

ABSTRACT

Background: The use of face masks as a public health approach to limit the spread of coronavirus disease 2019 (COVID-19) has been the subject of debate. One major concern has been the spread of misinformation via social media channels about the implications of the use of face masks. We assessed the association between social media as the main COVID-19 information source and perceived effectiveness of face mask use.

Methods: In this survey in six sub-Saharan African countries (Botswana, Kenya, Malawi, Nigeria, Zambia and Zimbabwe), respondents were asked how much they agreed that face masks are effective in limiting COVID-19. Responses were dichotomised as 'agree' and 'does not agree'. Respondents also indicated their main information source including social media, television, newspapers, etc. We assessed perceived effectiveness of face masks, and used multivariable logistic models to estimate the association between social media use and perceived effectiveness of face mask use. Propensity score (PS) matched analysis was used to assess the robustness of the main study findings.

Results: Among 1988 respondents, 1169 (58.8%) used social media as their main source of information, while 1689 (85.0%) agreed that face masks were effective against COVID-19. In crude analysis, respondents who used social media were more likely to agree that face masks were effective compared with those who did not [odds ratio (OR) 1.29, 95% confidence interval (CI): 1.01-1.65]. This association remained significant when adjusted for age, sex, country, level of education, confidence in government response, attitude towards COVID-19 and alternative main sources of information on COVID-19 (OR 1.33, 95%CI: 1.01-1.77). Findings were also similar in the PS-matched analysis.

Conclusion: Social media remains a viable risk communication channel during the COVID-19 pandemic in sub-Saharan Africa. Despite concerns about misinformation, social media may be associated with favourable perception of the effectiveness of face masks.

Keywords: COVID-19; face masks; health promotion; nonpharmaceutical interventions; social media.