

## Environmental policy for prevention of heat related illness in Aboriginal children by female environmental health workers in the Kimberley, Western Australia

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### Background

Surveys undertaken by the writer of health professionals in both community and public health settings in the West Kimberley region of Western Australia reveal that there has been no definitive attempt to determine whether heat related illness in children is a health problem in this region. A literature search has not elicited contextual information on the subject. The contention of the writer is that there may well be an unidentified problem of heat related illness which is having far reaching effects on children due to dehydration and thermal exposure.

A recommendation of the writer is that a strategy is put into place to prevent heat related illness. Stephenson (2001) notes that there is much evidence supporting the notion that research undertaken in Aboriginal communities is heavily prejudiced toward problem *identification* with a lack of follow through with problem *solution*.

A strategy proffered by the writer related to the development of an Aboriginal Environmental Health Worker (AEHW) role in the West Kimberley region is presented in the following discussion. Stephenson (2001) argues that the provision of an effective, efficient and dedicated Aboriginal environmental health service for Aboriginal communities presents one of the main workforce challenges for public health in Australia. The workforce challenge is highlighted by the fact that there is currently no career path for AEHW. Also that appropriate legislative powers, salaries and resources remain significant problems for AEHW.

Problems faced by an AEHW in the Kimberley communities are immense as they are multifaceted. For example, where an AEHW is in place in the community, recognition of the extent of the environmental health problem, does not ensure improvement nor does it help the worker with their practice (Stephenson, 2001). Communities themselves may put pressure on the AEHW to put into practice what the recommendations for the stated problem have been. Without significant resources and back-up from regional co-ordinators, or government bodies, it may not be possible for adequate programs to be implemented or followed through by AEHW. A resultant questioning of the credibility of the environmental health worker by both the community and the funding body may ensue.

AEHW who live within the community have different professional relationships to community members than those who live outside that community. That fact may possibly have ramifications relating to credibility and expectations of the community. The result may be conflict relating to responsibilities for maintenance of resources, and in planning for community development.

In order to prevent the consequences of heat related illness, functional water outlets and supply sources are essential. In relation to water resources within communities Gracey, Williams and Houston (1997) note that ongoing design and maintenance problems prohibit the effective functioning of water supply systems in over one third of Aboriginal communities in Western Australia.

The Western Australia Office of Aboriginal Health initiated a program of rectification for the problem of inefficient water services by providing funding for the establishment of an Environmental Health Worker Training Program, additional community based worker positions, allocation of funds for capital works on water based systems in 5 priority communities. A further 15 communities were identified for minor rectification programs (Stephenson, 2001). Application to extend this funding to shelters, shade covering, tree and grass planting and resources for maintenance needs to be considered.

### Recommendation

A forward thinking strategy involves utilisation of aboriginal community women as environmental health workers, who, as a component of the role of environmental improvement, will ensure that children are given adequate water, that water sources are maintained, and that shade facilities are constructed and maintained in order to prevent heat related illness. Emeharole (1991) opines that the

inclusion of women in what is hitherto a man's job domain as environmental health workers, will yield large socio-economic development bonus'.

The program by AEHW could be run by women in the communities along the lines of the successful Northern Territory 'Strong women, strong babies, strong culture' program. Women from the communities provide guidance, advice and care for pregnant women and their babies. The model could be utilised as a guide for an innovative program which aims to prevent heat related illness in children. Such a program will require a policy to ensure efficient planning, instigation and evaluation.

Hui (1997) states it is recognised that women are more connected to the environment and that both women and the environment are given less important roles in human society. Changes are necessary in attitudes toward both. A change in one will require the other to succeed to the fullest. A shift of power to females in society will benefit the biosphere. Hui (1997) further contends that this factor must also be incorporated into education and public awareness campaigns.

