COMMENTARY - ISSUE PAPER

Remote health service vulnerabilities and responses to the COVID-19 pandemic

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Abstract

The rapid response to the COVID-19 pandemic in Australia has highlighted the vulnerabilities of remote Aboriginal and Torres Strait Islander communities in terms of the high prevalence of complex chronic disease and socio-economic factors such as limited housing availability and overcrowding. The response has also illustrated the capability of Aboriginal and Torres Strait Islander leaders and the Aboriginal Community Controlled Health Services Sector, working with the government, to rapidly and effectively mitigate the threat of transmission into these vulnerable remote communities. The pandemic has exposed persistent workforce challenges faced by primary health care services in remote Australia. Specifically, remote health services have a heavy reliance on short-term or fly-in, fly-out/drive-in, drive-out staff, particularly remote area nurses. The easing of travel restrictions across the country brings the increased risk of transmission into remote areas and underscores the need to adequately plan and fund remote primary health care services and ensure the availability of an adequate, appropriately trained local workforce in all remote communities.

KEYWORDS

Aboriginal and Torres Strait Islander Health, COVID-19, infectious diseases, remote health, workforce

1 | BACKGROUND

The COVID-19 pandemic is testing some of the best-funded and most sophisticated health care systems globally. With the first Australian cases of COVID-19 confirmed in January 2020, the national response was rapid with the international border closed only weeks later (in March 2020) and returning travellers required to quarantine for 2 weeks in major cities before returning home. This was coupled with state and territory lockdowns, which saw non-essential industries shut down and population movement minimised.[1]

Early identification of the vulnerability of Aboriginal and Torres Strait Islander remote community populations was a notable feature of the Australian health sector's response to the pandemic environment. The Australian Government implemented a suite of initiatives to maintain existing health system function and optimise front-line workforce capacity, including telehealth, workforce training and general practice-led respiratory clinics.[2] Notwithstanding a 'second wave' in parts of Victoria, over 6 months since the first cases were confirmed in Australia, the nation has fared remarkably well compared with many other developed countries, where

COVID-19 mortality rates are up to 100 times greater than in Australia.[3]

In preparing for, and responding to, the pandemic, remote primary health services, including services in the Northern Territory (NT), Queensland and Western Australia, have been confronted with front-line workforce challenges that are unlikely to have been experienced by their urban and regional primary health counterparts. Remote Australia is characterised by limited access to primary health care (PHC) and specialist services, and generally poorer health outcomes.[4] Remote health services exhibit persistent challenges including underfunding and maintaining adequate health workforce supply and retention.[5,6] In recent years, remote health services have become highly dependent on short-term or 'fly-in, fly-out/drive-in, drive-out' (FIFO/DIDO) staff, frequently employed through an employment agency.[7] These workforce challenges have been highlighted by this pandemic. There is scant literature documenting how remote health services experience and respond to pandemics such as COVID-19. This article (a) summarises the factors that make remote Aboriginal and Torres Strait Islander communities particularly vulnerable to COVID-19; (b) summarises remote health services' responses to COVID-19; and (c) describes the persistent challenges for remote PHC services during the COVID-19 pandemic.

2 | REMOTE POPULATION VULNERABILITY TO THE PANDEMIC

Many remote residents are Aboriginal and Torres Strait Islander peoples who are highly vulnerable to COVID-19 and related complications for a number of reasons. These include the high prevalence of chronic diseases such as diabetes, hypertension and respiratory illness, and high rates of tobacco use.[4,8] Aboriginal and Torres Strait Islander Australians have three times the rate of diabetes compared with non-Indigenous Australians.[8]

To prevent the spread of COVID-19, Australian Department of Health guidelines have recommended physical distancing, good hygiene practices and limitations on the number of people allowed at public gatherings.[9,10] Lack of infrastructure, together with family, cultural and literacy factors, made compliance with these guidelines impractical for many remote communities. Firstly, around 30% of Aboriginal and Torres Strait Islander households in very remote Australia experience overcrowding, making social distancing at home difficult.[11] Secondly, the residents of many homes are intergenerational, making transmission to the elderly and higher-risk individuals more likely. Thirdly, many houses lack basic 'health hardware,' such as access to safe electrical systems, toilets, showers and taps to enable recommended

behaviours such as hand washing. Fourthly, there is high mobility of community members related in part to participation in cultural ceremonies and funerals. Such movement, coupled with groups of people coming together for ceremony, has enormous potential to spread the virus rapidly within and between communities. Fifthly, the requirement to quarantine prior to return to country, for example following some discharge from hospital of patients from cross-border areas (such as South Australian or Western Australian residents discharged from Alice Springs Hospital), can result in psychological distress. Sixthly, mainstream messaging is likely to have limited impact on remote Aboriginal and Torres Strait Islander populations if it is not available in local languages or sufficiently adapted to the remote context. Finally, inadequate messaging and levels of health literacy might result in misconceptions; for example, that Aboriginal and Torres Strait Islander peoples are immune or not susceptible to COVID-19.

