

Knowledge and Health seeking practices among parents on child injuries, at the Lady Ridgeway Hospital, Sri Lanka

Jayasiri Wijayasiriwardhana & Samitha Siritunga

1 Registrar in Medical Administration, ministry of health, Sri Lanka 2 consultant community physician, Non Communicable Disease Unit, ministry of health, Sri Lanka

Correspondent Author: jayasiriwijayasiriwardhana@gmail.com

Abstract

The aim of this study was to assess the knowledge of parents on child injuries and Health seeking practices of parents following child injury. Material and Methodology Used: This descriptive cross sectional study was conducted in the accident service of LRH in 2016. A total of 354 parents admitted with children were recruited using systematic random sampling. An interviewer administered questionnaire and a check list was used as study instruments. Data was analyzed using standard descriptive statistics on Statistical Package for Social Sciences version 21 and associations were analyzed using chi square test, taken $p < 0.05$ as significant. Results: Among parents father: mother ratio 1:10. Nearly one third of parents (33.9%) had an adequate knowledge, which was significantly associated with a higher educational level ($p < .05$). Most of the parents (46%) had obtained knowledge from electronic media. Majority of parents ($n=228$, 64.4%) have gone for health care facility within one hour of injury to the child and 210(59.3%) have selected specialized hospital (LRH) as first place for care following child injury. Conclusions: Only one third of parents had adequate knowledge on child injuries and associated with the level of education. But most of parents have reached health care facility within one hour of injury to the child. Electronic media can be used effectively for improve knowledge of the parents.

Key words: child, injury, parent, knowledge, Health seeking

1. Introduction

Injuries are a global public health problem. They were accounted for 9% of the global mortality (1). Approximately 16000 people die from injuries daily worldwide, and majority of the survivors are left with temporary or permanent disability (2). Injuries can be categorized in number of ways according to intention type, place of occurrence, age of the victim, causative factor for injury, activity at the time of injury occurred of the victim etc. Injuries affect all the stages of life. Globally, around 950 000 children under the age of 18 years die due to injury and violence each year.

Rates of child deaths from injuries are four times higher in low and middle-income countries compared to developed countries (3). About one-third of unintentional injury-related deaths were occurred in South-East Asia region (4). Child injury was the fourth leading cause of death in children less than 5 years old in 2003 in Sri Lanka and accounted for 17.3% of the total burden of injuries in 2007 (5). Childhood injuries lead to multiple problems. According to hospital statistics nearly 50% of young children with unintentional injuries that present to a hospital are left with certain form of disability (5),

Injuries are not inevitable; they can be prevented (1). For the prevention of child injuries, it is important to identify factors affect the occurrence of accidents, such as relationship between the children, their caregiver, the risks in the home and the circumstances occurring prior to the accident (6). According to world report on child injury prevention (5) most of injuries were being preventable. Parents or primary caregivers have a major responsibility on prevention of injuries as majority of occasions parents are the primary caregiver of children. Caregiver supervision has been identified as the most effective method of injury prevention (7). Prevention of child injuries is important as it leads to many problems such as economic, social and psychological. Most of the occasion's parents are the principal caregiver. So parents are the key

stakeholder in addressing childhood injury prevention, their Knowledge and attitudes on child injury are important inputs for actions for prevention of child injuries.

Cross sectional study done at Baghdad, Iraq 2013(8) assessed 1032 mothers knowledge of domestic injury prevention on comments four types of child injuries has found that 62 (6%) had good knowledge and 970 (94%) had bad knowledge. Level of knowledge on prevention varied for different types of injuries only 6.3% of the mothers had good knowledge regarding prevention of cut (sharp) injuries while 11.6% of mothers had good knowledge of burn injury prevention. Descriptive cross sectional study done of 283 parents at village in El-Minia governorate, Egypt at 2014 to find out knowledge of home related injuries were found 63 (22.3%) of mothers didn't know about first aids. Most 148(55%) of mothers gained knowledge from relatives and television and while 23(8%) of parents have gained knowledge from health care workers (9).

