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Australian Government Shed Development Program
Round Three of Funding opened in late August 2011
The National Male Health Policy includes $3 million to support Men's Sheds across Australia, including $750,000 for the Australian Government Shed Development Program. The Minister for Indigenous Health, Warren Snowdon, said Men’s sheds have long been recognised as making places where men can find social support and friendship. They can play a significant role in improving men's health and wellbeing by connecting them with each other and their communities in a pressure free environment. Men throughout Australia are eligible to apply for up to $10,000 in government assistance.
Website: http://www.mensshed.org/

Freit Deven: “Let’s Tackle Tobacco Together” – The Inaugural A-TRAC Symposium Artwork by Jasamine Baffe, who says, “Because of the devastating health effects of smoking and the use of tobacco products is being taken by our people and our culture, it is important to highlight the ever-increasing levels of resistance that are emerging. The lines and connecting circles in this artwork are symbolic of the unity between Aboriginal communities, government and non-government organisations to work together to tackle smoking in our communities and to give our people support to resist tobacco. This artwork is the central gathering place in this artwork and represents the coming together of workers and organisations to showcase their achievements in an area that has not had much light in the Aboriginal health sector as other health problems. Quitting smoking campaigns are part of our culture for cleansing and healing purposes, tobacco smoking is not. The plants and leaves symbolise the removing of ‘bad air’, and the white symbolises the disconnection of the innermost edges of this artwork represent cleansing and renewing clean. I am greatly appreciative of the opportunity to have done this artwork and feel strongly about the resistance of tobacco by Aboriginal people.”

Hinche Point Deven Playing Number Games with Indigenous Australians’ Health by David Paul, Inside Back Cover Conferences and Coming Events.

GUIDELINES FOR CONTRIBUTORS

ARTICLES: The Journal welcomes and accepts contributions in almost any form—newsworthy, typed, edited, photographs. The preferred method is a Word or text-formatted document sent by email or post on a disk. Photos and other illustrations should be high resolution. The preferred length is two to three A4 pages but articles can be shorter or longer.

LETTERS POLICY: The Journal welcomes letters to the editor on any health or related issue. Letters must be as short as possible and include the writer’s name for publication. The AHWJ reserves the right to edit letters for reasons of space, style or clarity. The Journal reserves the right to edit letters for reasons of space, style or clarity. The Journal reserves the right to publish letters in full, unless the writer requests otherwise.

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4
Broken Glass as an Injury Hazard in an Indigenous Community

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ABSTRACT
Reduction of glass-sourced injury is one target of an injury prevention and safety promotion project in an Indigenous community in Queensland. The research into broken glass litter had three principal objectives of determining the extent of the problem, devising workable strategies within the local context and assessing the outcome and impact following implementation of those strategies. Surveys, individual interviews, Photovoice® observations and injury data collection forms were utilised to determine the extent of the problem and gather perceptions from the community. Data collected supported the community’s view that broken glass was an abundant source of litter, with the majority of respondents also stating they had been injured by broken glass. Strategies to improve the amounts of broken glass litter were centred upon what caused people to litter in the first place. Working collaboratively with the Aboriginal Shire Council and Community Injury Prevention and Safety Promotion Project group, a waste management plan was developed which increased the number of waste facilities, aired a public awareness campaign including anti-litter posters, and developed plans for a recycling plant.

CONTEXT
Injury within the public health context is defined as physical harm to a person’s body commonly seen as broken bones, cuts, brain damage, poisoning and burns. Injuries occur in a multitude of ways and can have the potential to cause a range of physical, cognitive and psychological disabilities and death. In fact injury is the primary cause of death in people under the age of 45.

In Australia, Indigenous communities experience approximately three times the rate of fatal injuries as do the general community. Demand for improved health conditions and reduction in inequities between Indigenous and non-Indigenous Australians has coincided with a focus on public health strategies for primary and secondary prevention which often encompasses a whole of community population level intervention. Commonwealth and State Governments have declared injury prevention as a National Health Priority Area.

