### **BIBLIOGRAPHIC INFORMATION SYSTEM**

Journal Full Title: Journal of Biomedical Research &

**Environmental Sciences** 

Journal NLM Abbreviation: J Biomed Res Environ Sci

Journal Website Link: https://www.jelsciences.com

Journal ISSN: 2766-2276

Category: Multidisciplinary

Subject Areas: Medicine Group, Biology Group, General,

**Environmental Sciences** 

**Topics Summation: 128** 

**Issue Regularity: Monthly** 

Review Process type: Double Blind

Time to Publication: 7-14 Days

Indexing catalog: Visit here

Publication fee catalog: Visit here

**DOI:** 10.37871 (CrossRef)

Plagiarism detection software: iThenticate

Managing entity: USA

Language: English

Research work collecting capability: Worldwide

Organized by: SciRes Literature LLC

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Manuscript should be submitted in Word Document (.doc or

.docx) through **Online Submission** form or can be

mailed to support@jelsciences.com

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# Commentary on the Zimbabwean People's Response towards the Anticipated COVID-19 Vaccine

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#### Introduction

The Coronavirus disease which started in Wuhan, China in December 2019 has been and continues to claim lives worldwide. It created uncertainties and confusion even in the medical field with its mutations which created new variants which proved to be more dangerous than the original one in some parts of the world leading it to be more fatal in the second wave. Effects of the new variant termed South African COVID-19 variant claimed to have mutated in South Africa, seriously spiked COVID-19 cases in Zimbabwe in the beginning of 2021 claiming many lives. In trying to curb the spread of the disease, the medical fraternity in Europe, America, Asia and South Africa sped the development of the vaccines for the pandemic. Various vaccines were created which included Sinopharm, Pfizer-BioNtech COVID-19 vaccine, Moderna, Oxford-AstraZeneca, Jonhsons and Jonhson, Gamaleya and others. The Zimbabwean government received a donation of 200, 000 doses of the vaccine Sinopharm from China with the promise of another 200,000 donation [1]. The country also ordered 600,000 more doses [2] from China. The inoculation of the vaccine was received with mixed feelings especially from the Zimbabwean general population. Hence the objective of this commentary is to make an analysis of this response with the guide of the Health Belief Model [HBM].

# Analysis of the Zimbabwean People's Response to COVID-19 Vaccine using the HBM

The Health Belief model was developed to explain and to predict health-related behaviours [3]. The model focuses on individual beliefs and attitudes towards prevention of a medical problem for example COVID-19. Usually people do not change their health behaviours if they do not consider themselves at risk of contracting a disease. According to the Health Belief Model, health related behaviour depends on six elements which include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy.

The model attempts to restore good health by preventing further progression or spread of a disease. It also suggest that the individual perception will predict their adaptation of behaviour [4], meaning that perception determines success in behaviour change. In other ways, it gives the individuals power to control their health through behaviour change. Although it centres on the individual beliefs and attitude, the model also recognises and addresses the social context in which health behaviours take place [5]. Green further explains that the HBM forms the foundation to enhance perceptions of personal risk, thereby encouraging actions

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E-mail: rosychev@gmail.com DOI: 10.37871/jbres1206

Submitted: 08 March 2021 Accepted: 16 March 2021 Published: 17 March 2021

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#### **OPEN ACCESS**

Subject: Medicine Group

Topic & Subtopic(s): Public Health; Internal

Medicine

VOLUME: 2 ISSUE: 3





to mitigate or reduce the risk while building a sense of self efficacy to undertake the needed changes. This notion relates well to what was expounded by the World Health Organisation during the start of the pandemic. The World Health Organization emphasized the importance of behaviour change to mitigate transmission of the virus. This was done to ensure that every individual becomes proactive in protecting themselves and others and that no one should feel that they are helpless or incapacitated to control the spread of coronavirus. The World Health organisation expressed that every individual has the autonomy to fight the pandemic, maintaining that everyone has a right to health. This meant that people should not leave it up to governments or organisations to control the pandemic but to be vigilant and hands-on. In promoting prevention of the pandemic WHO endorsed guidelines which put emphasis on maintaining physical distancing, hand hygiene, covering coughs, staying home if one feels sick, wearing masks when appropriate, and only sharing information from reliable sources [6]. Guided by the HBM concepts, this was done to ensure that people can realise the severity of the virus once governments implement the [WHO] measures.