A cross-sectional study done by Thein (10) of 1253 primary care givers of children at Singapore 2005 found to have good knowledge of road safety but had limited knowledge of home injuries and first aid management. Only 308 (23.8%) of caregivers new first aid management of burns and scalds while majority 714 (55.2%) knew the first aid management of a choking .Descriptive cross sectional study done at LRH Sri Lanka (11) of childhood unintentional injuries and care givers knowledge on injury prevention of 425 parents 2007 has found most common source of injury prevention (41%) was media followed by relatives 32%.Majoriyy of parents had satisfactory knowledge 281(66%) while 122 (28%) had good knowledge. Only (n=22, 5.2%) of parents had poor knowledge

Health seeking practices are practices done following the event of injury or event. It was important for secondary prevention measures e.g. Reduce severity of damage (5).It includes in health seeking behavior context. (12) has described four important factors contribute for health seeking behavior.

- Availability: refers to geographic distribution of health facilities with functioning, Health care staff, drugs and technology etc.

- Accessibility: refers how community access for heath care center includes transport, roads, etc.
- Affordability: includes treatment costs borne by individual, household or family. It includes direct, indirect and opportunity costs.
- Acceptability: How community accept health care providing by the system, relates to attitudes, cultural and social barriers.(12)

Institutional and system factors, Socio-cultural factors, Individual and household factors has identified as three basic determinants of health care seeking (13).

There was lack of published data on health seeking practices of parents following child injury but population based cross sectional survey (14) at Bangladesh to find health seeking of parents, following burn injury to child has found 60% of parents have gone to unqualified medical practitioners. It also revealed health seeking of parents associated with education and economic status. Sri Lankans live in close proximity to a government health facility, with a radius of about 3 kilometers, enabling easy access, and they are free to seek medical care in a medical institution of their choice (15)

2. Materials and Methods

This cross-sectional study was conducted at Accident service in Lady Ridgeway Hospital (LRH) Sri Lanka. Study was conducted among parents of children admitted to accident service with injuries at LRH during study period of one month 2016. Study sample and sampling technique

Study sample was selected using Systematic random sampling technique and admission register at the Accident service OPD used as sampling frame. Study eligibility was limited to Parents' of children admitted with unintentional injuries and parents admitted with intentionally injured children, caregivers other than parents , parents with emotionally disturbed were excluded from study

sample. Finally eligible sample of parents for this study was 354. Data Collection instruments

A written informed consent obtained from parents before participation. Pre tested interviewer administered questionnaire and check list were used as study instruments. Interviewer administered questionnaire contained sub sections of questions Socio demographic and professional information of parents, Socio demographic and relevant information of children and the injury, Knowledge of parents regarding childhood injury prevention and health seeking practices. All questions were close ended questions, questions were categorized as General knowledge, knowledge on common child injuries (fall, cut injury, animal bites, burn, drowning, road traffic accidents) and first aid and management of injuries. Content of the Questionnaire was assessed by experts in the field community medicine, medical administration and pediatric surgery. Ethical clearance obtained from the ethical review committee at Faculty of Medicine, University of Colombo Sri Lanka.

Only one interviewer other than principal investigator was involved in collection of data to minimize the inter-observer bias. Data collection was done at the Accident service unit where patients are kept before transfer to special units. After checking the eligibility criteria, the parents were informed about the study, given adequate time to ask questions and verbal consent was obtained. Parent's informed that they are free to not participate at all or to withdraw from the study at any time despite consenting to take part earlier. Interviewer was very keen not to interrupt treatments and other activities between child and parent while filling the questionnaire. Parents were ensured that personal data which can use to identify them will not be obtained.

