

Awareness of People towards first Aid management of Burns among under five Years Children at Buramba Cell One Bushenyi District.

Gibwa, Babirye

Department of Nursing Sciences, Kampala International University Ishaka Campus, Uganda.

ABSTRACT

While burns take seconds to occur, injuries incurred result in morbidity and mortality among under five years children. The purpose of this study was to assess knowledge and practices of community members towards first aid management of burns among children in Buramba cell one Bushenyi district. The study adopted a descriptive cross-sectional design using a convenient sampling technique. Out of the 30 respondents in the study area, majority were females 25 (83.3%). Most of the respondents 11(36.7%) were above 36 years, 14(46.7%) and had never attended school and 22(73.3%) were peasants. Also, many of the respondents 19(63.3%) had average knowledge towards first aid management of burns. Among the practices done by community members, majority of the respondents 22 (73.3%) would not cool the burn with cold water and among the other used practices mentioned, most of the respondents 26.7% used cooking oil, sugar and salt respectively. Although community members had average knowledge on first aid management, there is still a big gap to sensitize the community on the recommended first aid practices like emphasizing the application of only cold water on the burn injuries and discouraging traditional home remedies for managing burns in under five years children.

Keywords: Children, Community members, Burns, Knowledge, Injuries.

INTRODUCTION

A burn is defined as an injury to the skin or other human tissue caused by heat [1]. It occurs when some or all of the cells in the skin or other tissues are destroyed by hot liquids (scalds), hot solids (Contact burns), or flames (flame burns). Injuries from radiation, radioactivity, electricity, friction or contact with chemicals are also regarded as burns.

Globally 95,000 deaths occur annually due to burns [1]. The World Health Organization (WHO) established that 180000 to 30000 children die due to burn injuries in Sub-Saharan Africa [2].

The death rate of burns in low-income and middle-income countries is eleven times higher than that in high-income countries - 4.3 per 100 000 as against 0.4 per 100 000 [1]. Most of the deaths occur in poorer regions of the world and in Africa it is estimated that between 17000

to 30000 children less than five years die each year due to burns [3].

Heating and lighting sources and cooking equipment especially those relying on fossil fuels, all carry risks. In particular, heating or cooking on open fires that are at ground level pose significant dangers to children [1]. Multiple studies have shown that children younger than five years of age have a higher burn injury rate than children of other ages [4]. This age group accounts for approximately half the number of childhoods burns cases seen in emergency departments and burns units worldwide [5]. In addition, children within this age group are at an increased risk of dying from burn injuries [1]. Their curiosity and impulsiveness, together with their limited ability to perceive and react promptly and properly to dangerous situations, make young

children more vulnerable to burn injury [6].

Inadequate supervision by parents and other caregivers further increase the risk of sustaining a burn in early childhood [7]. Proper knowledge and practices about burn first aid management among community members minimize the overall impact of the injury [8].

In Uganda, burn injuries account for 11% of all childhood injuries. Over 70% of children are given incorrect first aid treatment at home while others received none [9].

Burns are still common home accidents among children therefore, there is need to address the knowledge and practices of care givers on burn first aid management in order to reduce morbidity and mortality among children due to burns.

Statement of Problem

Globally 95,000 deaths occur annually due to burns [1]. About 70% of the burnt victims seen in hospitals in Uganda are children [9].

Homes are the commonest location of burn injury ranging from 72 to 94 % [10]. It is therefore important for everybody to be aware of what the first aid of burns are: The aim of proper first aid is always to promote wound healing as soon as possible and to minimize morbidity. In Bushenyi district, children are seen in villages with burn wounds and improper first aid practices given by community members. Despite the fact that the government of Uganda has sensitized the public about burn first aid management through media advertisement, hospital visits and training school children the proper first aid management, there are still cases of children presenting in hospitals sepsis, shock and dehydration due to burn injuries. In Buramba village Bushenyi district, research has not been done about first aid management of burns hence the researcher decides to assess knowledge and practices towards first aid management of burns among Community members in children under five years in Buramba cell one.

Aim of the study

To assess community members' knowledge and practices towards first aid

management of burns among children under five years in Buramba cell one Bushenyi

Specific objective

- ✚ To assess community members' knowledge towards first aid management of burns among children under five years in Buramba cell one Bushenyi.
- ✚ To identify practices of community members towards first aid management of burns among children under five years in Buramba cell one Bushenyi district.