#### Perceived susceptibility

This denotes individual assessment of risk of developing a health problem. People who regard themselves as predisposed/susceptible to a specific health problem often engage in healthy behaviours to lessen their risk of developing the health problem. During the pandemic every individual was pondering their chances of getting the virus. With regard to this, this has seen many Zimbabwean health practitioners quickly accepting the vaccination as they are frontline workers hence more susceptible of contracting the disease. This has been supported in Zimbabwean local newspaper, the Herald of 3 March [2021] which states that during the Government's phase one nationwide vaccination programme which targeted frontline workers, the security sector and members of the media, many people from the mentioned sectors were volunteering to receive the antigen free of charge. On the other hand, among the general population, some especially in the rural areas regarded themselves to be at less risk hence were not willing to be vaccinated. In the urban areas, people had mixed attitudes towards the vaccines, the majority view themselves as less at risk while others thought that though they might be at risk but their traditional ways of prevention like steaming using natural herbs were far much better than the vaccine.

#### Perceived severity

It's refers to the individual's evaluation of the seriousness or consequences associated with the condition; for example Zimbabweans evaluated the danger of Coronavirus and in some cases tried to compare it to other diseases or epidemics. Thus people compared COVID-19 to diseases like cholera, Ebola, HIV & AIDS cancer and other serious diseases

and in most cases it was regarded as more dangerous as it was highly infectious without cure. The severity of the Coronavirus disease was worsened by emergence of its variants which proved to be more dangerous than the original virus. Taking the HBM into consideration, individuals who perceive Coronavirus as serious are more likely to take the vaccines and adopt preventive measures to reduce its severity. This could be seen in Zimbabwean frontline workers who quickly accepted inoculation. Amongst the general population, those who had lost their loved ones to the pandemic or had significant others suffering from the disease or who had suffered and recovered from the diseases themselves, regarded the disease as severe hence showed great willingness to get the vaccine. On the other hand, most of those who did not have a direct link to the effects of the disease were adamant that they were not going to be vaccinated. Urich [7] emphasised that the combination of perceived severity and perceived susceptibility is referred to as perceived threat and the health belief model predicts that higher perceived threat leads to higher likelihood of engagement in health-promoting behaviours.

#### Perceived benefits

It's refers to the basic understanding of positive benefits of taking a health action to counterbalance a perceived threat for example the belief that being vaccinated will help in preventing the disease as well as reduce its spread. Zimbabweans weighed the risk that could be poised by being inoculated against the suspected side effects. According to Everrington [8], Sinopharm vaccine is the 'most unsafe vaccine' in the world with 73 local and systemic adverse reactions. This has caused some Zimbabwean to become sceptical and show reservations towards vaccination. Mavhunga [9], noted that some health experts questioned the efficacy of the Sinopharm product and its effectiveness against the South-African-originating variant. Such experts highlighted that they expect the country to benefit from COVAX facility and African Union facility so as to receive known vaccines with clear data. Some Zimbabweans as quoted by the same source reflected doubt and indicated that they would rather live the way they had been living as they doubted that the vaccines would reduce the disease's spread or mortality rate. Mavhunga [9], also quoted another citizen who showed scepticism towards the vaccine by noting that there were rumours of some people who received the same vaccine and had fatal side effects hence the respondent feared for his safety after being inoculated. However the same source quoted another respondent who showed willingness towards taking the vaccine by highlighting that he was more than ready to take the vaccine as he thought that since it was developed in China where the virus first emerged and where it has been used and proved to work so he was sure it would work for him too. In this regard a costbenefit-analysis would determine whether someone takes the vaccine or not.