Data analysis was done by using statistical package for social science SPSS version 20. Qualitative data expressed as frequencies and percentages. Quantitative variables presented as mean, standard deviation (SD), mode and range. Chi squared test used as tests of significance. $P < 0.05$ was considered significant. Overall knowledge was calculated by adding total marks of correct answers. Total mark was converted into percentages as follows

Table 1: Cutoff quartiles of knowledge level according to total score

Percentage (%)	Category
0-25	Very poor
26-50	Poor
51-75	Satisfactory
76-100	Good

According to overall level of knowledge satisfactory, very poor and poor categories were amalgamated and termed "inadequate knowledge" while only good knowledge category were termed "adequate knowledge".

3. Results

During the period of study 393 parents were selected but only three hundred and fifty eight met the eligibility criterion of the study. Out of them, 354 responded, thus achieving a positive response rate of 98.8%.

3.1 Socio demographic factors of parents

Majority of occasions mothers (n=321, 90.7%) were stayed with their children; while fathers were with children in less than ten percent (9.3%). Ratio of mother to father was nearly 10:1.

Majority of parents (N=196, 55.4%) were completed education up to GCE/OL and there were only two mother who has not gone to school. Thirty (8.3%) of parents had university education and all of them were mothers. All the fathers (n=30, 29.1%) were engaged with some form of employment but majority of mothers (n=251, 70.9%) were not employed. Majority of parents 345 (97.5%) were married and most of them 224 (63.2%) had nuclear families. Nearly sixty percent of parents (n=212) had two or less than two children. Nearly ten (36, 10.1%) of parents had four or more than four children.

Nearly three quarter of parents (258, 73.2%) of parents were living at single story houses. Almost all (n=342, 96%) houses of parents had electricity facilities, only eight parents (2.2%) used kerosene oil

lamps. The predominant method used for cooking was gas (n=314, 88%) followed by firewood (n=88, 24.8%). Some of the parents used more than one methods. Almost all parents (344, 97.2%) had some kind of communication facility while most of them (222, 62.4%) were using hand phone only. Majority of parents (n=210, 59.3%) had their own transport facility, 89(24.6%) had motorbikes and (n=81, 22.9%) had three wheelers respectively. Of those who did not own a transportation facility (n=144, 40.7%) majority (n=88, 61.1%) preferred three wheeler as the transport method..

Table 2: Socio demographic factors of parents

Variable	Result No	(%)
	n=354	
Ethnicity		
Sinhalese	225	63.8
Tamil	52	14.7
Moor	77	21.5
Age (years)		
21-30	81	22.9
31-40	217	61.3
41-50	53	15.5
51-60	3	0.3
District		
Colombo	289	81.7
Gampaha	38	10.7
Kalutara	18	5.2
Puttalam	3	0.8
Others	6	1.6
Monthly Income (Rs SL)		
≤10,000	9	2.6
10,001-20,000	58	16.4
20,001-30,000	101	28.5
30,001-40,000	78	22.0
40,001-50,000	55	15.5
≥50,0001	53	15.0
Total	354	100.0

3.5 Knowledge of the parents regarding childhood injury prevention

According to score parents were divided in to four categories good, satisfactory, poor and very poor. Knowledge was assessed by eight questions with five stems for each. As described in methodology chapter, according total marks parents were categorized as

good, satisfactory, poor and very poor. The maximum total mark obtained was 35/40 (87.5%). The mean knowledge score was 28.0 (SD=5.2) out of 40.

Table 3: Distribution of parents according to level of knowledge of child injury prevention

Amount of knowledge	Percentage of Marks	No n=354	%
Very poor	0-25%	6	1.7
Poor	26-50%	9	2.5
Satisfactory	51-75%	219	61.9
Good	76-100%	120	33.9
Total		354	100.0

Parents were divided in to two categories ‘adequacy and inadequate knowledge’ depending on total amount of score of knowledge. Nearly one third (n=120, 33.9%) of parents had adequate knowledge and majority of parents had inadequate knowledge (n=234, 60%).

