



COVID 19 Vaccine Acceptance: Perception, Media, Social, Politics and Cultural Influence A Case of Ilboru Ward, Arusha District, Tanzania

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ABSTRACT

This study examined community perception towards the COVID-19 vaccine, by determining the perception of community members towards the acceptance of COVID-19 vaccine, how and media influenced people to get vaccinated against COVID-19, and the social, political, and cultural influence towards COVID-19 vaccine jab. A global survey of potential COVID-19 vaccine acceptance shows that the majority of the population was confused about the COVID-19 vaccinations and remained unsure about whether they would be vaccinated. In Tanzania as of 27 December 2021, a total of 12,431,769 vaccines were administered but still, community responses were low. Through questionnaires and interviews, this study has shown a high degree of awareness has been spread through media both main media and social media through internet, however, there were a possibility for spreading misleading information from other unregulated source of information through family members. The results also confirm the influence of social, political and cultural believes towards COVID 19 vaccines.

Keywords: COVID-19 vaccine, acceptance, perception, social and cultural perception, media influence

1.1.1 Global context

Coronavirus disease (COVID-19) is a deadly disease that continues to affect many countries in the world. This is caused by the new coronavirus strain severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) which has become a serious public health concern worldwide. The World Health Organization (WHO) declared the COVID-19 outbreak as a pandemic on 11 March 2020. As of February, 2021, the pandemic had affected 223 countries, with over 104.37 million confirmed cases and 22.71 million deaths recorded globally. The incidence was higher in the Americas (46,313,540 cases and 1,072,244 deaths) and Europe (35,003,091 cases and 767,235 deaths) than in South East Asia (12,982,540 cases and 199,668 deaths), Africa (2,616,892 cases and 64,473 deaths) and the Western Pacific 1,466,248 cases and 25,526 deaths (WHO, 2020). The recent total cumulative death reported to WHO has reached 7,035,337(25, February 2024).

Vaccines are the still the most important public health measure and most effective strategy to protect the population from COVID-19 a highly contagious virus and affected populations globally. According WHO, 2022 vaccine acceptance rate were only at 48%. Hence most of the population were confused about the COVID-19 vaccinations and remained unsure about whether they would have the vaccination (WHO, 2022).

In the early days of vaccination, a Chinese study found that only just over half of their participants (54. %) said that they intended to have the vaccination. This is relatively low proportions of people that were willing to have the vaccine despite the potential threat of the virus (Lin et al., 2020).

1.1.2 African context

For example in Mali, Sudan, and the Central African Republic the topic of vaccines was the largest thematic area of concern in their December 2020 rumor monitoring (AU, 2020) Other narratives about the pandemic and the vaccines were many, complex, and diverse, linked to interests of the leaders. An analysis in Senegal distinguished national, regional, and global rumors and conspiracies, with different nodes of influence. At the national scale, there were media reports of frauds vaccinators, a secret agreement between Bill Gates and Macky Sall (Senegalese president) for a vaccine trial, and Europeans spreading the virus through vaccination (Tulloch et al., 2021).

An analysis of Senegalese diaspora also claimed, vaccines were going to be used to kill Africans, that the vaccines had harmed children in Benin and that Chloroquine could be used to treat COVID-19 (Desclaux, 2020).

1.1.3 Tanzanian context

Tanzania recorded its first case of Covid-19 on 16 March 2020 (Tarimo & Wu, 2020). Tanzanian health officials struggled to dismiss criticism and misinformation about coronavirus vaccines, amid widespread apathy among younger generations in a country desperately tried to contain a third wave of infections (Tarimo & Wu, 2020).

The hostility to COVID-19 jabs and suspicion of science is fueled by a multitude of rebel politicians and radical influencers who are opposed to the vaccination idea based on religious convictions (Ndaluka et al., 2021). As vaccines become widely available, a huge number of Tanzanians were still undecided about getting vaccinated because of a complex web of moral, medical and political convictions. However, President Samia Suluhu Hassan, publicly took the Johnson & Johnson shot during kick-off a campaign in July that intended to vaccinate at least 60% of the nation's 58 million people (Africa CDC & AU, 2021).

