

Investigating Covid-19 Vaccine Hesitancy in Soweto, Lilanda and Mandevu in Lusaka Province, Zambia

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Abstract:

This research report investigated the COVID-19 vaccines hesitancy in Soweto, Lilanda and Mandevu markets of Lusaka Province, Zambia. The study explored how to develop and implement literature to increase knowledge about COVID -19 and reduce vaccine hesitancy in urban and peri-urban areas of Zambia. In this educational research report, a mixed research approach (qualitative and quantitative research methods) was employed whereby random sampling procedure was used to select participants. Data was mostly obtained from primary sources from the three aforementioned markets through self-made questionnaires and interview guides. The data obtained showed that there were several factors that led to people's hesitancy in getting vaccinated against Covid -19. They were in form of traditional, scientific and religious beliefs that people had towards the Covid-19 vaccines. The study showed that more than 70% of the target population in the markets was not vaccinated against Covid-19 with only less than 30% percent of the population vaccinated. The study further showed that the elderly and Civic Leaders played a major role in sensitizing the markets populace against Covid-19 and the benefits of getting vaccinated against the pandemic. It was further observed that the women and elderly in the markets were more receptive to the campaign of getting vaccinated against Covid-19 than their men and young counterparts respectively.

Keywords: Covid-19, vaccination, hesitancy, beliefs, traditional, religion and science

1.1 Introduction

This chapter presents the background to the study, problem statement, research objectives and questions, significance of the study and limitations of the study. The essence of this study was to investigate the Covid-19 vaccines hesitancy in the semi-urban and rural areas in Zambia. The research will also provide recommendations to the government on the semi-urban and rural areas in Zambia. The research will also provide recommendations to the government on the measures it must put in place to minimize people's hesitancy to take the Covid-19 vaccines.

1.2 Background of the Study

Corona Virus which is popularly known as Covid - 19 had been the centre of attention in the whole world. Numerous human related activities had been distracted by the existence of Covid - 19 not forgetting the thousands of people who had died from it. Additionally, all sectors related to human activities were negatively affected by Covid - 19. The entire globe failed to operate effectively due to the breakout of Covid - 19. This virus originated in Asia in 2019 and China was considered to be the mother place for this world deadly virus (Butt & Dargham, 2022).

The Zambian government closed all learning institutions, selected working and market places as this was done to curb the spread of the virus. In as much as the Zambian government took this step to protect lives of people, all aspects were affected in a negative manner. This had affected the economy of the country as well as the society at large where marketeers' sources of income were tempered with. Thus, the Covid - 19 vaccines were invented to provide acquired immunity against Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the virus that causes Coronavirus disease 2019 (Covid - 19) (Kozlov,2022). The Covid - 19 vaccines were invented in order to restore the world back to its normal routines such as work, school as well as the economy.

Prior to the Covid - 19 pandemic, an established body of knowledge existed about the structure and function of Coronavirus causing diseases like Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) (Dargham, 2020). This knowledge accelerated the development of various vaccines platforms during early 2020. The initial focus of SARS-CoV-2 vaccines was on preventing symptomatic, often severe illness. On 10 January 2020, the SARS-CoV-2 genetic sequence data was shared through GISAID, and by 19 March, the global pharmaceutical industry announced a major commitment to address Covid - 19, (Hatch R et al 2021). The Covid - 19 vaccines are widely credited for their role in reducing the severity and death caused by Covid - 19. Many countries have implemented phased distribution plans that prioritize those with the highest risk of complications, such as the elderly, and those at high risk of exposure and transmission, such as healthcare workers. By March 2022, 11.12 billion doses of Covid - 19 vaccines had been administered worldwide based on official reports from National Public Health Agencies (Fonager, 2021). By December 2020, more than 10 billion vaccines doses had been pre-ordered by countries with about half of the doses purchased by high-income countries comprising 14% of the world's population (Pfizer, 2022).

Nine vaccines had been approved for emergency full use by at least one stringent regulatory authority recognized by the World Health Organization: Pfizer-BioNTech, Oxford-AstraZeneca, Sinopharm BIBP, Moderna, Johnson & Johnson (Janssen), CoranaVac, Covaxin, Novavax and Medicago (Peltier, 2021). Zambia however had received about 228,000 Covid - 19 vaccines doses namely COVAX, following a donation of vaccines by France through the COVAX facility. This is a partnership between United Nations International Children Emergency Fund (UNICEF) and World Health Organisation (WHO) (<https://www.unicef.org/supply/covax-ensuring-global-equitable-access-covid-19-vaccines>).