Majority of parents (n=219, 61.9%) had satisfactory knowledge, nearly one third, 120 (33.9%) parents had good knowledge only a very few parents (n=9, 2.5%) had poor and very poor (n=6, 1.7%) knowledge. Most of parents (n=163, 46%) have obtained knowledge from electronic media. Health care staff accounted for 116 (32.3%) instances. Newspapers were used to obtain knowledge by 80 (24%) of parents. Source of information exceeds number of parents because more than one method was used by parents.

Even though overall adequacy of knowledge was 33.9% there was a huge variation of knowledge at different areas of injury prevention. Knowledge on RTA (5.9%), animal bites (8.8%) and first aid (5.6%) were less than ten percent. Knowledge on fall injury prevention was adequate in 57(16.1%) Nearly one third (n=120, 33.9%) of parents had adequate knowledge and majority of parents had inadequate knowledge (n=234, 60%).

Table 4: Distribution of the parents according to the source of information about child injury prevention

Source of information	No n= 451	%
Newspapers	80	24.0
Electronic media	163	46.1
Elders	59	16.7

Friends	21	5.9
Health care Staff	116	32.3
Others	12	3.3

Table 5: Adequacy of knowledge of parents on different aspects of injury prevention

Knowledge Category	Inadequate		Adequate	
	N	%	N	%
	n=234		n=120	
General	179	50.6	175	49.4
Burns	264	74.6	90	25.4
Road Traffic Accidents	333	94.1	21	5.9
Falls	297	83.9	57	16.1
Drowning	312	88.1	42	11.9
Animal Bites	323	91.2	31	8.8
Cuts	219	61.9	135	38.1
First aid	334	94.4	20	5.6

There was statistical significant difference between knowledge scores ($p < 0.05$) and education level of parents. 76% of parents of less than GCE/OL had inadequate knowledge and 55% of educated mothers more than GCE/OL, had adequate knowledge

There was no significant difference between knowledge scores and age of parent ($p > 0.05$). There was no significant difference between knowledge scores ($p = 0.144$) and family type but it showed a significant association between number of children and parents knowledge ($p < 0.05$). Parents of less than 2 children 38% had adequate knowledge while more than 2 children 72% had inadequate knowledge.

Table 6: Association between overall knowledge and selected socio demographic factors of parents

Family type	Inadequate knowledge	Adequate knowledge	Total	Significance
	N %	N %	N %	
	N=234		354 100	
Nuclear family	143 63.8%	81 36.2%	224 100.0%	$X^2=0.247$ df=1
Extended	91	39	130	$P=0.144$.

Number of children				Significance
≤ 2	131 61.8%	81 38.2%	212 100.0%	$X^2=4.38$ df=1
> 2	103 72.5%	39 27.5%	142 100.0%	$P=0.036$
Education level of parent				Significance
≤ GCE/OL	180 76.9%	54 23.1%	234 100.0%	$X^2=36.07$ df=1
> GCE/OL	54 45%	66 55%	120 100.0%	$P=0.00$.
Age of parent				Significance
< 30	58 71.6%	23 28.4%	81 100.0%	$X^2=1.42$ df=1
≥ 30	176 64.4%	97 35.6%	273 100.0%	$P=0.233$.

Health seeking practice of parents regarding current injury prevention

Most of study population 210 (59.3%) has visited to specialized children hospital (LRH) as first place following child injury. Only 59 (16.7%) parents visited the nearest government hospital. Thirty nine (11%) of parents have brought their child to General practitioner while 31(8.8%) of parents have gone to private nursing homes.

Majority of parents (n=228 64.4%) have taken their children to health care facility less than one hour time only 13% of parents have waited more than 12hours for initial health seeking of the child. Most of children (153, 43.2%) were admitted to LRH between 12pm to 6pm.

