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African Leaders of Tomorrow (ALT)

ADDRESSING HEALTH DISARITIES IN ZAMBIA

By Nicholas Zulu

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Research Topic Summary: Rural retention in Zambia

Before applying for the African Leaders of Tomorrow (ALT) Scholarship, I worked as Human Resources Management Officer in the Health Sector for at least four (4) years. In this role, I worked with various District Health Management Teams to administer health services and address several health-related issues. One of the biggest challenges in Zambia is the disparity in access to healthcare between urban and rural communities.

The purpose of my case study was to conduct a cross-national comparison of health policies and strategies of Zambia and Canada to learn best practices. Canada is a country that has made a tremendous effort in trying to address health disparities that exist across the population of indigenous people. Therefore, it served as a good basis for cross-national comparison.

60% of the population of Zambia lives in rural communities and is the population group that faces health and healthcare disparities. Some of the possible causes include geographic isolation, socioeconomic factors, and limited health workforce. Of these, there is an interrelation between the limited health workforce and the geographic isolation of remote communities, and combined, it is these that contribute substantially to the health disparities.

To address the challenge, healthcare workers in rural health facilities are eligible for rural and remote retention allowances. These allowances are meant to attract and retain Human Resource for Health (HRH) in geographically isolated communities that are far removed from the major cities.

A rural retention scheme was also introduced by the Ministry of Health to increase health workers in rural communities in 2003 called the Zambia Health Workers Retention Scheme (HRH Policy Dialogue Report & PB, 2019). Nonetheless, ZHWRS was discontinued due to insufficient funds.

ZHWRS was made possible by the Government of the Netherland that initially sent doctors to Zambia but later paid the retention allowance to Zambian Doctors as this was a cheaper alternative than paying physicians from the Netherlands (World Bank, 2011). The scheme was later extended to other health workers including nurses. When the sponsorship by the Netherlands came to an end, ZHWRS was eventually discontinued as the Ministry of Health could not sustain the scheme.

To date, the only incentives in place are the rural and remote hardship allowances which are 20% and 25% of the basic salaries, respectively. These, however, have only managed to improve the staffing levels in rural communities only minimally. In a report by Prust et al (2019), about 45% of all the healthcare workers in Zambia work in rural communities. It is also worth noting that people living in rural communities are high users of health services which makes the shortage of skilled workers in rural communities dire.

All these issues have resulted in poor health outcomes for rural communities. Overall this is likely to affect the country's ability to attain Sustainable Development Goal Target No. 3 of "Good Health and Wellbeing".

Description of the Canadian case

The cross-national comparison of Zambia and Canada would, in addition to drawing lessons on best practices to improve retention of healthcare workers in rural communities, use theoretical and applied knowledge to also learn alternatives strategies to addressing healthcare challenges to improve health outcomes. In Canada, the disparities in healthcare services are more significant amongst the aboriginal people, therefore, the focus of the comparative case study was on public health services for the aboriginal people (Pong, DesMeules, & Lag, 2009).

Canada is a country that is faced with health inequalities mostly with aboriginal people and hence the country is making tremendous effort to address the issue. Similarities in the epidemiological

profile of aboriginal people of Canada with that of Africa also made it possible to draw comparisons. The Comparative case analysis was made possible through coursework at the JSGS and practical experience through the internship at the Saskatchewan Health Quality Council (HQC).

A brief analysis of the policy dimension of the Canadian case

The health of aboriginal people of Canada is a product of historical and contemporary determinants. The political, cultural, and economic factors that shape health outcomes often referred to as social determinants of health have created a disproportionate burden of disease between indigenous and non-indigenous people (Pong, DesMeules, & Lag, 2009).

Historically, indigenous people have lived on reserves but have been a rapidly urbanizing population, in fact almost 60% of indigenous people are off reserves[1]. These reserves for many communities in the Province of Saskatchewan are often isolated and sparsely populated, proving very challenging to provide services. Substantial effort is being made to improve the health and wellbeing of indigenous people. For example, there are MOUs that recognize the unique status of indigenous people such as the Tripartite agreement involving First Nations, the Federal Government and the Provincial Government[2]. There is also an MOU between the Métis Nation and the Saskatchewan Health Authority[3].

To encourage other healthcare workers to serve in rural communities, incentives have been put in place such as free housing, retention bonuses, and other financial incentives. Also, there are often systems of rotation that allow healthcare workers to only serve full-time partially for a specified period and then they are given a short break.

Similar to the case of Zambia, additional incentives have only improved access to health services in rural communities of the Province of Saskatchewan marginally. Till today, some parts of

[1] (Government of Canada, 2019): Chapter 3 - Advancing Reconciliation

[2] (Government of Canada, 2008): Mémorandum of Understanding on First Nations Health and Well-being in Saskatchewan

[3] (Memorandum of Understanding, 2019)

Northern Saskatchewan have an occasional shortage of skilled health workers despite having the vacancies as well as funding to hire them.