Research questions

- ❖ What knowledge do the community members have towards first aid management of burns among children under five years in Buramba cell one?
- ❖ What do the community members do towards first aid management of burns among children under five years in Bulamba Cell one Bushenyi?

Justification of the study

The study would serve the purpose of assessing the knowledge and practices of community members towards first aid management of burns among children under five years at Buramba cell one Bushenyi This would assist the concerned parties like village health team members to come up with measures to address and help improve community members' knowledge and practices towards first aid management of burns among children under five years.

This study would help to identify education needs targeting community members on proper first aid management and practices in children under five years. The findings might also assist the health planners and policy makers as well the Ministry of Health in identifying areas of improvement towards appropriate first aid measures of burns. Findings would add to theoretical basis and literature to be used by future researchers focusing on knowledge and practices of community members towards first aid management of burns among children under five years.

METHODOLOGY

Study design and rationale

This study employed a cross-sectional descriptive study. This design helped to assess knowledge and practices of community members towards first aid management of burns in children under five years.

Area of Study

This study was conducted in Buramba cell one, Bushenyi district which is found in western Uganda. It is 327km from Kampala to Ishaka Bushenyi. It is bordered by Rubirizi in the north, Sheema district to the east, Mitooma district to the south and Rukungiri district to the west. Buramba cell one is 7 km from Bushenyi town and 4km from Ishaka town. It has an estimated population of about 7000 people and the main activities done in the area stone quarrying and subsistence farming. Their main language is Runyankole. The researcher decided to use this area because parents always come with their children in the nearby hospitals presenting with sepsis, shock and dehydration due to burn injuries.

Study population

The study involved females and males residents of Buramba cell one, Bushenyi district aged 18 years and above.

Sample size determination

The sample size will be determined using Fisher's (1990) method in which the sample size is given by the expression

$$N = \frac{Z^2 Pq}{d^2}$$

N=Desired sample size

Z=Standard normal deviation usually set as 1.518 for maximum sample size at 95% confidence interval.

P=50% (constant) or 0.5 since there is no measures estimated

Q=1-p=1-0.5=0.5.

D=Degree of accuracy desired 0.12 or 0.12 probability level (at 95% confidential level).

Therefore, by substitution in the formula,

$$N = \frac{1.518 \times 1.518 \times 0.25}{0.0144}$$

Therefore, a sample of 30 males and females residents of Buramba cell one responded to the study.

Sampling technique

The researcher utilized simple random sampling procedure to obtain the sample size for the study. The researcher gave all potential respondents who met the study criteria an opportunity to participate in the study by picking papers from an enclosed box and any respondent who picked a paper with the word YES written on it was requested to participate in the study. This continued until the total of 30 respondents was achieved.

The study included male and females aged 18 years and above of Buramba cell one who consented to participate in the study.

Exclusion criteria

Community members who did not consent for data collection.

Community members who were found sick at the time of data collection.

Definition of variables

A variable is a characteristic that takes place on two or more values. It is something that changes.

Independent variable was First aid management of burns.

Dependent variable included knowledge and practices.

Data collection instrument/research instrument

Data was collected using questionnaires in English but were translated during the interview to the local language by the research interpreter depending on the respondents preferred language. The questionnaires comprised of both open and closed ended questions. The respondents were required to give a verbal or written informed consent.

Data collection procedure

The researcher got an introductory letter from nursing that was got from school nursing, presented it to the village chairperson Buramba cell one who gave permission to collect data. The research topic was introduced to the respondent and the purpose of the study. The researcher administered a questionnaire to collect data from community members of Buramba cell one who consented and confidentiality was ensured. Questionnaires were interpreted into

Runyankole to those who did not know English. The researcher went through the questionnaires before leaving the data collection area for completeness.

Data management

After gathering the data, the numbers of the participants were known and were tallied with number of the obtainable questionnaires; the questionnaires were coded to promote confidentiality and locked in boxes to protect them from those who are not authorised to see them.

Data analysis

Data was analyzed using papers, pens and pencils. Tallying was done and a calculator used to sum up the findings. Analyzed data was presented in tables, graphs and pie charts using Microsoft excel.

Ethical consideration

The researcher obtained authorisation letter from the department of nursing, Kampala international university school of nursing in form of an introductory letter. The researcher got permission from the village chair person to conduct the study from his village and purpose of the study was explained to him. Respondents were also informed and sought for their consent for the study.

All participants were informed of their rights to refuse researcher ensured location of interviews in places with no interruption and privacy was ensured. Confidentiality was maintained throughout the study by not using names of community members.

