Effect of swimming pools on antibiotic use and clinic attendance for infections in two Aboriginal communities in Western Australia

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To the Editor: Roe and McDermott recently noted that the health benefits of swimming pools demonstrated by Silva and colleagues[1] may be more modest than reported.[2] Our initial observations from a remote South Australian Aboriginal community support this observation, but there are also many difficulties with study implementation that may introduce biases.

A swimming pool was constructed during 2007 as a result of a community-led initiative. With ethics approval, trachoma screening was performed before the pool opening (November 2007) and 6 and 18 months after the pool was opened. Rates of middle ear infections, skin infections and antibiotic prescriptions among children aged 1–15 years were assessed using a retrospective analysis of clinic records between May 2007 and April 2009. A questionnaire regarding the benefits of and barriers to swimming pool use in the community was administered to key persons, such as community health workers and school teachers in April 2009.

We aimed to examine every child in the community aged 1–10 years; 45/56 (80%), 46/62 (74%) and 59/64 (92%) children were examined at each of the three visits. The proportion of children with follicular trachomatous inflammation remained low and unchanged at the three time points (7%, 7% and 8%). The clinic records of 166 children showed a trend of increasing rates of infection and antibiotic prescriptions for the period. With hypoendemic rates of trachoma and possible confounding factors, including a small sample size, population mobility, reporting bias and a high turnover of health personnel, we were unable to demonstrate health benefits of pool usage.

Our findings highlight the importance of avoiding complacency once a single intervention, such as a swimming pool, has been put in place. Long-term maintenance and supervision are needed to ensure efficacy of a pool. Aspects such as housing, sanitation, nutrition, education and substance misuse should also be high priorities when trying to address health conditions for which low socioeconomic conditions are major risks.[3,4] Although we found no specific health bene-

fits of having a pool, interviewees reported that the pool benefited the community in other ways, including providing an opportunity for exercise and recreational activity for otherwise unoccupied children, and creating an incentive to attend school, owing to a "no school, no pool" policy. The pool is a "public good"[2] that cannot be denied based on lack of health benefits.

Ongoing investigation is planned to monitor the effects of the pool in this community, and it may be too early to draw final conclusions concerning the health benefits of swimming pool use.

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