In addition, other vaccines include Pfizer-BioNTech, Johnson & Johnson and AstraZeneca were approved by the country's medicine regulator which was the Zambia Medicine Regulatory Authority (ZAMRA).

For doses such as Pfizer-BioNTech were administered twice after 21 days, Johnson & Johnson (Janseen) one dose and Atranzenca was taken twice after 8-12 weeks.

1.3 Problem Statement

Despite the Zambian government and other stake-holders putting in place measures to reduce the spread of Covid -19 virus, there had been high cases of Covid-19 in Zambia. In 2020, the Zambian government introduced the Covid-19 vaccines for everyone but the Zambian people continued to respond poorly towards it. The Zambian people actually had different views concerning these vaccines because of the fear of the unknown. Consequently, some of the people were not willing to get vaccinated. That prompted the researcher to undertake this research to address the vaccines hesitancy which might establish factors that are behind the hesitancy of Covid-19 vaccines in Lusaka, Zambia.

1.4 Objectives of the Study

1. Examine the beliefs towards vaccinations.
2. Assess knowledge, attitudes and perceptions regarding Covid - 19 and its vaccines.
3. Establish the role that the Civic Leaders played on Covid - 19 and its vaccines.

1.5 Significance of the Study

This study will be of great significance to the Government, Non-Governmental Organisations (NGOs), the health sector, and other stakeholders who will be beneficiaries of this information in order to address the hesitancy of the Covid-19 vaccines in both peri-urban and rural areas in Zambia. This study has helped disseminate the information about the knowledge people had about Covid-19 as well as the diverse reasons why people were hesitant to get vaccinated. It will also help the Government sensitize better about the COVID-19 vaccines and provide enough information about the vaccines in order to curb the fear of the unknown in people. Equally, this study also assessed the ratio of the people who had been vaccinated and those who were not vaccinated among the people in the targeted areas.

2.1 Review of Literature

The outbreak of the Corona Virus Disease of 2019 (COVID-19) over the years had been associated with increased sickness and deaths in the population globally and the lack of vaccines was at the centre of that experience. Where vaccines had been developed people were hesitant to accept it herd immunity was suggested to remedy this situation. However, it proved an impossible option without risking an unbearable increase in the proportion of cases and deaths across regions (Rockwell and DO, 2017; Ilesanmi et al., 2021). On the African continent, 2,831,003 Covid - 19 cases and 56,342 deaths had been recorded, with Zambia contributing to 62,000 and 853 cases and deaths, respectively (Team and Eurosurveillance editorial team, 2020).

Relating to the past scenario, learning from the new cholera vaccines introduced in 2018 to curb the burden of Cholera outbreaks, vaccines hesitancy needed attention in order to achieve a successful introduction and deployment of the Covid - 19 vaccines as indicated by a 2018 study that involved 48 focus groups that targeted key players in the administration of vaccines in Zambia. Vaccination was often heralded as one of the most important achievements of public health. Nevertheless, that success had always been accompanied by opposition to its practice (Wolfe and Sharp, 2002). Historical reasons for objection had

never been singular or straight-forward drew motivation from several frames of reference which included religious, scientific and traditional, (Durbach, 2000). Lay persons, lay healthcare workers, and neighbourhood health committee members were targeted to investigate the community's view of the Covid - 19 vaccines in Zambia. The results indicated the prevalence of vaccines hesitancy which was compounded by various factors. To address that problem, the study recommended community-driven models that incorporated factual communication by professionals (Pugliese-Garcia et al., 2018). A study about the impact of the social environment on cervical cancer prevention practices revealed how community awareness improved vaccines update (Nyambe et al., 2018).

