Letter to the editors

Increased number of brought-in-dead cases with COVID-19: is it due to poor health-seeking behaviour among the Zambian population?

Misheck Chileshe, David Mulenga, Ruth Lindizyani Mfune, Tato Herbert Nyirenda, James Mwanza, Bright Mukanga, Steward Mudenda, Victor Daka

Corresponding author: Misheck Chileshe, Mary Begg Health Services, 56 Chintu Avenue, Northrise, P.O Box 72221, Ndola, Zambia. misheckchileshe01@gmail.com

Received: 07 Sep 2020 - Accepted: 12 Sep 2020 - Published: 08 Oct 2020

Keywords: Coronavirus disease 2019, brought-in-dead, Zambia
Since the first reported case on the 31st December 2019 in Wuhan city, China, the current pandemic of the novel Coronavirus disease-2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus - 2 (SARS-CoV-2), has resulted in over 889,256 deaths and over 27 million infections globally as of 23rd August, 2020 [1,2]. Due to its rapid spread from China to many countries worldwide, COVID-19 was declared a global pandemic by the World Health Organization on 12th March 2020 [1]. The spread of COVID-19 has been facilitated by increased human-to-human transmission and ignorance to observe the preventive measures [3]. Zambia recorded its first two cases of COVID-19 on 18th March 2020. The first 28 cases in Zambia all had a history of travel to Europe or Asia. Three weeks into the outbreak, cases were noted among people without history of travel to COVID-19 endemic countries but were in contact with confirmed cases. There has since been an increase in local person-to-person transmission with increasing geographic spread. Cases have been reported in all ten provinces, with Western province being the last to record cases of COVID-19 [4]. We collected data for the period of five months, from April to August, 2020 from the official Zambia Ministry of Health website [5] and conducted a trend analysis to understand the frequency distribution of COVID-19 cases and associated deaths. Recently, Zambia has seen an increase in the number of COVID-19 cases and associated deaths. As of September 7, 2020, there were 12,836 confirmed cases of COVID-19 and a total of 295 deaths [5]. Of concern is that there has also been an increase in the number of COVID-19 brought-in-dead (BID) in the recent weeks with peak number being 28 BIDs on 9th August, 2020 within 24-hours (Figure 1) [5]. Of the total 295 deaths, 214 were BIDs, indicating that 72.5% of the COVID-19 deaths are occurring in the community [5]. Here we raised pertinent questions regarding the health-seeking behaviour among the Zambian population amidst the COVID-19 pandemic.

Healthcare seeking behaviour (HSB) is defined as, “any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy” [6]. Inappropriate HSB has been linked to worse health outcomes, increased morbidity and mortality, and poorer health statistics while early healthcare seeking has been reported to result in more favourable health outcomes [6]. Factors that define the healthcare seeking behaviour may be geographical, social, cultural and demographical. The use of healthcare services during COVID-19 pandemic may be determined by knowledge and information about the disease, perception of the illness, financial ability and social norms [6]. Stigma towards people infected with COVID-19 has also been reported as another contributing factor to poor HSB among people exhibiting suspected COVID-19 symptoms in Zambia [7]. Additionally, there has been a perception among the public that COVID-19 is not real and is fabricated leading to shunning of medical facilities despite having symptoms consistent with COVID-19 [7]. In Zambia, a number of studies have demonstrated poor health-seeking behaviour among the population. This has been reported among patients with tuberculosis, HIV, malaria, and even caregivers to under-five children. This has led to delayed hospital visitation because they perceived their illnesses to be common colds or malaria thereby opting to take home remedies or self-medication [8,9]. We believe this could be also the case of COVID-19 in which the symptoms mimic those of common colds and malaria, thereby making people to shun visiting healthcare facilities and practice self-medication. Furthermore, the prevalence of non-communicable diseases (underlying conditions) such as diabetes and hypertension among Zambian population may be higher than estimated and mainly undiagnosed. These conditions have been shown to worsen the course and prognosis of COVID-19 infection leading to increased mortality [10].
Current evidence indicates an increase in COVID-19 related brought-in-dead bodies in Zambia. With the increase in the number of cases making contact tracing more difficult, we hypothesize that this increase could be attributed to a poor healthcare-seeking behaviour among the Zambian population which may be due to a lack of knowledge about the disease, perception of the illness, stigma associated with the disease, readily available drug stores aiding self-medication as well as misconceptions about the severity of the disease due to the relative high proportion of recoveries with respect to cases. We recommend that studies on the perceptions of the Zambian population regarding COVID-19 be carried out to determine the drivers of the observed poor health seeking behaviour. We also recommend that there must be continuous and effective community sensitization and engagement programmes with regards to COVID-19 prevention and management. This information could be key in strengthening existing mitigation strategies against COVID-19 in Zambia.

Conclusion

Current evidence indicates an increase in COVID-19 related brought-in-dead bodies in Zambia. This increase might be attributed to poor health-seeking behaviour among the Zambian population with COVID-19. We therefore recommend that studies on the perceptions of the Zambian population regarding COVID-19 be carried out to determine the drivers of the observed poor health seeking behaviour.

Competing interests

The authors declare no competing interests.

Authors’ contributions

Concept and design of the study was done by VD, MC and RLN. Data collection, analysis and interpretation was conducted by VD, MC, JM, RLM and SM. The initial draft of the manuscript was done by MC and VD. Critical review for important intellectual contribution was done by THN, BM, DM and SM. All authors read and approved the final version of the manuscript.

Figure

Figure 1: trends in the number of COVID-19 associated BIDs and facility deaths in Zambia

References

1. World Health Organization. Coronavirus disease (COVID-19) Weekly Epidemiological Update and Weekly Operational Update. 2020. Accessed 7th September 2020.
2. Sichone J, Sinkala M, Kikonko M, Munsaka S, Simuunza M. Assessing required SARS-CoV-2 blanket testing rates for possible control of the outbreak in the epicentre Lusaka province of Zambia with consideration for asymptomatic individuals: a simple mathematical modelling study. medRxiv. 2020. Google Scholar
3. MacIntyre CR. Global spread of COVID-19 and pandemic potential. Global Biosecurity. 2020;1(3). Google Scholar
4. Zambia National Public Health Institute and World Health Organization. Zambia Situation Report No. 75. 2020. Accessed 7th September 2020.
5. Ministry of Health. MOH COVID-19 Daily Update. 2020. Accessed 7th September 2020.
6. Latunji O and Akinyemi O. Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. Ann Ib Postgrad Med. 2018;16(1): 52-60. PubMed| Google Scholar
7. Mwale Z. Stigma, fear linked to COVID-19 spike. August 6, 2020. Accessed 25th August 2020.
8. Cremers AL, Gerrets R, Kapata N, Kabika A, Birnie E, Klipstein-Grobusch K et al. Tuberculosis patients’ pre-hospital delay and non-compliance with a longstanding DOT programme: a mixed methods study in urban Zambia. BMC Public Health. 2016;16(1): 1130. PubMed| Google Scholar
9. Hamooya BM, Chongwe G, Dambe R, Halwiindi H. Treatment-seeking behaviour for childhood fever among caretakers of Chivuna and Magoye rural communities of Mazabuka District, Zambia: a longitudinal study. BMC public health. 2016;16(1): 762. PubMed | Google Scholar

10. Ruan Q, Yang K, Wang W, Jiang L, Song J. Clinical predictors of mortality due to COVID-19 based on an analysis of data of 150 patients from Wuhan, China. Intensive Care Med. 2020 May;46(5): 846-848. PubMed | Google Scholar

Figure 1: trends in the number of COVID-19 associated BIDs and facility deaths in Zambia