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Research Article

Burden of Unintentional Childhood Injuries in Pre-School Children (2-6yrs) and Knowledge of Primary Caregivers on Early Management: A Descriptive Observational Study in Urban Slums of Bhubaneswar, Odisha

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Abstract

Background

Injuries, particularly unintentional ones, are a neglected public health concern and are preventable or avoidable. Children in urban slums are especially vulnerable due to hazardous living conditions, inadequate supervision, and lack of safe sojourns or play areas. Since these injuries result in seeming spontaneous recovery, appropriate care being initiated by the primary care giver is questionable.

Objective

To assess the burden of unintentional injuries in pre-school going children aged 2-6 years in urban slums of Bhubaneswar, Odisha.

To compare the knowledge of the 1st level care post-injury among the primary care givers against standardized prescribed care.

Methods

A cross-sectional descriptive observational study was conducted for over 2 years in urban slums under the Bhubaneswar Municipal Corporation (BMC), the capital city of Odisha. A total of 285 children aged 2-6 years, whose mothers consented to participate, were included in the study. Data regarding the type of injury and its management, as well as associated socio-demographic factors, were collected using a pre-designed, pre-tested questionnaire. Descriptive statistics was used to derive the burden of unintentional injuries in children. The knowledge of the 1st level of care to be given after the common injuries was assessed among all the primary caregivers to detect the treatment and care gap.

Results

The majority of primary respondents were mothers aged 21-30 years (82.1%). The frequency of an episode of unintentional injury (occurrence in last 3 months) in the study population was found to be 58%. The most common type of injury reported was skin lacerations or tears, common site being in the upper and lower limbs. Males were more affected as compared to females (54.64 %). The reporting of unintentional injuries among the children was found to have significant association with the occupation of the father. Fathers who were unemployed or working as unskilled labor, their child's probability of reporting an unintentional injury was found to be high, with p value coming to be statistically significant.

Conclusion

The study highlights the complex interplay of sociodemographic factors influencing unintentional injuries among children in urban slums and the need to create awareness among the primary caregivers, about the immediate management, so that chronic complications may be averted. It is difficult to avert injury as this age group is agile and nowadays supervision is challenging. Still, the knowledge of management would not just empower the caregiver, but also the growing child, who can attend to their younger siblings or themselves, whenever they get injured next. Further research with larger sample sizes is warranted to validate these findings and develop effective prevention strategies.

Keywords:
Unintentional injuries; Urban slums; living conditions; primary care giver's knowledge

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Introduction

Children's unintentional accidents are mostly avoidable sources of mortality and impairment[1], more so in very young children. Due to their natural drive to explore and experiment with their environment, their tiny stature, and their physical and physiological immaturity to sense danger, children are thought to be more susceptible to unintentional accidents. [2,3,4] Children living in urban slums are particularly vulnerable to unintentional injuries due to a combination of hazardous living conditions, inadequate su-

pervision, and lack of safe play areas. These environments often lack basic safety measures, increasing the risk of injuries from falls, burns, cuts, and other accidents. Understanding the specific vulnerabilities faced by children in these settings is essential for developing targeted prevention strategies. Urban slums have high population density due to unplanned urbanization and the growth of informal settlements in India.[5] Rapid and unplanned urbanization in India has resulted from a shortage of space in towns and cities, increasing environmental dangers and, consequently, a rise in injuries of all kinds, including unintentional injuries, more so among younger age groups. [6], [7] Previous studies have indicated that caregivers in slum areas often face substantial barriers to seeking timely and appropriate medical care for injured children.[8] These barriers may include financial constraints, lack of awareness, and limited access to healthcare facilities. By identifying these gaps, the study aims to suggest ways to improve healthcare accessibility and responsiveness in these communities. The findings of this study have significant implications for public health and policy-making. By highlighting the factors that contribute to unintentional injuries, the study will provide evidence-based recommendations for creating safer environments and improving healthcare access for slum children. This can lead to better resource allocation and the implementation of effective injury prevention and treatment programs. Ultimately, the goal of this study is to enhance the health and safety of children living in urban slums. By identifying and addressing the risk factors, this research will contribute to the well-being of a highly vulnerable segment of the population, helping to reduce injury rates and improve outcomes for affected children.

Material and Methods

This study was a community-based cross-sectional observational study aimed at assessing the vulnerability of slum children aged 2-6 years to unintentional injuries in urban slums of Bhubaneswar, Odisha. The study area included urban slums within Bhubaneswar city, under the jurisdiction of the Bhubaneswar Municipal Corporation (BMC). The study period was for two years from June 2022 to July 2024.

Using the prevalence of unintentional childhood injuries as 24% (Kn *et.al* in Saudi Arabia [9]) and absolute precision as 5% with level of confidence as 95% and power of the study as 80%, using the formula $\{Z^2 \times (p \times q) / d^2\}$, where Z= 1.96, p = 24%, q = (1-p) and d = 5%; sample size was estimated approximately to be 280. A design effect of 1 was applied and no adjustments were made with regards to non-response or heterogeneity as the given population was already difficult to get. Moreover, the caregiver's response to the study was very proactive and supportive, as they perceived this to be of great utility to ensure the safety of their children of this age group. Hence, non response was minimal in this study.

Two stage sampling technique was adopted for the selection of slums and study population. Stratified sampling was used for slum selection: A list of all the slums under the 3 zones of Bhubaneswar (North, Southwest and Southeast) was obtained from the BMC. To get equal representation from each strata, as per the calculated sample size, 95-100 children were to be taken from each strata. 4 slums from each zone/strata are selected randomly by lottery method. A list of all the children from 2-6 years was collected from the nearest Anganwadi Centre/worker and to achieve a sample of 100, at least 33- 34 children were needed from each slum.

