

Table S1. Description of dependent and independent variables for the multilevel logistic regression.

Description	Categorization	Notes
Dependent variable		
Vaccine Hesitancy	0: Vaccine Hesitant	Vaccine Hesitant (somewhat unlikely, very unlikely to accept the vaccine, or don't know)
	1: Vaccine Accepting	Vaccine Accepting (very likely, or somewhat likely to accept the vaccine)
Independent variables: Socio-demographic factors		
County	0: Urban county (Nairobi/Ki-sumu)	
	1: Rural county (Kilifi/Wajir)	
Sex	0: Female 1: Male	
Age	1: 18-35 years 2: 36-57 years 3: 58+ years	
Education	1: No schooling/pre-primary 2: Primary education 3: Secondary 4: Tertiary	
Marital status	0: Single 1: Married	
Total household size	Continuous variable	
Socio-economic status	1: Tertile 1 (Poorest)	Principal component analysis was used to calculate socio-economic status based on (electricity, piped water source, reliable water source, livestock, and mobile phone ownership) and categorized into tertile.
	2: Tertile 2	
	3: Tertile 3 (Wealthiest)	
Independent variables: Individual influences, risk and perceptions		
Perceived risk of getting COVID	0: Some risk (low risk, medium risk, high risk) 1: No risk	
Know someone in your family, neighbourhood or workplace who has been infected with COVID	1: Know someone who tested positive/suspected of having COVID 0: Do not know someone who tested positive/suspected of having COVID	

Societal perception of having COVID	0. No perceived stigma 1. Perceived stigma	This was a composite variable of the following variables 1) People would stop talking to me 2) People would gossip about me 3) People I know would bring me the food I need 4) People I know would bring me the medicines I need 5) People in the community would treat me badly 6) After I recover from coronavirus, people in the community would still avoid me 7) After I recover from coronavirus, I would not be welcome back into my house by family 8) After I recover from coronavirus, I would not be welcome back at my place of work 9) After I recover from coronavirus, I would not be welcome back to my place of worship 10) After I recover from coronavirus, I would not be welcomed back to school
Ease of following government regulations on COVID	0: Easy to follow 1: Difficult to follow	Easy (Very easy to follow or somewhat easy to follow) Difficult (Somewhat difficult to follow and very difficult to follow)
Compared to the first few month of COVID, adherence to wearing of face masks over mouth and nose	0: More or about the same 1: Less	
Tested for Covid-19	0: Tested for COVID 1: Never tested for COVID	
Socio-economically impacted by COVID-19 measures	0: Socio-economically affected by measures 1: Not socio-economically affected by measures	This is a composite variable of the following variables 1) skipped meals in the past 7 days because of not enough money or food 2) Complete loss of job as a result of COVID 3) Partial job loss as a result of COVID 4) Reduced healthcare access 5) economic status-making more or less than when the pandemic just began
Independent variables: Context		
Perceived measures taken by the community against COVID-19	0: Community in support of COVID-19 prevention measures 1: Community does not support COVID-19 measures	This is a composite variable of the following variables: 1) Community taking steps to protect themselves and others from COVID-19 2) Community angry about social distancing measures due to COVID-19 3) Community work together to prevent and fight COVID-19
Government and media as trusted source of information	0: No 1: Yes	This is a composite variable of the following variables 1) Government SMS 2) government television advertisements 3) chief/administrators 4) government radio advertisements 5) television programs/shows 6) govt television adverts 7) radio programs/shows 8) internet 9) posters/print adverts 10) social media
Social Networks as trusted source of information	0: No 1: Yes	This is a composite variable of the following variables: 1) Friends 2) acquaintances/neighbours 3) work colleagues
Healthcare providers as trusted source of information	0: No 1: Yes	This was a composite variable of the following variables: 1) Public health facility 2) private health facility 3) NGO provider 4) pharmacy 5) community health worker
Community as trusted source of information	0: No 1: Yes	This was a composite variable of the following variables: 1) public announcements with megaphones 2) church/mosque/sheikh/religious leader 3) community meetings/spaces
Independent variables: Vaccination specific issues		
Worry about side effects	0: No 1: Yes	This was a composite variable combining: 1) vaccine trust 2) afraid of getting COVID after vaccination 3) worried about side effects
Don't think the vaccine will be effective	0: No 1: Yes	

Too busy to get vaccinated	0: No 1: Yes
Hard to access vaccination site	0: No 1: Yes
Scared of needles	0: No 1: Yes
For religious and cultural reasons	0: No 1: Yes