RESULTS

SECTION A: Knowledge of community members towards first aid management of burns. Table 1 showing knowledge scores of community members towards first aid management of burns.

KNOWLEDGE SCORES	KNOWLEDGE CATEGORY	CODE
1.0 -2.3	Low knowledge	1
2.4 -3.7	Average knowledge	2
3.8 - 5.0	Good knowledge	3

Knowledge was categorized according to average scores as seen in table 1 one above.

Table 2 showing the knowledge category of respondents towards first aid management of burns in children under five years (N=30).

Knowledge	Frequency (n)	Percentages (%)
Low	0	
Average	19	63.3
High	11	50

Most of the respondents 19(63.3%) had average knowledge while 11(36.7%) had high knowledge about first aid

management of burns in children under five years.

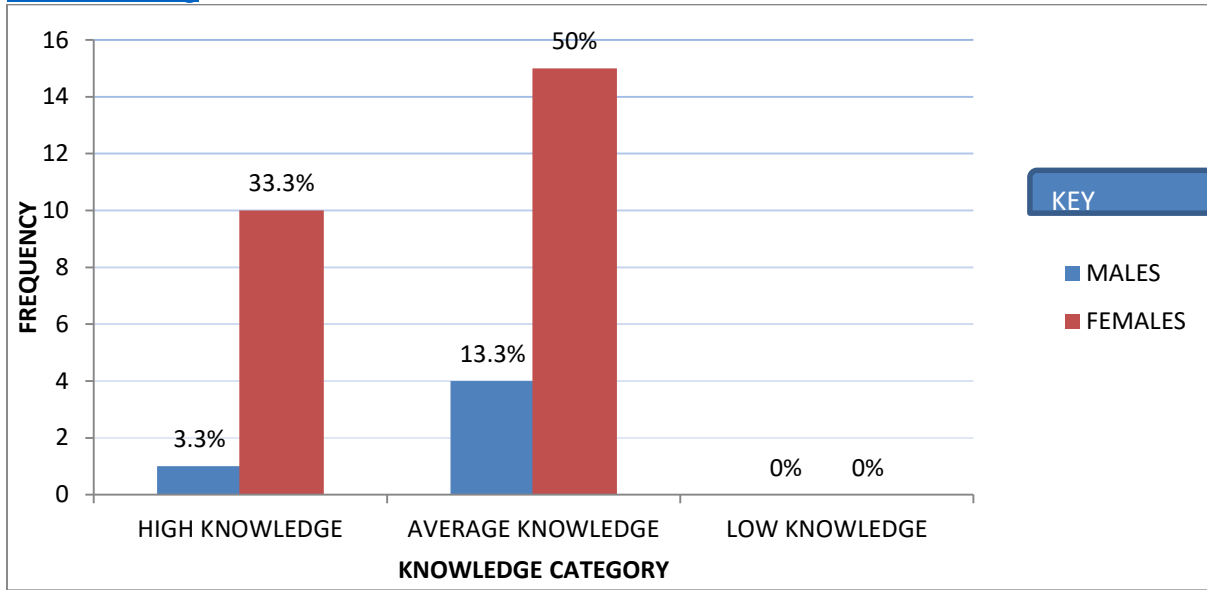


Figure 1 showing knowledge of respondents in relation to gender (N=30).

According to the results in the figure above, 1 (3.3%) had high knowledge about first aid management of burns while 10 (33.3%) had average knowledge about first aid management of burns while 15 (50%) had low knowledge about first aid management of burns in children under five years.

high knowledge about first aid management of burns in children under five years.