As a result, the Province is turning to other initiatives such as Remote Robotics Presence Technology (RRPT) in the short-term and emphasis on social determinants of health for the long-term to address health inequities.

a) Remote Robotics Presence Technology

Saskatchewan and a few other provinces are RRPT which uses electronic mobile devices to provide real-time access to specialist care. RRPT "performs ultrasound, check vital signs, heart and lungs, review X-rays and laboratory tests" remotely[4].

These devices are user-friendly and do not need any specialized skills to be operated. They can even be operated by the patients themselves. RRPT also provides a link between specialist physicians and other skilled personnel.

Regulations and Setbacks

RRPT is a costly initiative but provides good health outcomes. The major challenge is that often subsequent funding for such ventures is determined by previous performance. For initiatives such as RRPT, it can be challenging linking funding to performance because some outcomes are not easily visible.

For example, in a study of an isolated Northern community, early interventions using RRPT resulted in reduced demand for specialized pediatric transport services (Holt, et al., 2017). As can be seen, its success is reflected was in other areas which can make it difficult to justify the need for more resources to scaleup the program.

[4] (Vuchnich, 2018)

b) Social Determinants of Health

Finally, there is an emphasis on social determinants of health in the Province of Saskatchewan. Health is an outcome, hence the goal of the province of Saskatchewan is to see the patients' experience as a product of each of the government department's goals, understanding the patient experience before all events leading up to healthcare and how best these can be improved. This requires a collaborative approach by government departments to draw upon a range of expertise, including scale from the entire Province thereby widening opportunities to improve the quality of healthcare for indigenous people.

The benefit of the framework is that approaching public health through the complex interplay of social structures and economic systems reduces health inequities whilst improving public health. This is not only efficient but also cost-effective in the long run. The silo approach by government departments has not been successful especially for aboriginal people who have historically been collectivists in their institutions and processes.

Regulation

The challenge with this approach is that it calls for more collaboration in a government system that inherently works in silos. In the silo approach, each government department has its specific mandate and is headed by a Minister who in turn reports to the Premier. In addition to the goals, each department also has its targets in line with its goals. This is a significant setback to having an overarching framework for achieving improved health outcomes for indigenous people.

Lessons Learned:

Multi-prong approach to addressing health inequities:

i. Rural retention allowances to be complemented with RRPT: When implemented in isolation, rural retention allowances cannot completely improve access to health service by rural communities. Rural retention allowances need to be implemented with other initiatives such as RRPT.
ii. Social Determinants of Health: In the long run, and for more sustainable health outcomes, Zambia should focus on social determinants of health.

Adapting the Canadian Experience to Zambia

Complementing rural retention allowances with Remote Robotics Presence Technology

In Zambia for a long time, services in rural and remote communities have been provided by doctors from urban areas. To travel to these communities, these physicians are paid allowances for each trip in the form of daily subsistence allowances. Implementing remote robotics presence technology in remote facilities entails an end to these allowances and there is the likelihood of resistance from the beneficiaries.

Another potential setback is that for the northern part of the country, access to higher broadband speeds is very limited. RRPT requires higher internet speeds to be used effectively. The low bandwidth in the Northern part of Zambia entails delaying implementing this technology in some parts of northern Zambia.

Despite the drawbacks, there are potential benefits if RRPT is implemented in Zambia. About 60% of the people of Zambia live in rural areas and receive healthcare services from only about 45% of the government's healthcare workers. Therefore, RRPT can mitigate the shortage of healthcare workers especially specialists.