Public health policies are constructed on primary health care principles which requires that service provision is acceptable, affordable, appropriate, accessible and available. Stephenson (2001) contends that co-opting community-based practitioners, such as AEHW, into specific roles without supporting them with appropriate levels and forms of professional development, may in fact impede a project. This would then be counterproductive to bringing about environmental health improvement in community settings. Obstacles to training, such as appropriately skilled trainers, paucity of numbers of women who may be interested or able to afford the time and money in the communities are considerations.

## **Policy development**

### **Aim**

To prevent heat related illness in Aboriginal children in communities in the West Kimberley region, Western Australia.

### **Principles**

- Provision of a culturally appropriate and effective education program on heat related illness for women from communities who enrol as environmental health workers
- Improvement of the community environment by constructing shelters, shade covering by trees and shade cloth, provision of adequate water outlets
- Increase in participation of Aboriginal people in the communities in decision-making and appropriate strategy development for a program run by female environmental health workers to prevent heat related illness.
- Equity – sharing of resources with health centres and community services. Access to suitable resources. Appropriate service provision.
- Three way information flow - AEHW - community - health professionals.
- Intersectoral action between all levels of government, Aboriginal organisations, and women as environmental health workers to establish agreed priority needs (infrastructure, resources, education program, peer support, professional support).
- Community control and responsibility for the program

### **Policy recommendation**

Female aboriginal environmental health workers: a role in prevention of heat related illness in children

- All interested women in the aboriginal communities will be given the opportunity of being considered for the position (s) of aboriginal environmental health worker (AEHW)
- Opportunities for education pertaining to heat related illness will be available for AEHW personnel as the individual need arises – education will be affordable, and culturally appropriate
- AEHW are aware that environmental health is an essential component of their role
- AEHW are able to explain environmental health, and heat related illness to their communities

- All AEHW are aware of preventative strategies for heat related illness
- AEHW are able to activate community member ideas developed through discussion about personal ways for children to prevent heat related illness (e.g. the acquisition and distribution of sun hats for cover, water bottles and calico bags to carry fresh water supplies).
- Organise the planning and production of outdoor shade areas for cover during play e.g. shade over basketball courts and general meeting areas, either shade cloth, or, planting of trees
- Ensure children maintain hydration levels during times of play through organised supervision of play areas when it is hot and humid, and distribution of water or sports drinks.
- Avoid the drinking of river water when recreation is undertaken by the river or still water source.
- Liaise with other sectors such as government and non-government bodies for acquisition of resources such as water outlet maintenance equipment.
- Take responsibility for maintaining records of climatic events (such as heat waves and floods) and record any adverse heat related illness in the children.
- Present findings of the outcomes for evaluation and discussion with the parents, community council and health professionals

### **Human implications of this policy to the public**

Maximisation of community involvement in an innovative health program results in ownership of the program, hopefully a willingness to participate in the role developed, and outcomes which are of benefit to the health of the children of the community.

Emphasis on prevention of ill health is the result of the primary health care model in action. More widespread than merely the prevention of heat related illness in children is the fact that dehydration aversion and adequate kidney functioning through fluid intake may lead to other improvements in health. For example, there may be a link between chronic skin disorders and kidney problems. Flushing of the kidneys through water intake could only be beneficial. Improved hygiene standards will occur due to adequate water source outlets once the service infrastructure is operational.

Use of a multisectoral approach to problem identification and program establishment will ensure all community children, and those adults who participate in discussion and program planning have their needs addressed. Empowerment of community members will be a consequence of positive action and interaction with all agencies and government department.

The policy relating to the recommended strategy will be successful because AEHW programs in the Northern Territory of Australia have paved the way for effective future strategies. Clark (1997) reports that the work is regarded as important by community members in those areas where the AEHW role is well known and is operational. Significant environmental changes, which will occur through a strategy such as the development of female AEHW roles, will contribute to public health improvement in aboriginal children in communities of the West Kimberley. In the example presented in this paper, heat related illness can be prevented through the policy which this paper presents.

### **References**

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