$) had significantly lower BFC compared to those worried about their health ($35.2 \pm 10.2\%$), had limited access to a doctor ($34.9 \pm 10.2\%$), encouraged by family/friends ($34.4 \pm 11.2\%$) or indicated that health kiosk was more convenient than visiting the doctor ($35.0 \pm 8.1\%$).

This study provides critical and novel evidence on motivations for accessing a health engagement tool within socially deprived communities. It highlights the need and use of community-centred health engagement approaches to reduce and prevent obesity and presents potential options for commissioning health improvement and preventive services.

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References

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