#### Perceived barriers

It's refer to the obstacles to health behaviour change. These barriers may prevent involvement in healthpromoting behaviours. This means that the perceived benefits must outweigh the perceived barriers in order for behaviour change to occur. Perceived barriers can be anything ranging from perceived expense, danger, fear or emotional upset. In relation to Sinopharm vaccine, some unconfirmed negative effects associated with the vaccine which were circulating on internet especially social media as well as the inadequacy of the vaccine became the perceived barriers. According to Mazingaizo [1], the Zimbabwean President indirectly alluded to a mandatory COVID-19 vaccination when he was quoted saying that time shall come when those who resisted vaccination would not be able to get employment or have access to public transport. This can be become a barrier to vaccination as Mazingaizo quoted a medical doctor from the Zimbabwe association of Doctors for Human Rights who stressed that mandatory vaccination would not automatically increase vaccine uptake but it might reduce the uptake as people may end up losing confidence in the vaccine if its forced. The doctor went on to say that mandatory vaccinations coupled with myths and misconceptions around COVID-19 vaccination in the country can dissuade citizen from accepting vaccination. Hence mandatory vaccination became a barrier to vaccine uptake.

#### Cues to action

It's point to stimuli that trigger the decision-making in individual process to accept a recommended health action. These cues can be internal or external. In this regard, these cues could be information about the vaccine from different sources, one's proneness or level of risk to the disease and also actions taken by prominent figures in the community or the government. In the case of Sinopharm vaccine, the myths and misconceptions circulating on social media may trigger some Zimbabweans to resist being vaccinated. According to Mutsaka [2], the Vice President of Zimbabwe was the first to volunteer to receive the vaccine jab in Harare an in relation to the HBM this can act as a cue to action for other Zimbabwean who may feel obliged to be vaccinate as well if prominent figures have also been vaccinated.

#### **Self-efficacy**

A concept that was developed by Bandura in 1977 is another element of HBM. This concept refers to an individual's conviction in his or her capacity to execute behaviours vital to execute behaviours necessary to produce specific performance attainments. With regard to Sinopharm vaccine, Zimbabweans who believe that they are able to access the vaccine and will be able to stand whatever outcome the vaccine will bring, will not hesitate to take up the vaccine.

## Summary of the Six Dimensions of the HBM in Relation to Zimbabweans' Responses to Sinopharm Vaccine

#### PERCEIVED SUSCEPTILITY

Zimbabweans from all walks of life evaluated their levels of risk towards COVID-19. This resulted in different responses depending with one's beliefs, occupation and social network.

#### PERCEIVED SEVERITY

Zimbabweans had individual opinions of how serious the condition would be if infected.

#### PERCEIVED BENEFITS

Most people weighed the benefits of being vaccinated against not being vaccinated. In other words mostly people focused on the possible side-effects of the vaccine against prevention of contracting the disease.

#### PERCEIVED BARRIERS

**HEALTH BELIEF MODEL** 

Negative information about the vaccine which circulated on internet and social media, devastating side effects of some vaccines which were inoculated some people in the past in a bid to prevent some diseases and negative influence from significant others.

#### **CUE TO ACTION**

Global updates of Coronavirus vaccination elsewhere and government's encouragement towards vaccination.

#### SELF EFFICACY

Belief and confidence that one that will remain health after taking the vaccine.

# **Concluding Remarks**

The HBM has helped to expound on some of the responses that the Zimbabweans people are showing towards the Sinopharm vaccine. It is clear that when people are expected to take some action in health promotion they must be well informed to clear doubts and misconceptions. Therefore, it is the mandate of the Zimbabwean government to make sure that it empowers its citizens with appropriate information about COVID-19 vaccines before they are being administered so that people will make informed decisions without doubting the intentions of the government.

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How to cite this article: Chigevenga R. Commentary on the Zimbabwean People's Response towards the Anticipated COVID-19 Vaccine. J Biomed Res Environ Sci. 2021 Mar 17; 2(3): 173-177. doi: 10.37871/jbres1206, Article ID: JBRES1206