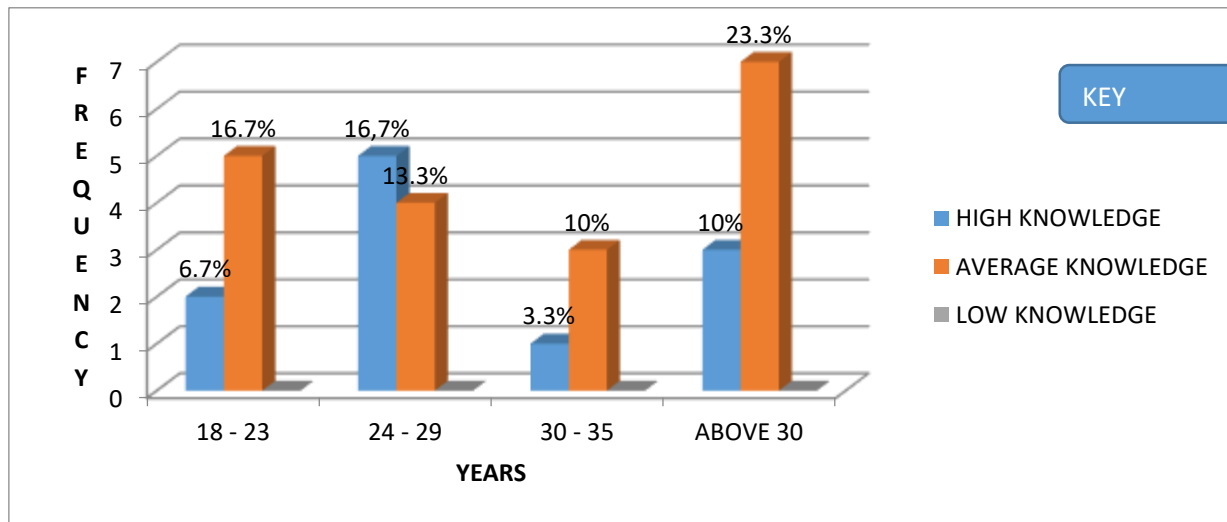


Figure 2 showing the relation of knowledge of respondents by age (N=30).

According to the results in figure 2 above, majority of respondents 2 (6.7%) of 18-23 years had high knowledge about first aid management of burns while 5 (16.7%) of 18-23 years had average knowledge while 0 (0%) had low knowledge about first aid management of burns in children under five years.

minority respondent 1 (3.3%) of 30-35 years had high knowledge about first aid management of burns.

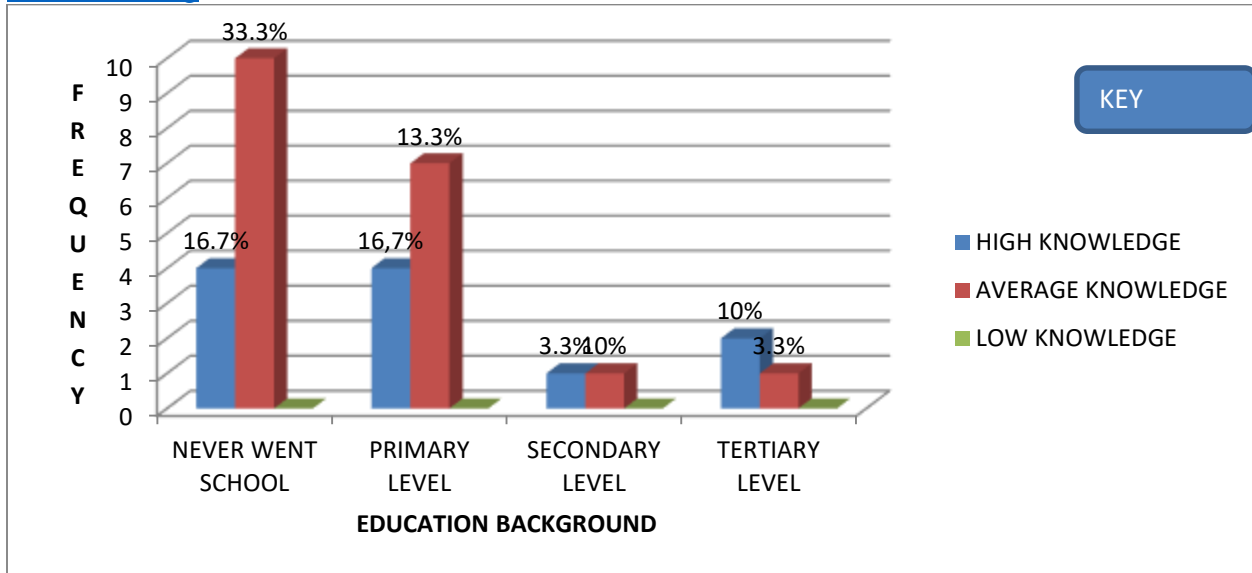


Figure 3 showing knowledge of respondents in relation to education level (N=30).

From figure 3 above, majority of the respondents who had never gone to school 10(33.3%) had average knowledge about first aid management of burns while respondents with secondary level

1(3.3%) had high knowledge and average knowledge respectively about first aid management of burns in children under five years.

Table 3 showing the practices done by community members during first aid management of burns (N=30).