Table 7: Health seeking practices following injury

First place of visited	No =354	%
General practitioner	39	11.0
Nearest government Hospital (other than LRH)	59	16.7
Ayurveda treatment Centre	6	1.7
Private Nursing Home	31	8.8
Lady Ridgeway Hospital	210	59.3
Others	9	2.5
Time duration(Hours)	No =354	%
≤ 1	228	64.4
>1 ≤6	53	14.9
>6 ≤12	26	7.3
>12	47	13.2
Time of admission to LRH	No =354	%
>06.01AM ≤12.00PM	114	32.2
>12.01PM ≤18.00PM	153	43.2
>18.01PM ≤ 24.00PM	75	21.1
>00.01AM≤ 06.00AM	12	3.3
Mode of transport child to LRH	No=354	%
Motor bike	21	5.9
Three wheeler	170	48.0
Car	18	5.1
Public transport	96	27.1
Ambulance	38	10.7
Others	11	3.2
Accompanied person *	n=457	%
Mother	228	49.9
Father	37	8.1
Grand parents	101	22.1
Teacher	30	6.4
Health care staff	38	8.3
Others	23	5.2
Reason of admit child to LRH *	No n=480	%
Transferred from peripheral Hospital	38	10.7
Nearest hospital to home	134	38.0
Specialized children hospital	198	66.7
More facilities available	101	28.8
Others	9	2.5
Total	480	100

*More than one choices were selected by the parents

Most of time (n=170, 48%) three-wheeler was used as mode of transport of injured children (n=170, 48%) while public transport was used in 96 (27.1%) of occasions to brought the child.

In most instances (n=265, 74.8%), parents themselves have brought the child to LRH. Teacher involved in brought of injured child in 30(8.4%) times while health care staff has brought 38(10.7%) of children to LRH. *Some of the injured children were accompanied by more than one person.

Most of parents (n=233, 66.7%) selected LRH since it is a specialized hospital for children. LRH was the nearest hospital for (n=134, 38%) of parents. Only 8.2% (n=29) children were transferred to LRH.

4. Discussion

Present study was hospital based descriptive cross sectional study. Calculated sample size was 384, systematic random sampling technique was used. During the period of one month, every other parent who fulfills eligible criteria was selected as study sample. During study period of one month from April 20th to May 20th only 354 parents were included for study sample with respondent rate 98%.

Most of parents 217 (61.3%) of current study were at age 31 to 40 years. But study done at Baghdad, Iraq (2013) has been found that most of mothers 814 (78.7%) were at age category of 21–40 years with mean age of 31.34 years (Lafta, 2013). Study done at rural village Egypt 2014 185(65%) of parents were age between 25 to 45years with mean age of 33.9 years. Study done at Jinan city of China 2007 majority of parents 2973 (82.2%) were at age group of 35 to 45 years. This may be due to their difference in socio cultural and age of marriage.

Majority of current study population educated up to GCE O/L 196 (55.4%) and 120 (33.9%) had completed education beyond GCE O/L. Only two parents of total study population had not gained school education. This compare with Asian study at Jinan city of China 2007 educated up to high school level 2462(68%) with 1053(29%) had up to university level. When we compare with study at Egypt 2014 lack of uniformity of education was shown , 90 (31.8%) mothers were illiterate, while 127 (44%) of mothers completed up to secondary education and 66 (23.3%) had university education.

According to current study most of parents were married 345 (97.5%). This situation was consisted of study Jinan city of China 2007, (95%) had normal marital status and (4.5%) were either divorced or widowed (Wang, 2012). Most of family were nuclear 224 (63.2%) and 130 (36.8%) were extended families in current study. This may be due to most of families from city areas of the country. Compare with study done at Baghdad, Iraq 2013 508 (49.2%) had nuclear family and 524 (50.8%) had extended family. (Lafta et al., 2013).