Determinants of the Covid-19 vaccines hesitancy in Zambia are scarce. Evidence suggested relatively low vaccination coverage in Zambia (CSO Zambia 2015; Babaniyi et al., 2012). For example, though Zambia's immunisation programme had routinely delivered vaccines for free to infants in all public health facilities since the 1970s, in 2013-2014, less than 60% of children had received the recommended vaccinations by 12 months of age. Coverage varied between vaccines and between doses for a given vaccines, with higher uptake among infants of more educated mothers, urban residents and wealthier households. Also, a cross-sectional study on anticipated response to the introduction of the human papillomavirus (HPV) vaccines reported high acceptance among women (Liu et al, 2012) in contrast, a qualitative paper voiced healthcare workers' concerns about the influence of male and elders' consent, distrust of western medicine and low education as barriers to uptake of the vaccines in urban and peri-urban settings, distance to health services, poverty, low health literacy and perceptions on accessibility negatively influenced adults decisions to seek care for their children including for immunization (Sasaki et al, 2012).

Modelling on Zambia's determinants of vaccination estimated that demand-related determinants (i.e. positive attitudes and norms towards vaccines and increased perceived control on vaccination) contributed strongly to completion of all required doses of vaccines, while supply-related determinants (supplies and human resources) contributed more to vaccines initiation (Nichter, 1995). Those included perceived purpose and effectiveness of vaccines and the personnel delivering them (attitudes), social networks and communication (norms), as well as perceived control overtime, cost and availability (self-efficiency). While determinants might have varied by disease or vaccines, (e.g. an HPV vaccines might have been more fear inducing than influenza vaccines), addressing those required an understanding of the general perception of vaccines within the given context (Williams et al, 2018). Some time ago, a qualitative study reported that mothers in the capital generally had positive views regarding vaccination, but signalled that lack of knowledge and rumours in the community acted as barriers for them to have their children vaccinated, (Williams et al, 2018).

Africa Union Centre for Disease Control conducted a survey between August and December 2020. The survey interviewed more than 15,000 adults aged 18 years and above across 15 African countries which were; Burkina Faso, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Gabon, Kenya, Malawi, Morocco, Niger, Nigeria, Senegal, South Africa, Sudan, Tunisia, and Uganda, (Africa CDC,17/12/2020). Data from the survey showed significant variations in the willingness across countries and across the five regions in the continent, from Ethiopia and Niger 94% and 93%, respectively to Senegal and the Democratic Republic of Congo 65% and 59%, respectively.

Prior to the Covid-19 pandemic, there had been a global decline in vaccines acceptability and uptake because of doubts about efficacy and safety and the spread of misinformation about vaccines. The pandemic had further exacerbated controversies around vaccines as a preventive measure against infectious diseases. The study was therefore conducted to investigate public knowledge and perceptions about the Covid -19 virus and its vaccines, thus identifying knowledge gaps, cultural beliefs, and attitudes to inform interventions for pre-deployment of vaccines across the continent.

Overall, willingness or not to take the Covid-19 vaccines depended mostly on the trust in vaccines as well as perceptions of its importance, safety and efficacy. Safety was of utmost consideration. On average 18% of respondents believed that vaccines generally are not safe and 25% believed that the Covid -19 vaccines were unsafe. Some of the respondents expressed distrust for vaccines generally while others expressed distrust for Covid-19 vaccines specifically.

Respondents who are older, those who knew someone who had tested positive for Covid-19 and those who lived in rural areas were more inclined to take the Covid-19 vaccines compared to younger people, those who had not seen Covid-19 affect anyone as well as those lived in urban areas. Rejection of the Covid-19 vaccines appeared to be linked to misinformation and disinformation, as most of those who said they would not take a vaccines believed that the disease was man-made, did not exist, or was exaggerated and did not pose a serious threat. Others thought that they were not at risk of being infected with the virus while some others believed that natural remedies and alternative medicines were safer than vaccines.

Literature showed how important factual information provision impacted positively on vaccines acceptance and eventual uptake (Nyambe et al, 2018), (Pugliese-Garcia et al, 2018). A study involving 13 countries indicated that vaccines hesitancy had a global characteristic and could even be expressed across regions within each country. While most Africans were likely to take the vaccines, the proportion that was likely to be hesitant negatively affected the impact and success of the Covid - 19 vaccination program (Dubé et al, 2014), (Nembaware et al, 2020).