PRACTICES OF COMMUNITY MEMBERS TOWARDS FIRST AID MANAGEMENT OF BURNS	FREQUENCY YES		FREQUENCY NO	
	(n)	(%)	(n)	(%)
Removing the patient from the burning area	30	100	0	0
remove clothes or jewelry from the burnt part	30	30	0	0
Cooling the burnt area with cool or lukewarm water	8	26.7	22	73.3
Keeping the patient warm	28	93.3	2	3.3
Don't break the blisters	26	86.7	4	13.3
Covering the burnt area with clean light cloth or cling film	26	86.7	4	13.3
Give pain killer like Paracetamol	23	76.6	7	
Seeking professional medical help	30	100	0	0
OTHER PRACTICES USED BY CARE GIVERS DURING FIRST AID MANAGEMENT OF BURNS IN CHILDREN UNDER FIVE YEARS				
Cooking oil	8	26.7		
Sugar	8	26.7		
Salt	8	26.7		
Traditional herbs	7	23.3		
Rabbit fur	6	20		
Water with soil	5	16.7		
Vaginal fluids	2	6.7		
Roasted sweet potatoes	2	6.7		
Millet floor	2	6.7		
Burnt hair	2	6.7		
Ghee	1	3.3		
Urine	1	3.3		
Aloe Vera	1	3.3		
Ekutiya	1	3.3		

All respondents 30(100%) practiced removing of the child from the burning area and could remove jewelry from the burnt area respectively while 8(26.7%) of the respondents would apply water on the burnt area. practiced by all respondents

30(100%). Cooking oil, sugar and salt were mostly used by (8)26.7% of the respondents respectively while ghee, urine, aloe Vera, burnthair and ekutiya were the least used practices 3.3% respectively.

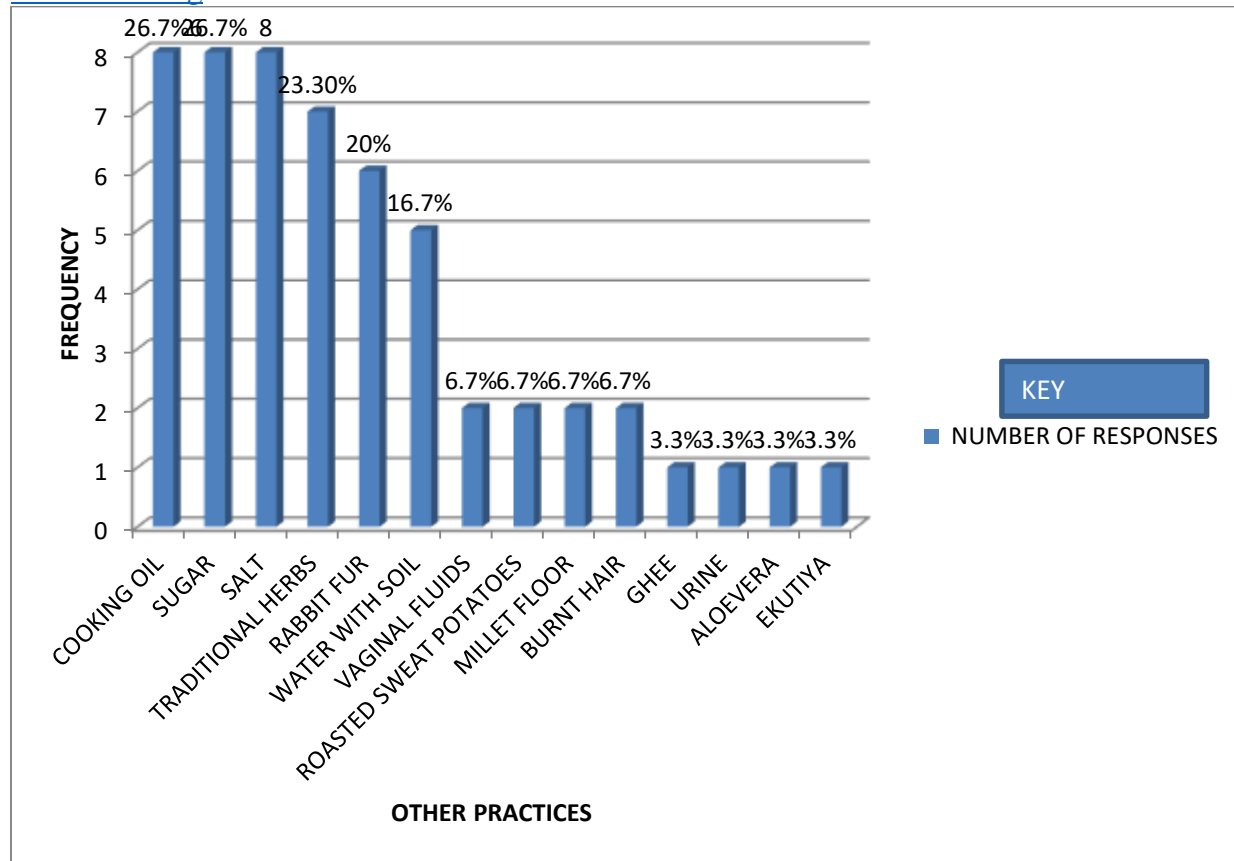


Figure 4 showing other practices used by community members during first aid management of burn (N=30).