Litter is an important environmental and public health issue that negatively affects the image of communities, and items such as broken glass are often a health hazard and source of...
injury. Research in the United Kingdom and the United States has indicated that the leading cause (15 to 27% of all lacerations reported to an urban emergency department) of lacerations is glass from broken bottles. Lacerations from glass can result in many health problems such as delayed wound healing, infection, debilitation and neuroapraxia. These health problems can be potentially exacerbated by low immunisation rates and diseases such as diabetes.

Injuries can seriously affect a person's quality of life and the life of those around them. However, through precise, specific implementation of strategies, injuries are viewed as being preventable. This paper describes the process undertaken to evaluate the extent to which broken glass was a health hazard in one community and the strategies identified and implemented to reduce glass injury.

BACKGROUND
Injury prevention is a strategic direction for Queensland Health, and in 2003 the department, through Health Promotion Queensland (HPQ), started supporting an Aboriginal Shire Council to implement a five-year Community Injury Prevention and Safety Promotion Project (CIPSSP). Principal partners to the Council were the Public Health Unit and the Centre for Rural and Remote Area Health at the University of Southern Queensland.

On 20 April 2003, the Council hosted the inaugural CIPSSP reference group meeting. In attendance were the partner organisations plus representatives from the community health department, hospital, community-run medical centre, radio station and school.

Workshops with the community run by Council had previously prioritised five key areas for action: Environment, Housing, Children, Road Safety and Alcohol, Tobacco and Other Drugs/Mental Health.

At the first reference group meeting members discussed these community safety concerns in order to identify activities that could be undertaken under the banner of the CIPSSP.

Subsequent reference group meetings invited participation from government departments and services (e.g. Communities and Police) and local non-governmental organisations representing employment, health and education. At these quarterly meetings additional activities were proposed and discussed.

With children identified as the number one priority for the IPSSP, and environment also recognised as a key area, the project recognised the health concern of broken glass in the community. Research into broken glass as reported here became an actioned strategy of CIPSSP.

OBJECTIVES
The research project had three objectives. Firstly to determine the extent to which broken glass was a hazard; secondly to explore with the community what strategies could be used to address the hazard; and finally to implement identified strategies.

METHODS
The extent of broken glass as a hazard was captured by a mixed method approach involving six activities. Firstly individual interviews lasting 5-10 minutes were held with twenty people over the age of 18 who were local residents or worked in the community. During the interview the participants were asked a range of open-ended and closed questions generating data on sex, age, their relationship to the community, their perception of litter and broken glass in the community, types of litter in the community and its source, changes in the amount of litter and why, injury from broken glass and solutions.

Secondly a survey was used to gain views from the broader community. A total of 330 surveys were distributed to homes and services. The survey contained 19 questions and was constructed to record a mixture of quantitative and qualitative data similar to the individual interview questions, which included demographic information along with the individual's perception of the broken glass issue within the community, their exposure to the problem, any injuries sustained and solutions or strategies to reduce the hazard.

Children from a class within the local primary school were also surveyed for their experiences with broken glass and thoughts on the topic. With approval from the State Primary School Principal a modified and shortened version of the community survey was completed by the single class year 6/7 students in the presence of their teacher who explained the topic to the children.

Additionally, Photovoice was employed where students were provided with disposable cameras for the purpose of recording items or locations within the community which they considered to be potential hazards. Groups of students, escorted by teaching staff, took photographs which were then compiled into a slide show and presented to the CIPSSP reference group.

A fifth method of data collection was observations of the community by the researcher. The researcher travelled to the community no less than once a month for 12 months and, during busy stages of the project, visited weekly. On these visits written comments were recorded in a note book. Recordings included observations of the community, general knowledge gained from community members, and follow-up actions.

Finally, data identifying causes and rates of injury were collected from the hospital and the primary school during the period of April through to December 2003 using patient injury forms designed in partnership with the Queensland Injury Surveillance Unit.

The research was undertaken by a Health promotion officer and all activities were carried out with the assistance of the CIPSSP Coordinator.

Ethical approval for the research project was received from both the University of Southern Queensland and Queensland Health. All data was collected in accordance with the guidelines for ethical conduct in Aboriginal and Torres Strait Islander Health Research.

