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AMUA SIKHENDU MEDICAL CENTER (AMUA-SMC)

A Community-led Virtual Intervention to Mitigate COVID-19 Misinformation and Increase COVID-19 Vaccine Acceptance in Kenya

A CASE STUDY OF RURAL SMALLHOLDERS IN TRANS-NZOIA COUNTY

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STUDY AREA: SMALLHOLDINGS IN TRANS-NZOIA COUNTY IN KENYA



VIRTUAL STUDY DESIGN, TOOLS AND METHODS

Digital Tools	Methods	Study Design
text	Researcher & knowledge gate- keeper chat <u>1-on-1 on phone</u> to <u>interview</u> project participant or to deliver corrective messages	 INTERRUPTED TIME-SERIES [ITS] Single group of participants (panel) pre-tested (baseline), administered treatment, and then
	keeper make joint <u>1-on-1 phone</u> call and use a checklist guide to <u>interview</u> project participant or to deliver corrective messages	 repeatedly post-tested. Baseline knowledge of COVID-19 and acceptance of a COVID-19 vaccine by ITS-panel (ITSP).
	Researcher & knowledge gate- keeper <u>embed in social media</u> <u>group to track live chats</u> for misinformation and to deliver corrective messages	 Effect of the administered treatment demonstrated by change in knowledge of COVID-19 and COVID-19 vaccine acceptance in the pre- (baseline) versus post-test responses of ITSP.

BASELINE: EXPLANATORY VARIABLES

Sample	ITSP - Randomly selected adults (AGE=18+; N=300)
	 SEX: Male-54% (n=162); Female-46% (n=138) OCCUPATIONS: Teacher (n=24) Farmer (n=184) Trader (n=9) Healthcare Worker (n=75) Student (n=4) Civil Servant (n=3) Politician (n=1)

Source of COVID-19 Information*	n (%) of ITSP
Television - TV	60 (20)
Radio	264 (88)
Social Media / Internet	
WhatsApp	210 (70)
Facebook	120 (40)
Opera News	105 (35)
Daily Newspaper	45 (15)
Phone SMS	15 (5)

*Note - Some ITS-panelists cited multiple sources of COVID-19 information

Baseline....

Continuum of Vaccine Acceptance



COVID-19 and COVID-19 Vaccine Misconceptions and Falsehoods in Social Circles



"COVID-19 is a government hoax" (n=18/300)	"COVID-19 is a disease for the rich and not the poor" (n=59/300)
<i>"Herbal medicines can cure or prevent COVID-19 infection" (n=102/300)</i>	"COVID-19 mostly affects white people than black people" (n=37/300)
"COVID-19 infect people who frequent and eat or sleep in big hotels" (n=9/300)	"COVID-19 is a demonic spirit and God's punishment to humans" (n=108/300)
"COVID-19 was created for	"I don't believe in vaccines for
Africans to reduce their population" (n=89/300)	protection" (n=31/300)
Africans to reduce their population" (n=89/300) "COVID-19 and a common cold are treated the same way with lozenges and antihistamines" (n=134/300)	protection" (n=31/300) "COVID-19 is a powder that was made in the lab and released in air by China" (n=6/300)
Africans to reduce their population" (n=89/300) "COVID-19 and a common cold are treated the same way with lozenges and antihistamines" (n=134/300) Misinformation tied to herbal	protection" (n=31/300) "COVID-19 is a powder that was made in the lab and released in air by China" (n=6/300)
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Idiosyncrasies

Misinformation tied to economic wellbeing

Community-Led Intervention plan? To "shift" people's risk assessment to increase the perceived value of COVID-19 vaccination



Intervention: From a default to a Knowledge shuffled COVID-19 response model in the project area.....



Community-Led approach to COVID-19

Examples of Gate-keepers & Norm-shaper Involvement....



"COVID-19 is a real new disease and as herbalists and spiritualists we have no herbal preparations that are proven to cure or prevent COVID-19. Go get tested or treated in a hospital if feeling unwell. Get vaccinated for COVID-19 to be safe"

- 1. Herbalists.
- 2. Spiritualists
- 3. Community Health Workers
- 4. Nurses
- 5. Clinicians
- 6. Healthcare Administrators



"COVID-19 is a real new disease and not a government hoax. Go get tested or treated in a hospital if feeling unwell. Get vaccinated for COVID-19 to be safe"

- 1. Politicians.
- 2. Civic Leaders
- 3. Community Health Workers
- 4. Nurses
- 5. Clinicians
- 6. Healthcare Administrators



"COVID-19 is a real new disease and not a demon or evil spirit. It is not a punishment from God. Your faith in the almighty God is not questionable if you go get tested or treated in a hospital if feeling unwell. Get vaccinated for COVID-19 to be safe and to keep your

families safe"

- 1. Clergy.
- 2. Community Health Workers
- 3. Nurses
- 4. Clinicians
- 5. Healthcare Administrators

Post-Intervention....

19

n=37/50*

43

Continuum of Vaccine Acceptance



<u>Note</u>: Whereas there was a 3%-point improvement of the ITSP that would accept a COVID-19 vaccine, a 6%-point drop in the healthcare worker (HCW) component of the the ITSP that would accept a COVID-19 vaccine.

*25/75 HCWs declined to respond to the vaccine acceptance question post-intervention. These were assumed as REFUSAL.

Conclusion and added value of this pilot study,

- 1. Misconceptions and falsehoods about COVID-19 and COVID-19 vaccine are circulating in social networks in Trans-Nzoia smallholdings.
- 2. COVID-19 vaccine acceptance among the general population in Trans-Nzoia smallholdings was a high (85%) at baseline and improved to 96% post-intervention. [Note: Availability of un-used vaccine doses (low-uptake) points to the need for robust strategies that leverage a high COVID-19 *vaccine acceptance* in the general population to achieve a high *vaccination turnout* going forward.]
- 3. COVID-19 vaccine acceptance among <u>healthcare workers</u> in Trans-Nzoia smallholdings dropped from 32% pre-intervention to 26% post-intervention.

This study determined the need to/for,

- 1. Continuously <u>engage and amplify trusted community voices</u> in debunking misinformation about COVID-19 and COVID-19 vaccines in the study area.
- Policymakers to take <u>immediate remedial action to address COVID-19 vaccine</u> <u>hesitancy among healthcare workers</u> in the study area. [Note: Priority may be placed on the research, development and implementation of innovative strategies for effective COVID-19 vaccine-acceptance messaging targeting healthcare workers.]



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 - AMUA-Sikhendu Medical Center
 - University of Nairobi