The project's long-term activities were targeted at reducing vaccines hesitancy for future vaccination programs by innovating vaccines-related programs for the population. This approach was informed by evidence produced by studies that revealed how educating children and adolescents against different vices had positive impacts on the particular disease awareness. Indeed, messages such as those aimed at reduced passive smoking in children and adolescents had subsequently helped to reduce in-home smoking. Therefore, information was seen to flow from the younger to the older population in the community and this was likely to be a more sustainable way of reducing vaccines hesitancy (Huong et al, 2016). Being the fast development phases of life, childhood, and adolescents demanded care in the delivery of well-developed material and the necessary information strategies in order to attend to both the individual and environmental aspects of the young. By so doing, the future behaviour of the population towards vaccines was positively influenced.

No study, qualitative or otherwise, had examined general perceptions on vaccination of the wider community and health actors to holistically understand vaccines hesitancy in peri-urban and rural Zambia.

Prior to the Covid-19 pandemic, there had been a global decline in vaccines acceptability and uptake because of doubts about efficacy and safety and the spread of misinformation about vaccines.

Vaccines hesitancy specifically against Covid-19 had impacted many global countries, with many myths and beliefs being advanced to give people more reason to why they are hesitant about the vaccines. A global survey conducted in 2021 in 19 countries found that at around one-third of participants hesitated to take a Covid - 19 vaccines, with acceptance of a vaccines ranging from 90% in China to 55% in Russia (Lazarus et al, 2021).

Acceptance and uptake of vaccines are reliant on whether populations place their trust in the vaccines itself, the institution that provides the vaccines or people who communicate and administer it. Despite the benefits that come from taking the vaccines such as preventing the risk to exposure of the Corona virus that can lead to death and respiratory diseases, the vaccines uptake had always varied differently with not being predictable because of constant changes depending on the peoples view towards the vaccines. This is reflecting in the Covid - 19 vaccines roll-out public responses, where the absence of trust had been recognised as a key inhibitor to uptake.

Vaccines trust was dependent on the Covid - 19 vaccines, the company supplying the Covid - 19 vaccines and the organization marketing the vaccines. For people to take the vaccines they needed to know where the products in this case Covid-19 vaccines came from, thus there was much contemplation that people made towards the vaccines depending on the source of the vaccines. Adhikari et al, 2021, argued that it was therefore critical to explore the relevance of trust in vaccines and Covid - 19 vaccines with the steady increase in production of Covid - 19 vaccines, globally vaccines supplies had become less of a problem compared to the vaccine's hesitancy.

In other global context, acceptance of the Covid - 19 vaccines remained unclear, a study across 19 countries found vaccines acceptance ranged from 55% to 89%, with 65% in Nigeria and 82% in South Africa, (Goldman et al, 2020). Despite many vaccines been produced rapidly there was inadequate tolerance of the intake of the vaccines by the people depending if weather they could trust the vaccines or not for their health perception as this was dependent on the quality of the vaccines and the safety of the vaccines towards the people.

Misinformation or conflicting information from the media became factors that influenced the acceptability of the Covid - 19 vaccines among majority of the group of people. The situation was due to the fact that others believed in unverified information about the vaccines and the unproven speculation in pharmaceutical industries involved in the manufacturing of the Covid - 19 vaccines. Younger people, people of colour and other ethnic groups were more likely to believe in the conspiracy from the USA (Earnshaw et al, 2020). Black participants were more hesitant to accept Covid-19 vaccines than whites this was due to the fact of on-going historical racism hence they did not trust the vaccines.

The lack of scientific literature that was related to trusting Covid - 19 vaccines combined with the developing of non-empirical research resulted to the majority of the literature reporting how personal attributes and interpersonal trust affected the willingness to accept the Covid - 19 vaccines. Hence that

showed that motivation and a barrier that led to vaccines hesitancy was that people proved to not have enough knowledge about the Covid - 19 vaccines.

While vaccines development is a considerable accomplishment there had was a significant attention to Covid - 19 vaccines hesitancy. The vaccines hesitancy rates were increasing worldwide over-time (Dube` et al, 2021), and several researchers have looked at vaccines hesitancy in a variety of populations, contexts and countries. Studies had shown that many had attempted to explain the factors that prompted to vaccines hesitancy and to give reason why people rejected and delayed to responding to the vaccines.

