

Willingness and barriers to the universal use of face mask for the prevention of the spread of COVID-19 in community settings in a southern State of Nigeria

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Willingness to wear mask influences compliance. Being older (>40 years) and having post-secondary education were significantly associated with willingness to wear mask and compliance. Effective risk communication strategies to reach diverse groups for better compliance to public health measures are urgently needed even for the future.

BACKGROUND

One of the major drivers of the current novel coronavirus (SARS-CoV-2) pandemic is largely community transmission. Nigeria like other countries globally, has taken to strict preventive public health measures including good respiratory and hand hygiene, physical distancing and use of face mask to control the spread of COVID-19 disease. Furthermore, the government of Lagos State (the economic nerve centre and the centre of excellence) in Nigeria made a pronouncement on universal use of face mask in the community. While the use of face mask has proven to be an effective barrier to reducing the transmission of respiratory diseases, its use in the community is uncommon. This study assessed the willingness, compliance and barriers of residents in Lagos State towards wearing face mask for the reduction of community spread of COVID-19.

METHODS

This was a descriptive cross-sectional study, that surveyed 488 respondents who were adult residents of Lagos State. Data collection was quantitative using a pretested interviewer-administered questionnaire, analyzed using IBM SPSS, and presented in frequencies and percentages. Pearson's chi-square was used to test association between variables. The level of significance was set at 5%.

RESULTS

Majority (75.7%) of the respondents were willing to wear a face mask in public areas but only 21.9% of the respondents were willing to wear a mask at all times. The most identified barriers to wearing mask were discomfort (72.5%) and inconvenience (77.7%). Two-third of the respondents reported they were compliant with always wearing face mask when leaving home, yet only 32.4% of the respondents reported they wore face mask when stepping out of the house in the previous one week and much less (15.0%), wore the mask continuously and appropriately when leaving home. Having a post-secondary education was found to be most associated with willingness to wear mask and this was statistically significant ($P < 0.001$). This group was also most likely to wear the mask continuously and correctly when leaving home for public places. Being older (40 years and above) was found to be significantly associated with wearing mask continuously and correctly when leaving home for public spaces ($p < 0.002$).

CONCLUSIONS

Our findings suggest that willingness influences compliance, having a post-secondary education was associated with both willingness to wear mask and wearing it continuously and correctly. Compliance to public health preventive measure remains a very important strategy to control any epidemic and the current pandemic. The major barriers to wearing mask were discomfort and inconvenience hence additional research is needed to ascertain evidence based effective risk communication strategies to reach diverse groups especially those that are vulnerable and less likely to practice the wearing of masks.

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REFERENCES

1. Amzat J, Aminu K, Kolo VI, Akinyele AA, Ogundairo JA, MC Danjibo. [Coronavirus outbreak in Nigeria: Burden and socio-medical response during the first 100 days](#). Int J Infect Dis. 2020; 98: 218–224.
2. Ajisegiri, W.S., Odusanya, O.O. and Joshi, R., COVID-19 Outbreak Situation in Nigeria and the Need for Effective Engagement of Community Health Workers for Epidemic Response. Global Biosecurity, 2020; 2(1):
3. Dan-Nwafor C Ochu CL, Elimian K, Oladejo J, Ilori E, Umeokonkwo C, et al. [Nigeria's public health response to the COVID-19 pandemic: January to May 2020](#). J Glob Health. 2020 Dec; 10(2): 020399
4. Feng S, Shen C, Xia N, Song W, Fan M, Cowling BJ. Rational use of face masks in the COVID-19 pandemic. Vol. 8, The Lancet Respiratory Medicine. Lancet Publishing Group; 2020. p. 434–6.

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