1.4 The Problem

Studies have proved that the COVID-19 vaccine encountered resistance from many countries due to a lack of knowledge, awareness, and negative perception of vaccination against coronavirus (Mohd Rani et al., 2022). WHO, (2020) also provided statistics and updates which show the extent of COVID-19 vaccination in Tanzania, it was revealed that, on 27th December 2021 a total 12,431,769 vaccine was administered but still community response was poor considering its population of nearly sixty-three million.

Similarly, in the Arusha district, particularly at Ilboru ward, the catastrophe and community perception were proved to spark the same as the entire country. Community awareness about the COVID-19 vaccine was still insufficient and coronavirus victims were increasing daily. One of the immediate measures was to influence the community to be vaccinated against coronavirus disease by giving people education about the importance of vaccination which help in changing community perceptions and attitudes towards the COVID-19 vaccine (Mohd Rani et al., 2022).

1.4.1 General objective

The general objective of this study was to examine community perception towards the COVID-19 vaccine.

1.4.2 Specific Objectives

- To determine the perception towards COVID-19 vaccine acceptance in the community
- To assess what influences people to get vaccinated against Covid-19
- To assess the social, political, and cultural impact of COVID-19 vaccine

1.4.3 Research Questions

- i. How do community members perceive the COVID-19 vaccine?
- ii. What influences people to get vaccinated against Covid-19?
- iii. What are the social, political, and cultural impacts of Covid-19?

1.4.5 Significance of the Study

This study explores useful data, facts, and insights into community perception, acceptance, knowledge, and attitude toward the COVID-19 vaccine. It provides additional knowledge to community actors with regard to vaccination against coronavirus which may help the government to formulate policies and strategies against coronavirus and related pandemic.

1.4.6 Scope of the study

This study was conducted in Arusha District at Ilboru ward in Tanzania. It examined community acceptance towards the COVID-19 vaccine. Ilboru ward was selected as the study area because the area is among of populated wards and hence vulnerable to COVID-19 transmissions. But also, there are health centers and nearby hospitals that enhance the accessibility of data which are supportive and relevant to this study.

2. Theoretical review

2.1 Social Learning Theory

Social learning theory states that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement. In addition to the observation of behavior, learning also occurs through the observation of rewards and punishments, a process known as vicarious reinforcement. The theory expands on traditional behavioral theories, in which behavior is governed solely by reinforcements, by emphasizing the important roles of various internal processes in the learning individual (Mergel, 1998).

Within this context, Albert Bandura studied learning processes that occurred in interpersonal contexts and were not adequately explained by theories of operant conditioning or existing models of social learning, such as the work of Julian Rotter. Specifically, Bandura argued that the weaknesses of learning approaches that discount the influence of social variables are nowhere more revealed than in their treatment of the acquisition of novel responses.

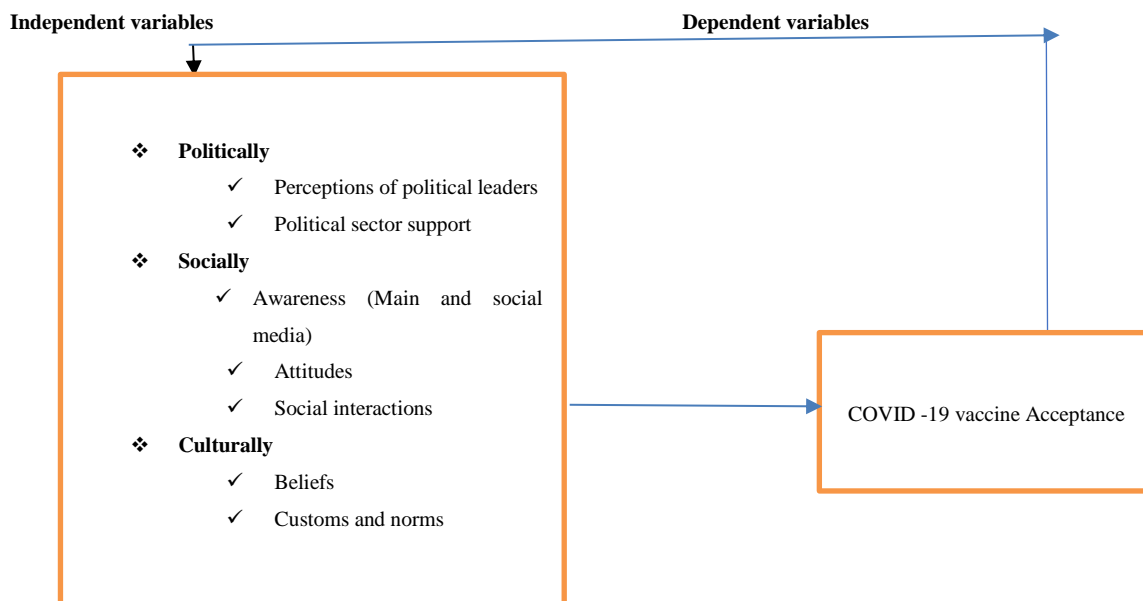
Rotter's theory proposed that the likelihood of a behavior occurring was a function of the subjective expectancy and value of the reinforcement. This model assumed a hierarchy of existing responses and thus did not (according to Bandura) account for a response that had not yet been learned. Bandura began to conduct studies of the rapid acquisition of novel behaviors via social observation, the most famous of which were the Bobo doll experiments.