Two studies reported that being in good health was a barrier to vaccination (Bell et al, 2020: Sherman et al, 2020). In Sherman et al study, vaccination intention was lower because participants who believed that Covid-19 vaccines were only necessary for those who were at risk of serious illness, meaning that the participants did not have to believe in the vaccines because of their belief that their natural immunity would protect them against corona virus hence they perceived to show an Anti-vaccines stance.

The location where vaccines were developed affected individual's attitude towards vaccination. For instance, people in the USA were less likely to be vaccinated if the vaccines were developed outside of the USA. Correspondingly, Chinese respondents showed more trust towards inland vaccines that were produced by pharmaceuticals that were local hence this increased willingness to be vaccinated with domestically produced vaccines unlike when the vaccines were manufactured somewhere foreign, (Chen et al, 2021).

The delay in acceptance or refusal of vaccines despite availability of vaccination services had proved to be the biggest threat to global health. That was because despite vaccines produced in large numbers people were still on low rate of receiving the vaccination that had to be given to them, however it was crucial because lack of knowledge had caused such issues leaving people to be unconvinced about the Covid-19 vaccines,

3.1 METHODOLOGY

The study employed a descriptive research design and cross-sectional design. The basic premise of this methodology was that such integration permits a more complete and synergistic utilization of data than to separate quantitative and qualitative data collection and analysis (Marshall and Rossman, 2009). This study employed a mixed method, qualitative, quantitative and a cross sectional study. The information gathered was used to increase the understanding of the researcher on this subject. The design was used because it increased the understanding of the researcher on this subject, it did not only provide conclusive results because of the lack of its population representation and statistical strength, but it made the researcher determine how and why things happen. The mixed method was used, the term "mixed methods" refers to an emergent methodology of research that advances the systematic integration, or "mixing," of quantitative and qualitative data within a single investigation or sustained program of inquiry.

3.2 Target Population

The targeted areas were peri-urban and rural area of Zambia. These areas were Soweto, Lilanda and Mandevu markets in Lusaka. A study population is a well-defined or specified as a set of people or group

of things, households, firms and services, elements or events which are being investigated. This researcher targeted marketeers and civic leaders.

3.3 Sample Size

The sample size of this study compromised of Soweto, Lilanda and Mandevu thereby making the total sample size of 150.

3.4 Sampling Techniques

The participatory ethos was adopted in this research to ensure participation of the entire key stake-holders at various stages of the research process. That was to ensure ownership of the research results and adoption of proposed strategies. The study was orientated to identify the factors of COVID-19 vaccines hesitancy, interventions and propose ways for improvement. The following was used to conduct the research: Both structured and unstructured questionnaires were administered in order to collect qualitative and quantitative data. The study involved Civic Leaders and Marketeers. An interview guide was prepared and used during data collection in order to be inclusive even for respondents who could neither read nor write. This proved to be very vital during the data collection process as it turned out that most of the marketeers preferred not write on their own.

3.5 Data Collection Method

In this study, primary data was the main source of findings presented, discussed and analysed in chapters four and five. Primary data collection techniques that were used included mainly interview guides and questionnaires.

3.6 Data Analysis

Quantitative data was presented and analysed using the Microsoft excel software while Qualitative data was analysed according to themes that emerged from collected data.

3.7 Ethical Consideration

According to (Maxwell, 2005) ethics refers to the quality of research procedures, with regard to their adherence to professional, legal, and social obligations to the research participants. These guidelines deal with voluntary participation, no harm to respondents, anonymity and confidentiality. Firstly, the researcher notified the respondents that participation will be completely voluntary. Secondly, the researcher avoided any possible harm to the respondents. This included embarrassment or feeling uncomfortable about questions (Maxwell, 2005). Thirdly, the respondents' identity was protected by exercising anonymity and confidentiality. The researcher seeks permission from Lusaka City Council (LCC), Ministry of Health and Central Statistical Office (CSO-ZM).