Parent's knowledge regarding childhood injury prevention

In the present study reveals that out of the 354 parents 219(61.9%) were had satisfactory knowledge on child injury prevention while 120(33.9%) had good knowledge, poor and very poor was less than 5% (n=15, 4.2%). This results somewhat tallied with Dharmawardana et al 2007 study at same study setting among caregivers 281(66%) had satisfactory knowledge while 122(28%) had good knowledge. This may be due to difference in content of questions and extensiveness of present study.

Compare with study done china 2007 only 57.5% of parents were able to get more than average KAP score on child injury prevention (Wang, 2012). Both these studies demonstrated overall good knowledge. But study done at Baghdad, Iraq 2013(Lafta et al., 2013) has found that only 62 (6%) had good knowledge and 970 (94%) had bad knowledge. This could have been due to difference in study setting of population of the study.

Present study further assessed knowledge on different components of injury prevention, general knowledge on injury prevention lower than specific types of injury prevention.

Health seeking practices, of Parents' following current injury to child.

Most of parents 210(59.3%) have selected specialized hospital (LRH) for children as first place for care following child injury. This may be due to several reasons. This may also be due accessibility of parents because three fourth of parents were living within 10 km from home to LRH and acceptability of patients from all over the country. Meanwhile 18% parents have gone to either General practitioner or Private Nursing Home and Only 59(16.7%) of parents visited to nearest government Hospital other

than LRH as first place for care. This may be due to parents always seeks best care and facilities for their child anyway they have managed to go to qualified medical personal.

According to Mashreky, (2010) health seeking following burn injury in Bangladesh has found majority (60%) of parents have gone to unqualified medical practitioners. This may be due to differences of health care services and parents acceptability. However most of parents (n=228, 64.4%) have gone for health seeking within one hour of injury occurrence to the child. this reflects acceptability of parents LRH as specialized hospital for children. This could be due to awareness and acceptability of parents about health care.

Most instances mother and grandparents were taken injured child to LRH (table 4.4.3). This could be due to availability them at majority occasions of injuries.

Majority of children (n=267, 75.4%) were admitted at day time 8 am to 8 pm (table 4.4.2). This tallied with time of injury and duration of health seeking following injury. Preferred transport mode was three wheel (n=170, 48.0%). It reflects accessibility of transport system and parents affordability. During Selection of LRH for admission over 90% of parents have selected due to it has been specialized children hospital or more facilities available. Only 38(10.7%) of children, even though parents were admitted to another hospital they were ultimately transferred to LRH. Sri Lanka has free health system and No proper referral system because of that selection of hospital is depends on parents perception. As specialized children hospital LRH may receive more transfers than this amount but according to selection criteria certain number of parents of children who were transferred may not include in the study sample.

5. Conclusion

This study was conducted in order to explore the knowledge, attitudes and practices of parents among children who admitted with injuries. It was a challenge to assess above components by an questionnaire. There were total of 354 of parents who took part in the study (n=354) and respondent rate was 98%.

Majority of parents were mothers (90.7%) at age group 31 to 40 years (61%). Three quarter of parents were living at distance less than 10 km from LRH. Majority of them were educated up to GCE/OL (55.4%) but most of mothers were not employed (70.9%). Majority of them had two or less than 2 children with nuclear family (63%).

Majority of parents have brought injured child to LRH as the first place for care (59.3%), only 16.7% of parents have visited nearest government hospital as first place of care. However two third of parents (64.4%) have gone for health seeking within or less than one hour. Nearly three quarter of times (74.8%) of children were brought to LRH by parents. Majority of parents have admitted their children to LRH due to its' availability of facilities (66.7%) and specialty for children.

One third of parents had good knowledge, while 60% of had satisfactory knowledge with the mean knowledge score was 28.0 (SD=5.2) out of 40. Variability of knowledge on different aspects of injuries were prominent. Only 20% of parents had adequate knowledge on RTA, and first aid management. There was statistical significant difference positive relation between knowledge scores ($p < 0.05$) and education level of parents and significant association between number of children and parents knowledge. Most of parents ($n=163$, 46%) have obtained knowledge from electronic media and newspapers nearly one third from health care staff.

