Impact of swimming pools on health of Aboriginal children in two remote WA communities

Deborah Lehmann, Mary Tennant, Desiree Silva, Daniel McAullay, Jacinta Johnston, K Sivwright, P Serna, Telethon Institute for Child Health Research Perth, Irene Nannup, Derbarl Yerrigan Medical Service Perth, Harvey Coates, Francis Lannigan, Peter Richmond, Princess Margaret Hospital for Children, John Stuart, Child and Family Centre, Wallsend NSW, Sharon Weeks, Disability Services Commission

INTRODUCTION

Swimming pools may have a positive effect on specific health problems in addition to providing recreational and social opportunities for the residents of Aboriginal communities. The pools may reduce the heavy burden of eye and skin diseases in Aboriginal communities, whilst swimming instruction and pool use may contribute to a general sense of well-being.

OBJECTIVE

To determine the health impact of introduction of swimming pools in remote Aboriginal communities with particular reference to skin sores, nasal discharge and otitis media.

METHODOLOGY

In July and August 2000 children aged between 0 and 16 years in Burringurrah and Jigalong communities were enrolled before swimming pools were opened. Demographic and school attendance data were collected and adults’ views on the provision of a pool into the community were sought. The children were examined by a paediatrician looking specifically at ear health and for the presence of skin sores, nasal discharge, eye disease and cough. Pictures of ear drums were taken using a video-otoscope. Swabs of some skin sores were taken to obtain information on the strains of Group A Streptococcus circulating in communities and a severity score for sores was recorded. Morbidity data were collected from local clinic records one year prior to opening of the pools and this has been collected throughout the period of the study. Pool managers provided data on pool use for individual study participants. The children were re-examined in March and July 2001 (summer and winter) and again in March 2002.
RESULTS

In Burringurrah before the pool opened we found 31% of the children had perforated tympanic membranes (wet or dry) and 64% had skin sores. One year later 19% had perforated drums and 21% had sores. The Jigalong pool was closed for lengthy periods during the summer in the first year due to structural problems. Perforated tympanic membranes remained at 30% over the year however wet perforations halved from 16% to 8% and severe skin sores fell from 28% to 5%. Findings from the fourth visit to communities and impact on number of antibiotic prescriptions will also be presented.

IMPLICATIONS

Preliminary results suggest that swimming pools in remote Aboriginal communities can have a marked beneficial effect on Aboriginal child health.

PRESENTER

Mary Tennant trained as a nurse in Brisbane. After completing her midwifery and gaining some clinical experience she moved to East Arnhem Land where she worked as a community nurse in remote Aboriginal communities. She undertook studies in Nursing at Curtin University and later moved to the Cocos Islands where she again worked as a community nurse. She completed a Masters in Public Health at James Cook University and is currently working as a research assistant at the Telethon Institute for Child Health Research in Perth. Mary has worked on the swimming pool study for almost three years.

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