Other practices used by respondents are presented in the figure above. Among the used practices, application of cooking oil, salt and sugar were the mostly used measures (8)26.7% mentioned by

community members respectively while ghee, urine, aloe vera, were the least 1(3.3%) mentioned practices mentioned by respondents respectively.

DISCUSSION

Findings on knowledge of community members towards first aid management of burns among children under five years at Buramba cell one.

Good knowledge of respondents in relation to age was seen to be high with respondents between (20 -29) years. This is in agreement with research done by a survey done by [11] which revealed that older people aged (65 and above) were significantly less likely to have optimal knowledge about first aid management of burns compared with adults aged 25 to <65 years. According to education level, most of the respondents 14 (46.7%) had never gone to school but 10 (33.7%) of them had average knowledge towards first aid management of burns. This is not consistent with a study done by [12],

which found out that education and literacy level represents an important factor for proper adoption of first aid practices of burns. The reported literacy rate among Saudi population aged 15 and above was 94.4 % (female 91.4 %, male 96.5 %).

Findings on practices of community members towards first aid management of burns among children under five years at Buramba cell one.

From the findings above, 30(100%) of the respondents would remove clothes and jewelry around the burnt area. This is in line with research done by [13], who found out that less than 40% parents would remove clothing and jewelry.

The findings of this study indicate that majority of the respondents 22(73.3%) did

not use cold water after a burn injury, these findings are not consistent with those in a study done in New South Wales by [11], which revealed that 82% would cool the burns with cold water. This could be attributed to lack of awareness among community members of the recommended first aid measures which emphasise the use of cold running water to the burnt area.

Majority of the respondents 26(86.7%) would not break the blisters after a burn injury. This is consistent with research done in Vietnam by [14] who found out that 80% of the respondents would keep the blisters intact after a burn injury.

Furthermore, the research findings revealed that most of the respondents 28(93.3%) would keep the patient warm. This is consistent with research done by [15] which revealed that 78.3% of the respondents would keep the patient warm after a burn injury.

Another important finding was the use of other methods apart from application of only cold water. The most used methods mentioned were application of cooking

The study found out that the community members of Buramba village had average knowledge about the use of cold water during first aid management of burns. Community members also used traditional home remedies during first aid management of burns and believed they were harmless. Health education of community members on the recommended use of only cold water should be emphasized.

Recommendations of the study

Basing on the above conclusion, the following recommendations were made for first aid management of burns in Buramba village.

- The information about practicing the appropriate practices of first aid after a burn injury have to be communicated to all community members through community gatherings, media and hospital visits to increase public awareness.
- Village Health workers have to be fully sensitized so that they can

oil, application of salt and use of sugar each having 8(26.7%). This was in agreement with the study done by [16] in Harare Zimbabwe, which revealed that care givers used more than one method during first aid management of burns and among them were use of cold water, traditional herbs and margarine.

Furthermore, the study findings above are in line with a study done by the [8] which found out that 77.4% of respondents knew of traditional home remedies and potentially used them during first aid management of burns [17-22]

The study findings above are still consistent with a study done in Kwa-Zulu Natal by [17], which revealed that 59.2 % used substances like eggs, butter, and soap during first aid management of burns. This could be because community members lack of information about the negative effects resulting in use of traditional home remedies during the first aid management of burns in children under five years [23-27].

CONCLUSION

deliver frequent burn management campaigns for the local people.

- Traditional healers and the health professionals have to work together in order to provide the best treatment to children which is not detrimental.
- First aid training for burns at all levels of education should be considered. The curriculums should include both theory and practical issues.

Implications to the nursing practice

Effective first aid of burns reduces severity and depth of tissue damage and improves outcomes. Therefore, as members of the nursing fraternity, it is our role to sensitise the community on current recommended first aid measures emphasizing the use of only cool running water. This is possible through health education during community gatherings and on mother to child clinics.

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