6. Acknowledgements

We would like to acknowledge all the staff members at the Accident service in Lady Ridgeway Hospital (LRH) Sri Lanka for their immense support.

7. References

- [i] ALONGE, O. & HYDER, A. A. 2014. Reducing the global burden of childhood unintentional injuries. *Archives of disease in childhood*, 99, 62-69.
- [ii] KRUG, E. G., SHARMA, G. K. & LOZANO, R. 2000. The global burden of injuries. *American journal of public health*, 90, 523.
- [iii] WHO 2014. *Injuries and violence: the facts 2014*.
- [iv] PANT, P. R., TOWNER, E., PILKINGTON, P. & ELLIS, M. 2015. Epidemiology of unintentional child injuries in the South-East Asia Region: A systematic review. *International journal of injury control and safety promotion*, 22, 24-32.
- [v] PEDEN, M. 2008. *World report on child injury prevention*, World Health Organization.
- [vi] ANDERSON, V. A., ANDERSON, P., NORTHAM, E., JACOBS, R. & MIKIEWICZ, O. 2002. Relationships between cognitive and behavioral measures of executive function in children with brain disease. *Child Neuropsychology*, 8, 231-240
- [vii] . MORRONGIELLO, B. A. & HOUSE, K. 2004. Measuring parent attributes and supervision behaviors relevant to child injury risk: examining the usefulness of questionnaire measures. *Injury Prevention*, 10, 114-118.
- [viii] LAFTA, R. K., AL-SHATARI, S. A. & ABASS, S. 2013. Mothers' knowledge of domestic accident prevention involving children in Baghdad City. *Qatar medical journal*, 2013, 50.
- [ix] KAMEL, E. G., EMAM, S. A. & MOHAMMED, E. S. 2014. Knowledge, attitude and practice among rural mothers about Home-related injuries in a rural area in El-Minia Governorate, Egypt. *Science*, 2, 653-659.
- [x] THEIN, M., LEE, B. & BUN, P. 2005. Knowledge, attitude and practices of childhood injuries and their prevention by primary caregivers in Singapore. *Singapore medical journal*, 46, 122.



[Xi] DHARMAWARDANA 2007. Childhood unintentional injuries: pattern, sociodemographic factors, other relevant factors and the knowledge of injury prevention among caregivers of children admitted to Lady Ridgeway Hospital (Doctoral dissertation, Post Graduate of Medicine (PGIM), University of Colombo, Sri Lanka).

[Xii] HAUSMANN-MUELA, S., RIBERA, J. M. & NYAMONGO, 2003. Health-seeking Behaviour and The Health System Response: [http://pass-international.org/site/images/stories/publications/DCPP Working Paper 14 No Health seeking behavior and the health system response.](http://pass-international.org/site/images/stories/publications/DCPP%20Working%20Paper%2014%20No%20Health%20seeking%20behavior%20and%20the%20health%20system%20response.pdf)

[xiii] GRUNDY, J. & ANNEAR, P. 2010. Health-seeking behaviour studies: a literature review of study design and methods with a focus on Cambodia. Health policy and health finance knowledge hub working paper series no, 7.

[xiv] MASHREKY, S. R., RAHMAN, A., CHOWDHURY, S., SVANSTRÖM, L., SHAFINAZ, S., KHAN, T. & RAHMAN, F. 2010. Health seeking behaviour of parents of burned children in Bangladesh is related to family socioeconomics. *Injury*, 41, 528-532

[xv] RANNAN-ELIYA, R. P. & SIKURAJAPATHY, L. 2009. Sri Lanka: "Good Practice" in Expanding Healthcare Coverage, Colombo, World Bank.