In Search of the True Prevalence of COVID-19 in Africa: Time to Involve More Stakeholders

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Dear editor,

The dynamics of the overlap of the symptoms of the novel Coronavirus-2019 (COVID-19) with other illnesses has raised uncertainty in the identification, reporting and uptake of COVID-19 testing among individuals (1). A few of the individuals with mild symptoms go uncaptured in the COVID-19 testing activity if they recovered without progression to severe symptoms (2). The number of people who are being missed out in the COVID-19 testing activity cannot easily be ascertained. We aim to shed more lights into how the true prevalence of COVID-19 could be determined in Africa by the involvement of appropriate stakeholders.

During the pre-COVID-19 era, symptoms such as cough, fever, headache, and poor taste were linked to malaria, common cold, and other related illnesses, but presently, these symptoms are highly suggestive of COVID-19 (3). The development of such symptoms and its persistence after the completion of prescribed medication initiates the classification of such an individual as a possible COVID-19 case (3). Severity in the presentation of symptoms is a pointer that COVID-19 test should be requested (4). However, a nuance approach since few months into the pandemic among many is the avoidance and reluctance for the uptake of COVID-19 tests (5).

Reports from an online surveillance system highlight that only 46% of people with symptoms of fever and cough had gone for COVID-19 testing (6). This signifies that a below-average proportion of tests have been conducted. Reasons for the low testing rates and declination have been reported to range from the stigma associated with a COVID-19 confirmed diagnosis avoidance of the perceived burden of the testing procedure, unwillingness to lose productive hours, and fear of living with the trauma of COVID-19 (6). Hence, preference to live in oblivion regarding COVID-19 status exists among many individuals, thus these persons evade COVID-19 testing, and could contribute to a spike in the prevalence of the infection.

As with other health-related decisions, an evaluation of the perceived harms and benefits of COVID-19 is considered by individuals (7). Such evaluation exercise informs the decision on whether to accept testing. In the face of door-knocking testing campaigns, mildly symptomatic individuals shied away from testing due to likely stigmatization and ostracism. They are thus likely to be missed in the COVID-19 testing either due to their reluctance or unavailability (8). A recent evaluation of the turnaround time has reported an increase in the COVID-19 tests results from a few days to a minimum of 8 days (9). Such increased waiting time similarly implies longer time spent idly while on self-isolation. This translates to unproductive hours. Thus, persons with contact history with COVID-19 cases with mild symptoms could be missed from being tested. As a result, untested persons with mild symptoms could go on spreading the virus.

Deliberate evasion of COVID-19 tests accompanied by using antimalarial prescription for a few days would not result to a resolution of the symptoms. Rather, progression of the infection from a mild to severe stage would result (10). The employment of the services of community-based health care workers in the effective mitigation of the infection is highly required, and their roles in this regard cannot be overemphasized. The involvement of competent hands resident in the community will serve to bridge the gap between missed persons in COVID-19 test. Community pharmacists and patent medicine store owners could serve to link persons, especially asymptomatic or mildly symptomatic, to COVID-19 testing and care. Due to their extensive knowledge base in the field, community pharmacists...
could provide information on appropriate quality COVID-19 care (11).

Aside community pharmacists and patent medicine store owners, active case search in hospitals, clinics and other health care facilities could help identify the true rates of COVID-19 among patients and health workers alike. Evidence from Taiwan reports the identification of inpatients with pneumonia following the admission of a Taiwanese who was confirmed positive for COVID-19 after three weeks of admission (2). A prospective surveillance system was then integrated into the Information Technology Services (ITSs) to provide up-to-date information on persons whose pneumonia showed no improvement following antibiotic treatment (2). The adoption of ITSs that are adapted to the system of each health facility will keep authorities up to date with information on the infection rates in such facilities. Increased index of suspicion in healthcare settings coupled with the collection of nasopharyngeal swabs for immediate confirmation among suspected COVID-19 cases could significantly capture persons on hospital visits.

Similarly, the relevance of community mobilization teams (CMTs) cannot be overlooked in the context of the improvement of COVID-19 testing at grassroot level (12). The role of CMTs has been described as crucial in responding to epidemics (13). Prior to COVID-19 outbreak, extensive interactions exist between CMTs and health professionals on community-focused health interventions in Hong Kong (12). The existing relationship can be harnessed in the context of COVID-19 to scale up testing and identify the true vulnerability of communities to COVID-19. This can be done through the establishment of sound notification systems for the reporting of mildly symptomatic persons who are suspected COVID-19 cases. In the fight against COVID-19, the success story of Hong Kong could be traced to social mobilization and engagement of civic groups in the society (12).

Decentralization of COVID-19 sample collection centers to districts/ counties/ local government areas (LGAs) and other places in the community is a promising approach to the increased uptake of COVID-19 testing (14). Due to its proximity to residential areas, this strategy overcomes the challenge of accessing distant testing centers among persons who are willing to undergo COVID-19 testing. Also, decentralization helps to identify high-burden areas (14). Integrating COVID-19 into the health system is required (15). Integration will help to ascertain the reality of infection rates at all levels.