Social learning theory integrated behavioral and cognitive theories of learning to provide a comprehensive model that could account for the wide range of learning experiences that occur in the real world. Social learning theory draws heavily on the concept of modeling, or learning by observing a behavior.

Bandura outlined three types of modeling stimuli: Live model in which an actual person demonstrates the desired behavior, Verbal instruction in which an individual describes the desired behavior in detail and instructs the participant on how to engage in the behavior symbolic in which modeling occurs using the media. An important factor in social learning theory is the concept of reciprocal determinism. This notion states that just as an individual's behavior is influenced by the environment, the environment is also influenced by the individual's behavior. In other words, a person's behavior, environment, and personal qualities all reciprocally influence each other (Mergel, 1998).

2.2 Conceptual Framework

The conceptual framework guides the paths of a research and offer the foundation for establishing its credibility. It is a theorized model identifying the classical under study and the relationships between the dependent variable and the independent variables (Adom et al., 2018).



As shown in Figure (1) above the study involved both the dependent and independent variables where the independent variable was Community perception which is divided into sub-variables which are political social and cultural perceptions while the dependent variable was community members getting COVID-19 vaccine. The conceptual framework in this study showed that there was a relationship between the independent variable and the dependent variable. It was observed that if the community has positive perceptions towards the COVID-19 vaccine then its uptake will also be high but if the community has negative perceptions towards COVID -19 vaccine then its acceptance will also be low.

3.1 Research design

The researcher used Cross-sectional research design that helped the researcher to involve using different groups of people who differ in the variable of interest but share other characteristics, such as socioeconomic status, educational background, and ethnicity

3.1.1 Study population

In this study, the population included community members of the Ilboru ward and key informants such as Health service providers, local leaders and Local health service partners.

1. Table 1: Distribution of respondents

S/No	Type of Respondent	Number of Respondents
1	Community members	58
2	Health service providers	3
3	Local leaders	3
4	Local partners	2
	TOTAL	66

3.1.2 Sampling methods

Researcher used purposive sampling (health service providers, local leaders and local partners). Simple random sampling was used to identify community members.

3.2 Method for data collection

3.2.1 Primary Source of Data

Researcher used questionnaires and interview methods to gather of data to gather primary data from the respondents.

3.2.2 Secondary Source of Data

Documentary of review was used to gather secondary data. Secondary data was collected through review of the related documents from different sources including books, journals, and document data from the office of Ilboru Ward. Another document which was reviewed were reports of WHO about Covid-19 vaccine.

3.3 Data Analysis

Data were analyzed in Statistical Package of Social Science (SPSS) and presented in graphs and tables. The findings displayed by using tabulation form helped the researcher to have clear information of the report that was readable well and understandable.

3.4 Ethical consideration of the study

The researcher informed the respondents that the instruments being administered were for research purpose only and the responses from the respondents were kept secret and confidential. The researcher obtained an introductory letter from the local government authority to collect data to the ward.

4.1 Demographic characteristics of respondents

The study involved respondents of varying sex, age, and education levels to capture vast and differentiated perceptions concerning the subject of the study. In this section, the researchers portray the characteristics of the participants in this study based on their sex, age, marital status and education levels.