RESULTS

Individual Interviews
Twenty people were interviewed, 15 were male and half were over 40 years of age. Results are summarised in Table 1. All but one of the people interviewed claimed the community had a litter problem, with all stating broken glass was a concern.

Sixty-five per cent of people interviewed claimed they or a family member had been affected by broken glass. The most frequent location where an injury occurred was on the street, with most injuries resulting in a laceration to the foot. Of the 13 who said they or a family member were injured, eight required medical treatment and only one person was wearing shoes at the time of injury. The most frequent responses for solutions to broken glass were to recycle, increase the number of litter bins, and deploy a clean-up gang.

Community Survey
Fifty three people responded to the survey. Fifty-four per cent of respondents (n=29) were 40 years of age or older, 64 per cent (n=34) were female, 33 (64.2%) lived in the community, and 85
percent (n=45) worked in the community. Results indicated that broken glass was a hazard (Table 2).

Those who disagreed that the problem was lessened over the previously year frequently stated it was due to a lack of waste facilities, poor behaviour and attitude (Table 3). Although many causes were documented, poor behaviour and a lack of waste facilities were the most frequent responses.

Cross tabulations of the survey data revealed several significant findings. Although non-residents were affected by broken glass, there was a higher rate of cuts amongst residents. Results indicate that lacerations can occur regardless of footwear, it was found that all the people surveyed who were not injured were wearing shoes. However 38.7 percent of respondents who were injured were wearing footwear at the time of injury. A significant difference was found with age versus perception of litter, with 100 percent of respondents aged over 40 indicating that the community has a litter problem, almost doubling any of those under 40.

Children survey
All 12 of the children who were surveyed identified the community as having a litter problem and stated glass was a hazard where they played. All had been cut by broken glass while in the community and only three were wearing shoes at the time of injury. The street was the most frequently indicated location for injury.

Photovoice
Over 100 photographs were taken by the school children to illustrate that the community had a litter problem which created an environment that was both unsafe and unpleasant to live with. The children requested a clean community which was free of broken glass identified on the street and playing surface of a public basketball court. Some examples of the photographs that were taken are provided on page 8.

Researcher observation
It was evident that at the beginning of the study, areas within the community had large amounts of litter, including broken glass. It appeared efforts were made to keep the entrance to the community and the main street relatively tidy. In contrast, the back streets, sporting facilities, and play areas had an abundance of litter and smashed glass littering footpaths. Litter surrounding streets, homes, ovals, etc. consisted mainly of papers and plastics, discarded food and product containers, wrappers, and plastic bags. Less frequently sighted were larger littering objects which included mechanical parts, old signs, parts of broken fences and unwanted building products such as wood, and sheet metal. As the broken glass was primarily either clear or brown, sources most likely would be soft drink bottles, windows, windscreen, beer bottles, or spirit bottles. The broken glass was observed in many streets, from small as a pin head enough to cause a glass splinter, to half beer bottles enough to cause a deep laceration.

On commencement of the research, there was a distinct lack of community waste facilities – both community bins and household bins for residents. Those shortages were also identified by the community, as was inconsistent and sometimes total lack of waste removal from residential areas for periods of time. Additionally, the waste dump site for the community was poorly maintained, resulting in unsaured litter and inappropriate dumping.

| Table 1: Responses to individual interview questions |
|-----------------------------------|-------|-------|
| **Interview question**            | **Yes** | **No** |
| Is broken glass a concern in the community? | 19   | 1     |
| What types of glass is it?        | Footpath | 13   |
| Bear bottles                      | 20   | 6     |
| Spirit bottles                    | 2    | 10    |
| Soft drink bottles                | 9    | 8     |
| Where do you think the broken glass comes from? | 7    | 10    |
| Incorrect disposal of bottles by adults | 1   | 12    |
| Was the person wearing shoes at the time of injury? | 1    | 12    |
| **Solutions for broken glass?**   | **Recycle** | 4   |
| **Increase number of bins**       | 5    | 0     |
| **Clean up gang**                 | 4    | 0     |
| **Bend glass**                    | 1    | 0     |
| **Street sweeper**                | 2    | 0     |
| **Improve peoples' behaviour**    | 3    | 0     |