In a bid to improving the uptake of COVID-19 testing, there exists the need for improved awareness regarding the testing activity. Stigmatization and discrimination have previously been associated with pandemic emergen-

References

1. Kakodkar P, Kaka N, Baig MN. A Comprehensive Literature Review on the Clinical Presentation, and Management of the Pandemic Coronavirus Disease 2019 (COVID-19). Cureus. 2020;12(4). e7560. doi: 10.7759/cureus.7560. [PubMed: 32269893]. [PubMed Central: PMC7063423].
2. Lin CY, Cheng CH, Lu PL, Shih DC, Hung CT, Lo HH, et al. Active surveillance for suspected COVID-19 cases in inpatients with information technology. J Hosp Infect. 2020;105(2):197–9. doi: 10.1016/j.jhin.2020.03.027. [PubMed: 32243950]. [PubMed Central: PMC727150].
3. European Centre for Disease Control. Case definition for coronavirus disease 2019 (COVID-19). 2020, [cited July 17, 2020]. Available from: https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition.
4. Montgomery DH. COVID-19: How it compares with other diseases in 5 charts. 2020, [cited July 17, 2020]. Available from: https://www.mprnews.org/story/2020/03/11/covid-19-compares-with-other-diseases-in-5-charts.
5. Archer SL. Archer's update on COVID-19 response from the DOM and Medicine Program. 2020, [cited June 8, 2020]. Available from: https://deptmed.queensu.ca/news/june-8-2020-dr-archers-update-covid-19-response-domand-medicine-program.
6. Williams J. Why some people don’t want to take a COVID-19 test. 2020, [cited July 17, 2020]. Available from: https://theconversation.com/why-some-people-dont-want-to-take-a-covid-19-test-141794.
7. Carico RR, Sheppard J, Thomas CB. Community pharmacists and communication in the time of COVID-19: Applying the health belief model. Res Social Adm Pharm. 2020. doi: 10.1016/j.sapharm.2020.03.007. [PubMed: 32247880]. [PubMed Central: PMC711622].

8. Mendelson M, Madhi S, Nel J, Venter F. Stop random COVID-19 testing and sort the backlog. 2020, [cited July 17, 2020]. Available from: https://www.dailymaverick.co.za/article/2020-06-01-urgent-stop-random-covid-19-testing-and-sort-out-the-backlog/#gsc.tab=0.

9. Stone J. Turnaround time longer for COVID-19 test results. 2020, [cited July 17, 2020]. Available from: https://www.smokymountainnews.com/news/item/29456-turnaround-time-longer-for-covid-19-test-results.

10. Md Insiat Islam R. Current Drugs with Potential for Treatment of COVID-19: A Literature Review: Drugs for the Treatment Process of COVID-19. J Pharm Pharm Sci. 2020;23(1):58–64. doi: 10.18433/jpps31002. [PubMed: 32251618].

11. Yao H, Chen J, Xu Y. Patients with mental health disorders in the COVID-19 epidemic. The Lancet Psychiatry. 2020;7(4). doi: 10.1016/s2215-0366(20)30090-0.

12. Wan K, Kaki Ho L, Wong NWM, Chiu A. Fighting COVID-19 in Hong Kong: The effects of community and social mobilization. World Development. 2020;134. doi: 10.1016/j.worlddev.2020.105055.

13. Blair RA, Morse BS, Tsai LL. Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia. Soc Sci Med. 2017;172:89–97. doi: 10.1016/j.socscimed.2016.11.016. [PubMed: 27914936].

14. Onyedika-Ugoeze N. PTF calls for decentralization of COVID-19 response to LGA level, identifying high burden LGAs, 2020, [cited June 18, 2020]. Available from: https://guardian.ng/news/ptf-calls-for-decentralization-of-covid-19-response-to-lga-level-identifying-high-burden-lgas/.

15. Ilesanmi O, Afolabi A. Time to Move from Vertical to Horizontal Approach in our COVID-19 Response in Nigeria. ScMedicine Journal. 2020;2:28–9. doi: 10.28999/SciMed-2020-02-S1-3.

16. Barrett R, Brown PJ. Stigma in the time of influenza: social and institutional responses to pandemic emergencies. J Infect Dis. 2008;197 Suppl 1:S34–S7. doi: 10.1086/524986. [PubMed: 18269226].

17. Centers for Disease Control and Prevention. Coronavirus Disease 2019: Reducing Stigma. 2020, [cited July 18, 2020]. Available from: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/reducing-stigma.html.

18. Ilesanmi OS, Akande A, Afolabi AA. Overcoming COVID-19 in West African countries: is herd immunity an option? The Pan African Medical Journal. 2020;33(103).

Int J Health Life Sci. 2021; 7(4):e108105.