3 | REMOTE HEALTH SYSTEMS' RESPONSE TO COVID-19

When the first cases of COVID-19 were recorded in Australia, Aboriginal Community Controlled Health Services, other organisations such as land councils and Aboriginal and Torres Strait Islander leaders quickly recognised and acted to minimise the threat posed to remote communities by COVID-19 transmission.[2,12] There was a rapid and forceful advocacy at various levels of government to inform responses and minimise COVID-19 transmission risk through: restrictions on non-essential travel to remote communities;[13] collaborative efforts with non-health organisations to support community members to return to country; and the creation and rapid dissemination of targeted resources with consistent messages in Aboriginal and Torres Strait Islander languages using print, television (eg NITV, Imparja), social media platforms (eg Facebook) and radio.[14] There is much that can be learnt from this Indigenous-led response—lessons about early targeting of language-specific resources could be heeded, for example, in cultural and linguistically diverse (CALD) communities within Australia.

A suite of responses were designed and implemented by remote Aboriginal Community Controlled Health Services to support and strengthen the existing remote PHC workforce so that PHC delivery was maintained. The measures included identifying of essential staff in each clinic and coupling them with workforce contingency planning (eg enabling 'vulnerable, at-risk' including non-Indigenous staff aged 60+ years and Indigenous staff aged 50+ years to return home or to work from home using telehealth), staff training in the use of personal protective equipment, and mental health support for existing staff

(eg short, regular breaks in regional towns within the same state or territory where they were working). Although telehealth cannot be a substitute for local workforce and service delivery, the added temporary Medicare Benefits Schedule items increased the availability of telehealth services. This has helped maintain ongoing delivery of PHC in some remote areas during the pandemic.

As observed in other parts of Australia, rapid testing and isolating of individuals with symptoms is vital to managing outbreaks of COVID-19. The extraordinarily low infection rates experienced in remote areas during the first wave provided remote health services additional time to develop processes and access equipment needed to efficiently respond to outbreaks. As part of the Australian Government's Remote Point of Care Testing Program, many remote health services are now operating COVID-19 point-of-care testing sites. In the initial months of the pandemic, testing was available in centralised locations only. Remote PHC clinics were located long distances from centralised testing facilities, and many clinics experienced limited accessibility as regional airlines reduced flights or ceased operations altogether. Long delays for test results were therefore experienced prior to point-of-care testing becoming available in these locations. This program has reduced test result waiting times in remote communities from many days and in some cases weeks to approximately 45 minutes.

Early in the pandemic, remote clinics lacked adequate resources to effectively prevent, identify, isolate, treat and evacuate cases. With the additional time to prepare, services have since purchased and stocked up on personal protective equipment. Soap and other hygiene products have also been distributed to community households by remote health services. At a local and regional level, remote health services have met regularly with essential services—including police, schools, medical retrieval teams and hospitals—to develop procedures for evacuations should there be an outbreak. Suitable buildings have been identified for isolating COVID-19–positive patients and families who either do not require evacuation or are awaiting evacuation. These facilities will help to minimise infection spread within the health workforce and remote communities.

As time has passed and understanding of and preparation for COVID-19 has progressed, federal, state and territory governments have released roadmaps consisting of a step-down approach to easing of restrictions. With support from relevant organisations (eg land councils), the Australian Government also released a framework containing guidelines for easing remote area travel restrictions.[15] As population movement between and within states and territories has recommenced, remote health services and communities remain alert and prepared to respond promptly to community outbreaks. Yet, the vulnerabilities experienced by remote Aboriginal and Torres Strait Islander communities remain.

The high prevalence of chronic disease and overcrowding, for example, are long-standing issues that require fundamental reform, such as an Indigenous Voice to our national parliament. Other long-standing remote PHC service workforce issues, which have implications for the transmission and management of COVID-19, also persist.