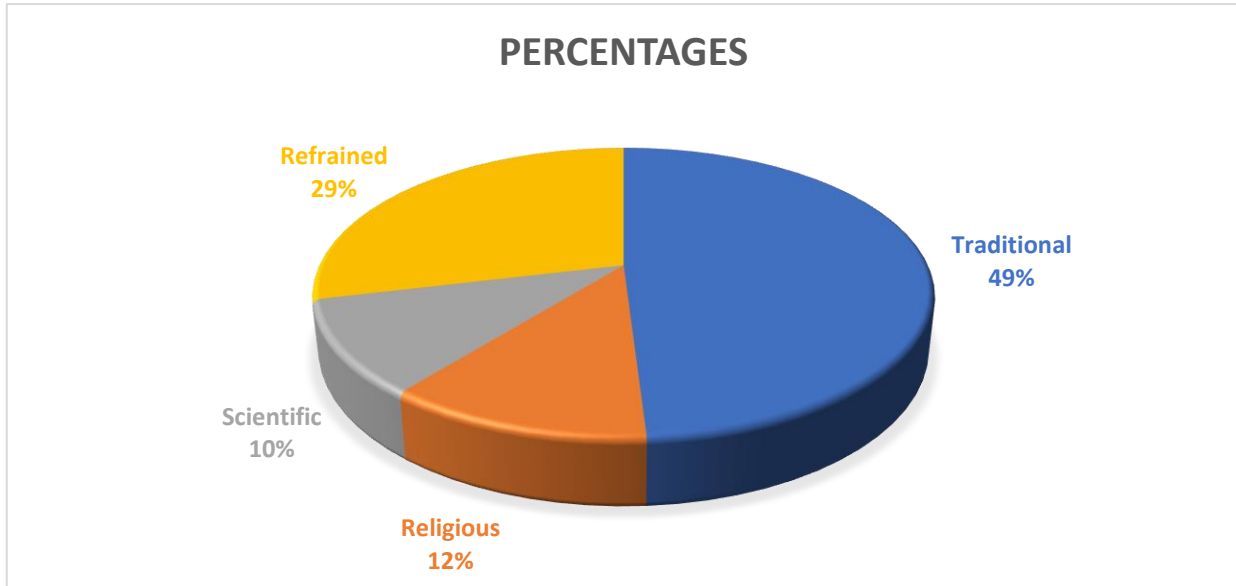
4.1 FINDINGS AND DISCUSSIONS

The following findings and discussion were presented according to set research objectives.

4.2.1 People's General beliefs towards the Covid-19 Vaccines

The discussion of findings begun with people's beliefs about the Covid-19 vaccines, ranging from scientific and traditional beliefs to religious beliefs. Furthermore, the study analyzed peoples' skepticism

about Covid-19 vaccines and the roles of Civic Leaders and Marketeers in sensitizing and encouraging people to get vaccinated against Covid-19. Figure 4.2.1 below presents the frequencies and their corresponding percentages for each type of belief.



Source: Field Work, 2023

Figure 4.2.1: General beliefs of people towards the Covid-19 Vaccines.

Figure 4.2.1 above, it is evident that the majority of people who refrained from the Covid-19 Vaccines cited traditional beliefs for their failure to get the vaccines. This comprised 49% of the total population sample size covered. It is also shown that 12% of the respondents refrained from taking the vaccines due to their religious beliefs while 10% cited scientific beliefs. Moreover, 29% of all respondents declined from answering the question on their beliefs about the Covid-19 Vaccines. From these statistics, it can be seen that the desire by the government to have its people vaccinated against Covid-19 fails to yield the desired results due to people’s various and numerous beliefs towards the vaccines.

Scientific Beliefs

Some scientific beliefs associated with the Covid-19 vaccines include the fact that it was believed that the vaccines weaken one’s immune system once taken. It is scientifically believed that once someone gets vaccinated, they get sick with various ailments such as rash all over the body, flu, body pains, diarrhea, vomiting, fever, etc. It is also believed that if someone has pre-existing health conditions, they are worsened when they take the Covid-19 vaccines. Other scientific beliefs are that when one gets vaccinated, the body becomes susceptible to several other diseases. The vaccines are believed to have side effects that are assumed to bring future complications such as serious ailments and consequent death. Another scientific belief related to the Covid - 19 vaccines is that when one is vaccinated, their body becomes magnetic to metallic and electrical objects.