| Table 2: Responses to community survey |
|---------------------------------------|-------|-------|
| **Does the community have a litter problem?** | 48   | 92.3 |
| **Is broken glass in the community a hazard?** | 49   | 100.0|
| **Have you been cut by broken glass?** | 31   | 57.6 |
| • Did you seek medical treatment? | 19   | 31.7 |
| • Were you wearing shoes when injured? | 19   | 38.7 |
| **What is the source of litter?** | **broken glass – beer bottles** | 49   | 92.5 |
| • soft drink bottles | 16   | 30.2 |
| **What contributes to litter?** | **Not enough bins** | 48   | 94.1 |
| **In the past year has the problem improved?** | 26   | 83.3 |

* Percentages of those answering the question.
** Clean-up gangs and the introduction of an alcohol management plan by the government were predominantly the reasons for the broken glass litter levels improving.
Injury Data

Data was collected from the laceration clinic at the primary school for eight months (April–December 2010). A total of 70 presentations were recorded, of which 69 were for Indigenous children. The peak of injuries occurred in the 5–7 age group and declined with age. Males had a slightly higher rate of injury, 57%. Glass was the injury factor on 14 occasions, resulting in open wounds 100% of the time. The majority of injuries from glass occurred while playing.

Data collected from the hospital from September 2009 to November 2010 resulted in a total of 200 injury presentations to the emergency department. The peak age group for the injury presentations was 15–44 years. Results also identified a greater representation of males (57.5%). The greatest incidence of injury was that caused by another person (n=57) and glass was only indicated in 4.5% of injuries (n=9).

DISCUSSION

The Community Injury Prevention and Safety Promotion Project (CIPSP) had been presented with information that glass injury was a problem that needed addressing. These data were anecdotal and the research confirmed through its various methods that broken glass is a hazardous problem for the community. Beer bottles were identified as the major contributing source of broken glass, along with spirit bottles, soft drink bottles, and windows.

The methodology was complementary; results of written questionnaires completed more by women coincided with the verbal responses of interviews. Information from children concurred with those results and observations from both the researchers and the children presented visual evidence. It is interesting that the Photovoice technique also identified other potential sources of injury within the community. Requests to improve road safety, animal management, unsafe housing, lack of recreational facilities and infrastructure including lighting, alcohol and violence were presented to CIPSP.

The exact incidence of lacerations could not be reliably determined because of self treatment, although more than half of adults, and all the children who were surveyed or interviewed, had been cut by broken glass. It was interesting that despite this anecdotal evidence of high laceration rates cause by glass, injury data collected from the hospital and school indicated incidences of injury from broken glass were low when compared to other injuries. Within the school those other injuries were largely abrasions as a result of playground falls; however hospital data indicates the highest incidence of injury resulted from being struck by or colliding with another person. This result suggests that injury and safety promotion around all aspects of lifestyle require considerable attention.

As expected, the wearing of footwear was found to reduce the likelihood of injury from broken glass, however footwear did not prevent all lacerations to the lower limb area. It is suggested that those injured whilst wearing footwear were wearing open shoes such as sandals and thongs.

Table 3. Reasons for litter

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<td>Poor behaviour</td>
<td>15</td>
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<td>Boredom</td>
<td>3</td>
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<tr>
<td>Bad attitude/apathy</td>
<td>8</td>
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<tr>
<td>Lack of waste facilities</td>
<td>10</td>
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<tr>
<td>Alcohol</td>
<td>2</td>
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<tr>
<td>Violence</td>
<td>1</td>
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<tr>
<td>Lack of signage</td>
<td>1</td>
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<tr>
<td>Lack of education</td>
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A lack of litter bins, behaviour and attitude of people to litter were considered major factors in why people in the community litter. Of particular interest, the results confirmed a significant difference in perception towards litter between age groups. Results indicate that those over 40 years of age are more likely to view litter within the community as a problem. This could be an indicator that litter has increased over time and younger generations see litter in their environment as normal.

One of the most frequent solutions provided to resolve the broken glass litter problem, was to increase the number of bins and this is comparable to other studies which revealed that one of the main causes for littering was a lack of bins. Other solutions were to recycle, improve peoples’ behaviour and to ban glass; however this last solution was seen as impractical to the community and surrounding communities.