4.1.1 Marital status of respondents

The researcher was interested in understanding the marital of the respondents in the study area because the status of having a family or not having one influences health seeking behaviors in the community. Due to this the researchers asked this information in order to know the distribution of the participants in this study basing on their marital status

2. Table 2: Marital status of respondents

Marital status	Frequency	Percent
Single	20	34.5
Married	28	48.3

Widower	6	10.3
Widow	4	6.9
Total	58	100.0

Results as shown in the table above portray that majority 48.3% of the participants in this study were married, 34.5% were single while few 6.9% were widows. These results imply that majority of the participants in this study were married and living with their families and so due to this their health seeking behavior is influenced by their need to ensure the survival of their offspring while those who are single had poor attitudes and their health-seeking behaviors are influenced by personal motives (interviews reveals). These results imply that those who are married have more motivation towards vaccination to endure their survival

4.1.2 Age group of Respondents

The researcher was interested in understanding the age groups of the respondents in the study area because age status heavily influences individual behaviors toward health outcomes and decisions related to healthy living. The researchers of this study asked about the age of the respondents since the researchers needed to collect information from people with the relevant knowledge and experiences in COVID 19.

3. Table 3: Age group of Respondents

Age group	Frequency	Percent
15 -20 years	7	12.1
21 – 25 years	9	15.5
26 - 30 Years	14	24.1
31 - 35 Years	11	19.0
36 - 40 Years	13	22.4
Above 40 Years	4	6.9
Total	58	100.0

Results of the findings from this study as shown in table 2 above reveals that majority 24.1% of the respondents in this study were from the age group of 26-30 years of age, 22.4% were of the age group of 36-40 years of age, 19% were aged between 31-35 years of age while the least 6.9% were above 40 years. These results show that data concerning the subject in this study were collected from people with adequate age and experiences.

4.1.3 Educational level of Respondents

Education is one of the major tools of liberating people from ignorance, poverty and awareness of the socio-economic problems such as poverty reduction and others (URT, 2014.) Also, it is important for a study to determine the respondents' level of education; because education influences individuals' decisions concerning their health and well-being.

4. Table 4: Educational level of Respondents

Educational level	Frequency	Percent
Primary Level	25	43.1
Secondary Level	20	34.5
College / University	13	22.4
Total	58	100.0

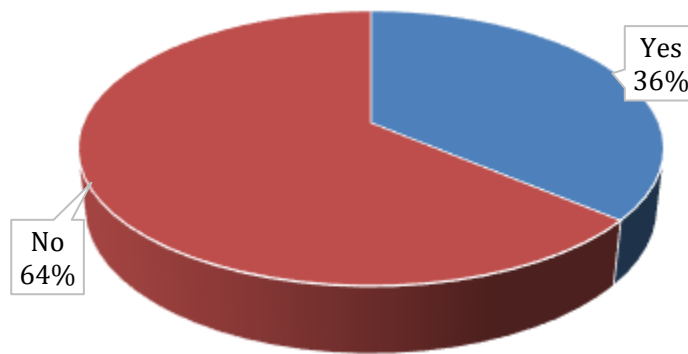
Results as presented in table 4 above reveals that 43.1% of the respondents in this study had attained primary level of education, 34.5% have attained secondary level education while the least 22.4% had attained college/university level of education. These results show that the respondents had varying levels of education. Averagely the results show that the respondents had enough education to understand about vaccine and its consequence to their health status.

4.2 Perception of Covid-19 vaccine in the community

4.2.1 Number of people vaccinated in the study area

The researcher asked respondents about their vaccination status in order to determine the ration of people of who have been vaccinated for Covid 19 in the study area so as to measure their awareness on the availability of the vaccines and also their utilization among them. The results obtained are as shown in figure 1 below