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According to the findings Figure 4.2.1 shows that about 10% the target population cited scientific beliefs for their hesitancy to get the Covid-19 vaccine. This implied that 1 in every 10 people was sceptical about the vaccine due to scientific reasons. Thus, to combat this impediment to getting vaccinated, the government through the Ministry of Health should devote a considerable amount of time in dispelling people's scientific beliefs about the Covid-19 vaccines. Furthermore, the study showed that social media, television and radio platforms would help spread the Covid-19 awareness more rapidly compared to other platforms. This is because most respondents (up to 92% of all respondents) indicated that they learnt about Covid-19 and its vaccines through the aforementioned platforms, averaging 9 in every 10 respondents.

Traditional Beliefs

According to traditional beliefs, people believe that the Covid-19 vaccines is a plan to clear or eliminate black people from the surface of the earth. Since the Covid-19 virus started in Asia and later spread to European countries first, respondents suggested that it should be Europeans and Asians who should get vaccinated first rather than experimenting it on Africans. The Covid-19 vaccines are believed to have been created with the motive of reducing the population of the world especially Africa. This is because many people did not know what was contained in the Covid-19 vaccines. It was also believed that the vaccines had a hidden agenda against Africans and that the Covid-19 vaccines contained the Covid-19 virus itself. Some respondents believed that the Covid-19 vaccines were not real but rather just projects and a scam on people, no wonder they did not trust the vaccines with some believing that even the virus itself did not exist.

It was also traditionally believed that once someone was vaccinated, they would die after 2 years' time while others viewed the Covid-19 vaccines as a die slow medication. Sequentially, others believed that those who get vaccinated with the Covid-19 vaccines die instantly and some of those vaccinated would be the first ones to die when the variant wave of Covid-19 came. The Covid-19 vaccines were also believed to be ineffective because some people believe that whether one was vaccinated or not, they were still prone to contract the virus. One of the fundamental traditional beliefs about the Covid-19 vaccines was that people believed that they could heal without the Covid - 19 vaccines using traditional medicines such as aloe-vera, munsoka-nsoka, ginger, garlic, lemon and steaming with eucalyptus and lemon leaves etc.

Moreover, some people believed that the Covid-19 vaccines caused infertility, complications during child birth and disability to perform sexually after a certain period of time. It was also believed that the Covid-19 vaccines caused malaria, chicken pox and also contained substances that could harm the human body. The study also showed that most clinical personnel who emphasized and encouraged the general public to get the Covid-19 vaccines were not vaccinated themselves and thus discouraged many people from getting vaccinated. Moreover, lack of sensitization left many people with inadequate information about the Covid -19 vaccines which then led to various misconceptions, beliefs and theories about the vaccines.

Religious Beliefs

The study further showed that the Covid-19 vaccines inflicted fear upon the people as they believed that getting vaccinated meant accepting the mark of the beast. It was also believed that only those who got vaccinated could have access to certain things such as food, trade, travelling, gathering and many others. Furthermore, this correlates with the view that some people believe that it is a sign of the end of time and also a devil’s trap for doom. It is also believed that people who get the vaccines will be initiated in spiritualism of which their blood will be taken from them and it will be used for rituals. Others consider the Covid-19 vaccines to be satanic and not biblical. The influence exerted by religious leaders and the bible on the people discourages them from getting vaccinated with the view that the Covid - 19 vaccines are Anti-religious because they believe God is their protector. The information above indicates that in as much as people were sceptical about the Covid-19 vaccines due to traditional and scientific beliefs, a good proportion of the population avoided getting vaccinated against Covid-19 based on their faith and biblical principles. Thus, to address the vaccine hesitancy problem among the vast population, the government through the Ministry of Health had to tackle the matter from all aspects (i.e. scientific, traditional and religious beliefs).

4.3.2 People’s Knowledge, attitudes and perceptions regarding Covid -19 and its vaccines

The people’s knowledge, attitudes and perceptions regarding Covid-19 and its vaccines were presented under different themes. Every data presentation theme was simplified in both tabular and graphical or figurative form. A narrative was then made based on the numerical statistics presented in the tables and figures.

Table 4.3.2: Are people scared of getting vaccinated?