4 | REMOTE HEALTH SERVICE WORKFORCE VULNERABILITIES

Primary health care workforce models in remote Australia differ from those in urban and rural settings.[16] Remote clinics usually consist of small teams comprising resident remote area nurses (RANs) and Aboriginal health practitioners (AHPs), supported by general practitioners, other medical specialists and allied health professionals through community visits and telehealth consultations. The median-sized NT Government clinic consists of two nurses: 0.5 full-time equivalent AHP and 2 other non-clinical employees.[5] Over recent years, use of agency nurses—sourced frequently from the south-eastern corner of Australia and New Zealand—has increased substantially.[6] In 2016, a cross-sectional analysis reported that 42% of remote nurses in the NT were employed on a casual or agency contract.[17]

Remote health services have been confronted with several additional workforce challenges during this pandemic. These are largely associated with remote health workforce instability, high turnover rate and heavy dependence on FIFO/DIDO and short-term staff [5,7] and include the following: heightened difficulty sourcing appropriately skilled agency nurses due to the combination of national and state/territory border restrictions, and rapidly changing national demand for short-term health workforce; expensive self-quarantine; increased risk of losing permanent staff through burnout; and risk of health worker illness eroding service provision.

In the early stages of Australia's COVID-19 outbreak, the capacity of remote health services to replenish their short-term workforce was curtailed due to border restrictions imposed by state/territory, Australian and New Zealand governments in order to reduce domestic and international travel. Many remote health services were unable to source previously used interstate and international agency nurses and locum doctors who possess valuable remote health service knowledge and experience and have established relationships with long-term clinic staff and remote communities. Some remote health services now request short-term staff to work remotely for a minimum period (eg 12 weeks).

A further strain on sourcing short-term staff was the national high demand for skilled health workers, particularly agency nurses. With more COVID-19 cases in metropolitan centres, there has been competition between and within health systems seeking to boost their own short-term workforces.

Remote area nursing might also be less attractive at this time, due to limited flexibility to travel across regions and greater family responsibilities. These factors are likely to leave remote health services with a greater reliance on agency staff who are lacking the cultural competency and breadth of knowledge required to work in remote communities.[18] There have been some temporary closures of remote clinics during the pandemic because of staffing shortages. These challenges highlight the need for a strong, appropriately trained and adequately funded local health workforce in all remote communities.

Some categories of health staff deemed 'essential services' are exempt from border restrictions and the 14-day self-quarantine period linked to government-imposed state/territory border controls. However, some remote health services are nevertheless quarantining all new staff as a precautionary measure to minimise any spread of the virus and alleviate community concern about introduction of the virus by staff. This measure adds substantial costs relating to salaries and accommodation during quarantine to an already underfunded remote PHC system.[6,19]

Loss of existing permanent workforce through burnout might also increase services' need for short-term staff during the pandemic and compromise remote PHC delivery. RANs already had onerous workloads pre–COVID-19, largely due to insufficient number of clinic staff, frequent orientation of new staff, concerns about the clinical and cultural competency of incoming short-term staff and ensuring continuity of care. These stressors result in many RANs experiencing high levels of emotional exhaustion.[20] The pandemic exacerbated the demands on permanent staff, with an increased workload related to COVID-19–specific planning and reduced opportunities to take leave. Other local clinic staff, especially AHPs, might also experience concerns commonly experienced by front-line workers during pandemics such as contagion exposure and cross-infection to family.

5 | CONCLUSION

The threat of COVID-19 transmission into and within Australia's remote Aboriginal and Torres Strait Islander communities has highlighted not only population vulnerabilities, but also the vulnerability of and unique challenges for remote health services. A clear understanding of the COVID-19 threat by the Aboriginal and Torres Strait Islander leadership has resulted in a rapid response to better prepare PHC services, inform the population at risk and prevent transmission into remote communities. The low numbers of COVID-19 cases experienced in remote parts of Australia early in the pandemic have given health services additional time to develop innovative approaches to manage and respond to cases should future outbreaks arise in remote communities. However, long-standing, persistent workforce shortages and heavy reliance on short-term, casual FIFO/DIDO staff remain a vulnerability and a substantial COVID-19 risk for remote residents. Costly 14-day quarantine of staff mitigate the risk of introducing COVID-19 unwittingly into remote communities, but this reduces the available pool of health professionals and the orientation of new staff adds to the already high work demands on existing staff. This pandemic has highlighted not only an unacceptable level of socio-economic disadvantage amongst Aboriginal and Torres Strait Islander populations living in remote communities that continues to place them at higher risk of adverse health outcomes, but also the urgent need for a well-funded, appropriately trained, stable and accessible health workforce in all remote communities.

CONFLICT OF INTEREST
None to report.

DISCLOSURE STATEMENT
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ETHICS APPROVAL
The study has ethics approval from the Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (project number DR03171), Central Australian Human Research Ethics Committee (CA-19-3493), Western Australian Aboriginal Health Ethics Committee (WAAHEC-938) and Far North Queensland Human Research Ethics Committee (HREC/2019/QCH/56393).

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