Research complexity in the remote Australian Indigenous context: a way forward

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In *The Lancet Global Health*,[1] James Ward and colleagues report the findings of a stepped-wedge, cluster-randomised trial undertaken across remote Aboriginal Australia, which aimed to reduce the prevalence of three endemic, fully curable, sexually transmissible infections (STIs): chlamydia, gonorrhoea, and trichomonas. Untreated, these infections can have long-term sequelae, including infertility, or adverse pregnancy outcomes, such as ectopic pregnancy and preterm birth. These last two conditions can result in the potentially preventable death of the mother or baby. Prevalence of STIs across remote Australia have changed little in 20 years,[1] with women in these communities also having some of the poorest pregnancy outcomes in Australia.[2]

The study by Ward and colleagues has several strengths. It was led by a prominent Aboriginal researcher who is supported by a team with extensive expertise in Indigenous health and STI research. Aboriginal research leadership is important in ensuring the research approach is informed by Aboriginal ways of knowing, being, and doing. This study should be commended for its large scale (probably the largest randomised controlled trial focusing on improving health of Aboriginal people in remote communities), especially in terms of geographical distance and number of health-care providers who modified their information systems and participated, and for the robustness of the study design.

Via a continuous quality improvement programme, Ward and colleagues increased screening rates by 38% overall (26% in females and 62% in males) from baseline; however, no change in STI prevalence was seen. Modelling has shown that screening rates of approximately 60% would be needed to reduce the prevalence of chlamydia and gonorrhoea to below 7% and screening up to 80% of the population is needed to eliminate these infectious conditions.[3]

The complex intervention included several strategies to embed STI best practice, including the development of local action plans, training, support from regional coordinators, and incentives paid to the health centres (not individuals).[1] Barriers to undertaking STI screening in this environment have also changed little in the past 20 years, highlighting insufficient resourcing to manage the acute care needs in these communities, with primary health care and prevention activities being less of a priority than other more urgent health care needs. A lack of input from Aboriginal communities in health centre and service design is also problematic. Additional research from this study group highlights the importance of culturally safe services informed by cultural kinship, protocols, and knowledge.[4] Cultural kinship is informed by relationality—ie, how people relate to each other and their roles, responsibilities, and obligations in relation to each other, animals, ceremonial business, and land. Hence, some health-care workers cannot care for some people in the community. These sensitivities are rarely accommodated for in staffing levels or the designs of health-care centres. The sensitive management of positive STI results can also be challenging in small communities.[4]

Focusing on a continuous quality improvement programme to increase screening is clearly important but alone was not enough to reduce the prevalence of STIs in this study. A systematic review of continuous quality improvement studies in Aboriginal and Torres Strait Islander primary health care in Australia found changes to services were variable and effects were not always consistent, with no economic evaluations undertaken.[5] Some studies report poor quality of care,[5] and none reported intentional community engagement in continuous quality improvement activities,[5] which arguably is important. These findings necessitate an understanding of the effect of colonisation in disease presentation, service models, health financing, and community engagement.

Elsewhere, high-performing continuous quality improvement programmes have been associated with a stable workforce, teamwork, good leadership, and continuous quality improvement systems.[6] In settings where continuous quality improvement is everyone's business, communities are active, visible, and engaged in the process.[6] In the Article by Ward and colleagues, how much community engagement occurred is unclear, although funding for small-scale health promotion activities was available.

An opportunity for further improvement with these factors at the forefront might exist. Research in the Canadian context describes community engagement activities that made a difference to maternal and child health outcomes as First Nations community investment (collective understanding and valuing of a programme), ownership (ie, the programme is ours), and activation (high-level community participation).[7] We have applied this approach to our own research and developed the RISE framework to drive substantial maternal and infant health service reform. The RISE framework comprises redesigning the health service; investing in the workforce, both Indigenous and non-Indigenous; strengthening families' capacity; and embedding Aboriginal community governance and control.[8] Application of the framework has resulted in significantly improved quality of care and reduced preterm birth.[9] The health services were clearly redesigned for this study and approximately 30% were Aboriginal community-controlled services. Investment in the workforce was also apparent, but how much work occurred to strengthen families' capacity, understanding (health literacy), and involvement in implementing solutions, and how much local community investment, ownership, and activation occurred is less clear. Perhaps what has been learnt in the Canadian setting could be applied and tested in the STI setting.

This research has resulted in sustained improvements in continuous quality improvement in sexual health in participating services and a further study, STRIVEplus, to refine and translate the continuous quality improvement activities. New technology, incentivising clients rather than health centres, and other advances might also help address this endemic health issue with point-of-care testing for rapid diagnosis being tested by the team in a large randomised controlled trial.[10] We look forward to future work from this team.

For more on **STRIVEplus** see https://researchdata.ands.org.au/striveplus-refinement-translation-remote-communities/454825

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