Assessment of COVID-19 vaccine Intention in a Rural Community in Rivers State

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Abstract

Background: In the wake of the COVID-19 pandemic, vaccines were rolled out to quickly bring a lasting solution to the pandemic. Achieving community immunity requires individual decisions in bringing the pandemic to a halt. Despite poor uptake, plans for future rollout to categories beyond health/frontline workers in Nigeria are on the way. The next phase of the COVID 19 vaccination would involve rural communities. It has become imperative to determine the extent to which rural community dwellers, who make up vast majority of the population, are willing to take the vaccine.

Methods: This descriptive cross-sectional study was conducted between March and April 2021 in a rural community in Rivers State. We used Open Data Kit Collect version 1.3 to administer a semi-structured questionnaire on eligible participants. Data was collected from 841 respondents using multi-stage sampling technique. Data was analysed using IBM SPSS version 25. Consent was obtained from all eligible participants recruited into the study. Ethical clearance for the study was obtained from the Ethical Review Committee of the University of Port Harcourt Teaching Hospital.

Results: The mean age of the respondents was 38.83 ± 14.83 years, 459 (54.6%) were males, 438 (52.2%) were married, 503 (59.9%) were farmers and 202 (24.0%) had no formal education. A total of 620 (73.8%) had heard about COVID-19, 741 (88.1%) had heard of the vaccine. Radio was the most common source of vaccine information 398 (47.3%) followed by family 183 (21.8%) and friends 147 (17.5%). A total of 274 people (32.6%) indicated they would definitely not take the vaccination, while 347 people (41.3%) would definitely take it while 220 (26.1%) were unsure.

Discussion: This study found a low intention for COVID 19 vaccination. This differed from some other local and foreign studies that have recorded higher levels above the findings of this study. While these other studies where online surveys that underscored a level of literacy, our study was carried out in a predominantly farming community in which one fifth of the population had no formal education. Information from community contacts such as friends and family almost surpassed radio as the predominant source of information of the COVID 19 disease and

vaccination. There is need, therefore, to approach demand generation for COVID 19 vaccination in the rural areas through community mobilization efforts, working through the community development committees, community action groups and other established channels. This would augment the gains from radio and other media to help combat infodemic as well as help reduce low intention and hesitancy to COVID 19 vaccination.

Conclusion: Our study found poor intention for COVID-19 vaccination among rural dwellers in a community in Rivers State. We recommend that radio sensitization campaigns should be augmented with community engagement to improve uptake of the COVID-19 vaccines.

Disclosure: The authors declare that there is no conflict of interest in the conceptualization, design, conduct, analysis or reporting of this study.

Key words: *COVID-19*, vaccine intention, rural community