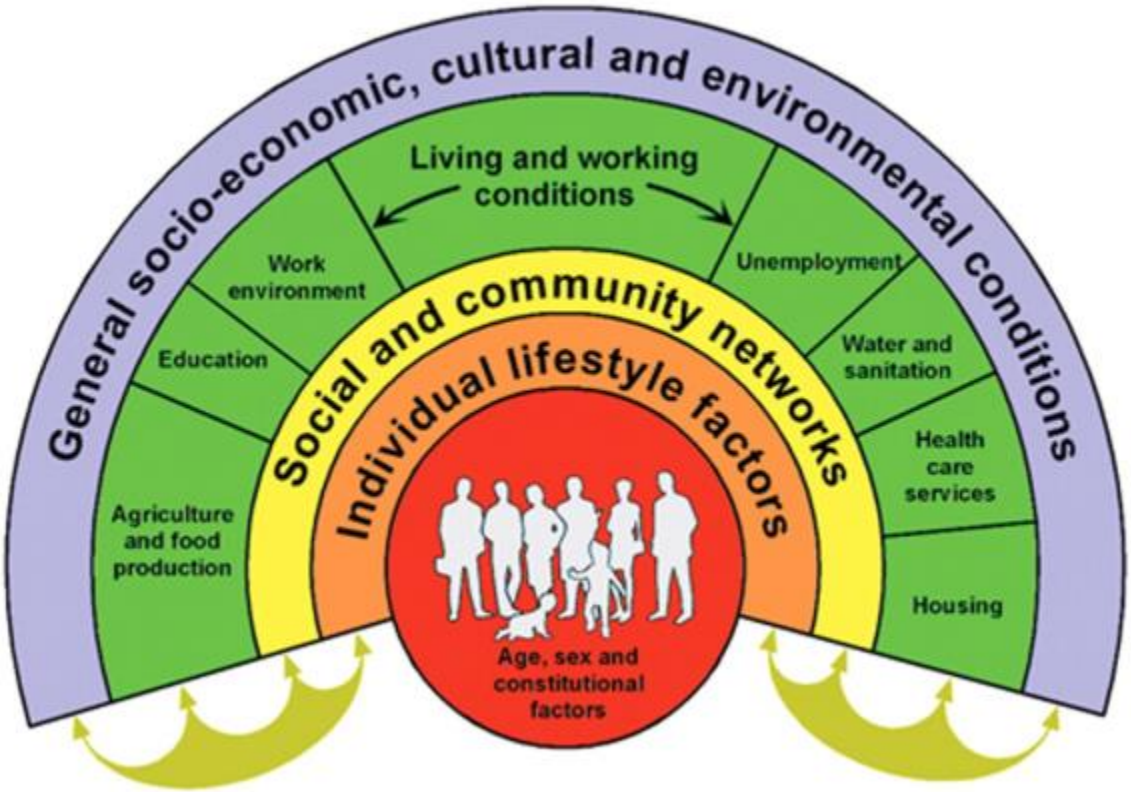
A good approach is to have electronic devices at District Hospitals (First Level Hospitals), which are the first point of contact for cases referred from the community clinics. Usually, District Hospitals are designed to serve community health needs and do not have any specialized physicians except the resident medical officers.

Zambia has a three-tier system of hospitals: First Level, Second Level, and Third Level. Most specialists are located at Third level Hospitals and a few others at Second level Hospitals. Generally, the specialist to population ratio is very low and so RRPT can provide an easier link for specialist care at First Level Hospitals whilst decongesting the few Third Level Hospitals in Zambia.

For those living in frontier communities, electronic devices can offer an affordable and convenient method of specialist care. Many people living in remote areas must first travel to the District Hospitals and then after being referred to specialists, must travel the extra distance more than once to either second or third level hospitals. Travelling is firstly for consultation, and then for specialist treatment. This can be very costly for the people who in most cases are living below the poverty line.

However, through RRPT, the burden of trips on patients is reduced as patients would only have to make shorter and fewer trips to the District Hospitals. The patients can then be screened and then where necessary, appointments can be made with a specialist.

Emphasis on Social Determinants of Health.



Source: NACCHO Aboriginal Health

For the short-term, initiatives such as rural retention allowances, and RRPTare appropriate but will not end the health inequalities permanently. Health is an outcome, and usually a product of so many societal factors including the socio-economic environment, and physical environments. For the long-term, ending health inequities between urban and rural communities will require having a holistic approach to framing the strategic objectives of government departments, especially those involved in areas of social determinants. For Zambia, the departments involved include the departments of Education, Health, Social Services, and Community Development.

Each of these departments needs to begin framing their goals in a way that is overarching so that they can all contribute to improving health outcomes for people in remote and frontier communities. For this to be successful, however, it will require the implementation of the

National Decentralization Policy which was launched in 2002 but is still pending full implementation[5].

The purpose of the decentralization policy is to bring decision-making closer to the people so that those affected by outcomes participate in the decision-making process. The National Decentralization policy will devolve specified functions including, primary health care, early childhood education and other local authorities with matching resources under the administration of the district level.

Implementing the National Decentralization Policy will make it easier for collaboration of government departments and therefore, allow for an overarching approach to service provision that includes all departments responsible for different areas of social determinants of health. In the future, this will improve development at the local level, reduce demand for health services and improve health and well being.

Conclusion

The health disparities in Zambia cannot be addressed by merely having rural retention allowances. Following the cross-national comparison with the Province of Saskatchewan, it is evident that even for Canada, financial incentives to improve retention of the healthcare workers have only achieved minimal benefits.

In the short-term, RRPT can provide real-time access to specialists without the need of transporting patients thereby mitigating the shortage of the health workforce. It is also convenient for patients as it is more patient-centered. However, as the health of a country is an outcome of the environment and socio-economic factors, for long-term results the country should focus on social determinants of health. This is not only cost-effective in the long run but also effective.

[5] https://www.grin.com/document/231193: Decentralization Policy was launched in 2002 but is still pending full implementation.

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APPENDIX I

Doctor in the Box[6]

[6] Doctor in the box: The electronic device can be connected to any device used to check vital signs including, stethoscope, BP machine, blood sugar monitor.

Appendix II

[7]

[7] A more sophisticated version. A specialist can navigate and perform clinic rounds remotely on patients and have real-time interaction with either the patient or the doctor via video conferencing. It uses high resolution and allows the specialist to zoom to get a clearer image of the patient pending treatment.