Status	Number of Respondents	Percentage
YES	137	90%
NO	16	10%

Source: Field Work, 2023

From Table 4.3.2 above, it can be seen that most respondents believed that many people in the community are scared of getting the Covid-19 Vaccines. Statistically speaking, up to 90% of all the respondents to the questionnaire indicated that people did not get the vaccines because they were sceptical about it. Only 10% of the respondents indicated that there was no fear for Covid - 19 vaccines among the people in their communities. This information furthermore shows that there is a general incredulity among the people of various communities concerning the importance of taking the Covid - 19 vaccines.

4.4. 3 Roles of Civic Leaders

A Civic Leader is a responsible citizen who proactively seeks knowledge of community issues in order to contribute to their solutions. In market places, Civic Leaders play a vital role of maintaining order and stability so as to ensure safety of all marketeers and customers. In an event of any pandemic affecting the market places, they are expected to sensitize the markets about the best way to protect themselves and ensure safety for everyone trading. Since the outbreak of Covid-19 in December 2019, the Civic were expected to execute their responsibility of sensitizing markets about the disease and ensure that the trading places were safe. However, this was met with people’s hesitancy to get the Covid-19 vaccines based on their traditional, scientific and religious beliefs towards the vaccines.

Civic Leaders played a vital role in helping curb the Covid-19 vaccine hesitancy by sensitizing and encouraging marketeers and consumers to always wear face masks when trading. In this regard, Civic Leaders in conjunction with the Ministries of Health and Local Government ordered and distributed free face masks to marketeers while making more readily available for consumers to buy at affordable prices. Washing hands regularly and maintaining social distance were other important steps promoted throughout the trading places by installing and ensuring that there were enough hand-washing facilities and soap. Civic Leaders facilitated health workers by providing space for testing and vaccinating marketeers and consumers against the Covid-19 virus. They advised the government to educate the marketeers and consumers more by carrying out door-to-door sensitization. Civic Leaders also encouraged Health workers to pass through the markets in order to disseminate correct information to marketeers and customers about the Covid-19 vaccines by providing more information about the safety in getting vaccinated. Civic Leaders made sure that they advised marketeers and customers on the importance of getting the vaccines for them to trade freely.

Conclusion

From this study the vaccines hesitancy factors were guided to assess knowledge, attitudes and preconceptions regarding COVID-19 and its vaccines. The established discoveries were that it was mainly misguided information and beliefs towards the vaccines that led to the vaccine's hesitancy. These beliefs were put in three categories that were discussed in the study and these were scientific, religious and traditional beliefs. The findings of the study showed that most people in market areas of urban and peri-urban areas of Lusaka district lacked adequate information about what was contained in the COVID-19 vaccines which led to the various assumptions made by people, which consequently reduced the percentage of people who got vaccinated. Under Scientific beliefs, the findings showed that people associated the COVID-19 vaccines with the weakening of one's immune system once taken, thereby increasing the hesitancy towards the vaccines.

In addition, under traditional beliefs, people believed that the introduction of COVID-19 and its vaccines was a plan to clear or eliminate black people in order to reduce the world population. According to the study, people believed that if one got vaccinated, they would be initiated into spiritualism and their blood which was taken would be used for rituals. Furthermore, religious people considered COVID-19 vaccines satanic or demonic and also that it was the mark of the beast. Other religious people stated that they believed in God to protect them from the virus and so they were immune to COVID-19. The assessment done in chapters 4 and 5 illustrate figures that indicate the respondents' expressions in various ways according to their understanding regarding the COVID-19 vaccines. The findings indicated that majority of the people did not get vaccinated because they were sceptical about the vaccines for lack of knowledge and clarity about the vaccines and only a few people were optimistic about them. People ended up assuming all sorts of things about what the COVID-19 vaccines do, what the motive behind them were and most importantly what was the content of the vaccines. That equally was attributed to the fact that there had not been enough dispensation of correct information about the COVID-19 vaccines.

Recommendations

1. The health sectors should only consider administering the COVID-19 vaccines after a proper and thorough sensitization of the COVID-19 vaccines
2. Information about the COVID-19 vaccines should be easily accessible by everyone
3. Civic Leaders should be motivated to help educate the Zambian population because they are at grassroots level.
4. Government should empower more youths to enable them participate more in the campaign against Covid-19 hesitancy and any other pandemic.
5. Vaccinated citizens should be encouraged to spread awareness about advantages of being vaccinated against the pandemic.

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