Results of the study were presented to the IPSSP reference group and to the Aboriginal Shire Council, and strategies to reduce the amounts of broken glass identified. Negotiations led to the partnering of a waste management plan which saw the purchase and placement of ten community bins in locations of high pedestrian traffic. These community bins were complimented by new wheelie bins for each household. Additionally, a public awareness campaign was launched, aired on the local radio station, informing of household rubbish collection days and the people of the community to dispose of rubbish appropriately and to take pride in their community.

Further with the education theme, consultation with the Primary School led to the development of anti-litter posters which were distributed throughout the community and placed on the community bins. The Aboriginal Shire Council has now planned to develop a local recycling plant. Recycling may offer a solution to not only keep glass off the streets but a productive solution to utilise the discarded material and create work for local people. Due to time constraints the effectiveness of these strategies will be measured over time through the CIPSP.

CONCLUSION

Data collection methods were effective in determining the community’s problem with litter, and specifically glass, and the methods also proved useful in ascertaining solutions. Information (Continued on page 27)
training. However, a generic program that can be adapted to meet the clients from that area should be considered to contextualise the process. It would be envisaged that a facilitator from universities would be trained so that they could use these skills to assist their students in their university.

The following is a suggested model.

1. An initial workshop could be held with potential stakeholders to map the possible outline of resilience training. Skilled individuals with experience in resilience training would be advised, along with community members, staff and students.

2. Recruitment: in this case, contact has been made to seven universities across Australia to participate. Recruitment could be undertaken through a series of strategies including emails, posters and promotion of the study through Aboriginal and Torres Strait Islander Support Centres at the respective educational institutions. All strategies should emphasise that students do not have to participate if they don't want to and will not be disadvantaged in any way if they choose not to participate or to withdraw.

3. Pre-testing: The Wagild and Young Resilience Measurement Tool (1993) is a good tool used to conduct primary testing on levels of resilience. It is a standardised test, so one thing to be considered is that it is not Indigenous-specific. High score and low scores could be used to determine the establishment of two groups. The first group will be a control group. These participants will have scored poorly on the resilience measurement tool and will have the benefit of resilience training over a period of twelve months. In these twelve months participants will have four sessions of two-day workshops. The second group – the experimental group – will have scored highly and will also have the benefit of the same four sessions as the control group.

4. Post-testing: The Wagild and Young Resilience Measurement Tool would be used again to determine if the level of resilience is higher for the experimental group, remembering that they already had high scores to determine if their scores are the same or have increased or decreased. The Control group will also be measured to determine if their scores have improved as a result of resilience training.

The aim of this model is to provide clinical educators, team leaders and other suitably qualified personnel to deliver training on the guidelines within the workplace.

By making use of mixed methods of both qualitative (resilience measurement tool) and quantitative methodologies, the development and implementation of a resilience training package has been specifically designed to account for contextual and cultural issues in the study of resilience. A mixed method design should be used to address the need for greater specificity in how we link protective factors with the risks they mitigate (Guerra 1998). It is important that the resilience team strategize and develop the initial framework of this resilience training program. Arguably, without understanding the context and culture in which behaviour occurs there can be little authoritative comment made on findings related to resilience and the structures that help to create health (Newton et al. 2000).

Conclusion

It is hoped that the outcome of resilience training will develop and promote healthy, resilient students that display good wellbeing. The social benefits for developing a resilience training model include happier and healthier Indigenous students. Happier, healthier students equals more of our Mob gaining higher qualifications and skills that increase potential to work in higher paying, more senior positions to better support our own people. Further, adding a valuable contribution to the economic growth of this country and particularly individual communities. Environmental factors will improve for the individual and healthy lifestyle achievable as a result of better incomes. Our students have the right to thrive, to reach their full potential and to have a positive impact on others. Resilience has shown to have impacts on wellbeing and health overall. Resilience respects body-heart-mind-spirit, self-community. With the right training our students can flourish and thrive.

References


(Continued from page 13)

gathered from the community supported a multi-strategic approach to reduce litter and broken glass. Working synergetically with partners using a combination of strategies, is likely to offer the greatest and most sustainable response.

REFERENCES