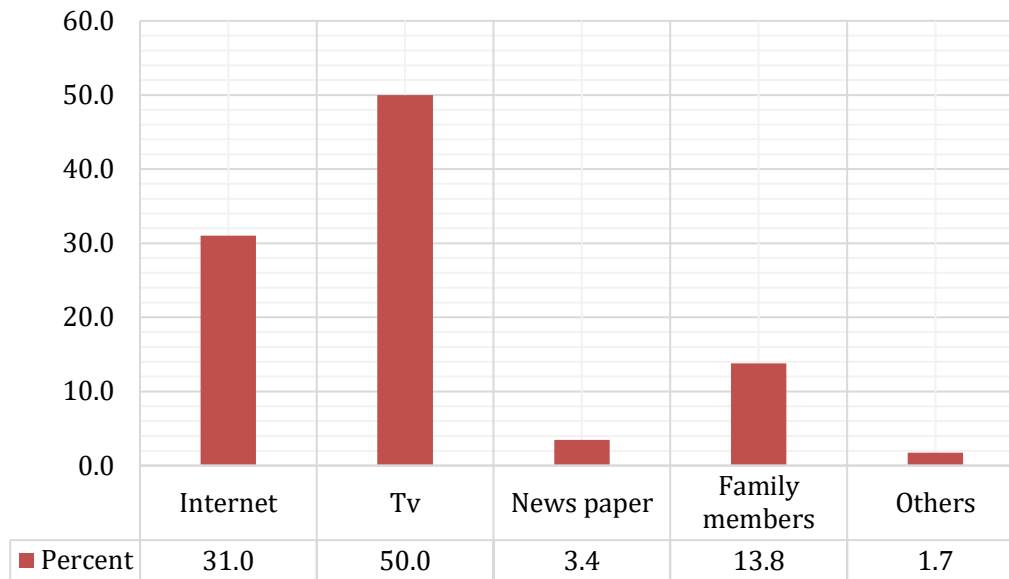
5. Figure 1: Number of people vaccinated



Results from this study as presented in figure 2 above reveal that majority 64% of the respondents have not been vaccinated while only 36% reported to have been vaccinated. Majority of those who have not been vaccinated reported that they were afraid of the side effects and also said they preferred to use local herbs and traditional medicine. Indigenous medicines have been used to treat COVID-19 in Tanzania and Madagascar without meeting safety and efficacy standards. However, The use of these plant products to treat COVID-19 may harm human health because they are not scientifically proven (Adane et al., 2022). Although, some of plant extracts have been traditionally been used to treat various diseases in many African countries (researchers personal experience). Findings from this study imply that the perception of the community members in the study area towards the use of vaccines has a very important role in the success of communication and this reveals that there is a relationship between knowledge about COVID-19 and the acceptance of the COVID-19 vaccination program in the community. This confirms the concepts of social learning theory that the behaviors of the individual are influenced by the environment.

4.2.2 Influence of source of information on vaccination against COVID-19

Media platforms are used by many people to seek and share health related information that may influence their decision-making about COVID-19 vaccination. Although vaccine hesitation has been witnessed over the years, it can be claim that in today's world the internet may misrepresent information if not well honestly handled (Adane et al., 2022). For example both social media and main stream media can be used efficiently to inform the general population about the consequences of the pandemic (Alomiry, 2022). Thus, media has significant impact on influencing perception of disease outbreaks, decision-making, and risk behaviour. **Figure 2: Influence of sources of information on vaccination against Covid-19**



The findings from this study as shown in the figure above describe that media has had a huge influence on creating awareness on the places where vaccines are available and when they are given to the people. As seen in figure 2 above the results obtained show that most (50%) of the respondents obtained information about COVID-19 vaccines through television, 31% obtained via internet while 13.8% obtained information from family members, and few 3.4% were aware of COVID-19 vaccines through newspapers. These results show that media influences COVID-19 vaccinations by being a source of major valuable information. The likelihood for participants to be vaccinated increased through media follow-up despite the negative impacts.

4.2.3 Social, political and cultural impact of Covid-19 vaccine

Social, political and cultural factors have affected community towards COVID – 19 vaccines. Politically the previous president of Tanzania Mr. Magufuli was against the use of vaccines and urged people to appraise the use of herbal treatments (Myumbo, 2023). After the coming of a new President Hon. Samia Suluhu Hassaan Tanzanians were urged to turn to the COVID-19 vaccine.

(Mtenga et al., 2023) argued that socially, as vaccines become widely available, a huge number of Tanzanians were still undecided about getting vaccinated because of a complex web of moral, medical, and political convictions. This study confirmed these claims through interviews in the study area.

Culturally; findings show that there was a large section of the society believed in the use of traditional medicine to cure their illnesses (Mlozi, 2022). It's not surprising that the turn up for vaccines partly was low in the study area.

5. Conclusion

In conclusion, community perception towards COVID 19 vaccine is a barricade that many countries faced and opted for the herd immunity to end the pandemic. However, many societal behaviors need to be fragmented for better vaccines acceptance for future pandemics and vaccine related interventions. Media especially social media has become a helpful element for communicating critical information to communities, yet, they need to be regulated for misleading information.

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