Consecutive sampling was used according to the list to achieve sample size in study population. After obtaining data from Anganwadi workers, the first household was approached through consecutive sampling following door to door procedure.

The primary care giver of the study population (which in most cases was the mother) was approached as per the list consecutively till 33-34 children were available and care giver willing to participate and who gave consent. In case sample were not achieved in any 1 slum, extra was taken from the other selected slum. The study population comprised of pre-school children (2-6 years) who were available at the time of the survey to enable a physical verification of details and anthropometry check, regardless of their gender. The respondents were mothers/primary caregivers >18 years of age who gave written informed consent. A single child from each household was included. In case there were more than 1 eligible participant, the younger child was included in the study. An injury that happened in the last 3 months which warranted a long duration of treatment and care, leading to pain and restriction of

activities of daily living was included in the study. If more than 1 episode of injury was reported, then the severe form of injury was considered for study.

Subjects who were not available even after 2 home visits, the mother absent/dead and the primary caregiver was less than 18 years, if either the respondent or the child was a known case of mental illness irrespective of the treatment status, children with congenital anomalies and any child with a medico-legal case of injury (intentional) or very severe form of injury that led to prolonged hospitalization, disability, loss of life were excluded from the study.

Study tool: The study employed a semi-structured, pre-tested, pre-designed, and interviewer-administered questionnaire in the English language. A language consultant and a second expert, unaffiliated with the study, translated the learning tool into Odia and then back-translated to English for greater comprehension by the study participants and accuracy of the information gathered. Three subject matter experts verified the study tool. The Sikharchandi slum, which is close to the medical institution, was then chosen for pilot testing. After the pilot research, the required changes were made to extract relevant data related to the study. Both open-ended and closed-ended questions were included.

The questionnaire was divided into the following sections: Social and demographic data (included socio-demographic details like age, religion, caste, marital status, family type, the respondent's and her spouse's level of education, their occupations, the family's monthly income and expenses) and History with details of the injury. The mother's knowledge regarding immediate care that should be given after common injuries was compared to the prescribed standards to know the treatment gap, which was expressed in percentages.

Data Analysis

The collected data was entered into Microsoft Excel sheet. Coding and cleaning of the data was done and data analysis was done using SPSS Version 25.0. The dependent variable was the reporting of any unintentional injury in the last 3 months dichotomized as yes and no. So it was a categorical variable. The frequency of the reports helped ascertain the burden of the problem. The assumptions for normality were checked by observing the means and medians. The independent variables were the socio-demographic characteristics that were represented as frequency and percentages. Characteristics of the injuries in terms of common type, sites, and health-seeking behavior would be depicted using graphical charts like pie charts with percentages as data labels. Knowledge of the caregivers was calculated as a percentage of the sample who could answer correctly regarding the first initial level of care that was supposed to be rendered before seeking medical aid in diverse types of injuries that afflicted this age group.

Ethical Clearance: KIMS Institutional Ethics Committee (IEC) gave clearance to carry out this research study with Ref. No.: KIIT/KIMS/IEC/931/2022, Dated 2nd July 2022. An approval was also sought from the ward member of the selected slums, to get requisite cooperation from the population.

Results

Table 1 represents the details of the socio-demographic characteristics of the respondents wherein mothers were the primary respondents (82.1%), with maximum of respondents 72.9% being 21-30 years old. Around 81.4% were Hindus and 13.9% were Muslims. There was a near equal representation of general and other castes (51% vs 49%) in the study population. More than half of the families were of nuclear type, and 44.3% of families had more than 4 family members.

Table 1. Sociodemographic profile of the study participants (N=280)

		Frequency	Percent
Category of respondent & Relationship with the Child	Mother	230	82.1
	Father	42	15
	Grandmother	8	2.9

Table 1 (continued)

		Frequency	Percent
Age group of respondent	10-20	2	0.7
	21-30	204	72.9
	31-40	62	22.1
	>40	11	3.9
Religion	Hindu	228	81.4
	Muslim	39	13.9
	Sikh, Christian and others	13	4.6
Caste	General	143	51.1
	OBC, SC & ST	137	48.9
Type of Family	Nuclear	143	51.1
	Joint	130	46.4
	Extended	7	2.5
No. of Family Members	less and equal to 4	156	55.7
	above 4	124	44.3
Educational status of Mother	Illiterate	52	18.6
	Primary, Middle school	77	27.5
	High school and above	150	53.6
Education status of Father	Illiterate	23	8.2
	primary, middle school	80	28.6
	High school & Above	177	63.2
Occupation of Mother (Maximum time spent in the last 1 year)	Unemployed	158	56.4
	Unskilled worker & Labour	114	40.7
	Semi profession	3	1.1
	Profession	5	1.8
Occupation of Father (Maximum time spent in the last 1 year)	Unemployed	10	3.6
	Unskilled worker, labour	128	45.7
	self employed, skilled	62	22.1

In terms of economic parameters only 4.6% reported a net family income of less than Rs. 10,000. Majority (56.4%) of the respondents were homemakers and amongst the fathers, only 22.1% were engaged in any skilled profession. Illiteracy rate among fathers was less as compared to mothers (8.2% vs 18.6%).

Table 2 gives the association of the occurrence of an unintentional injury to the sociodemographic variables considered in the study. The incidence of the injury among this age group is high when the child is aged 2-4 years (74.2%), when the father is engaged in unskilled labour (51.5%), high even

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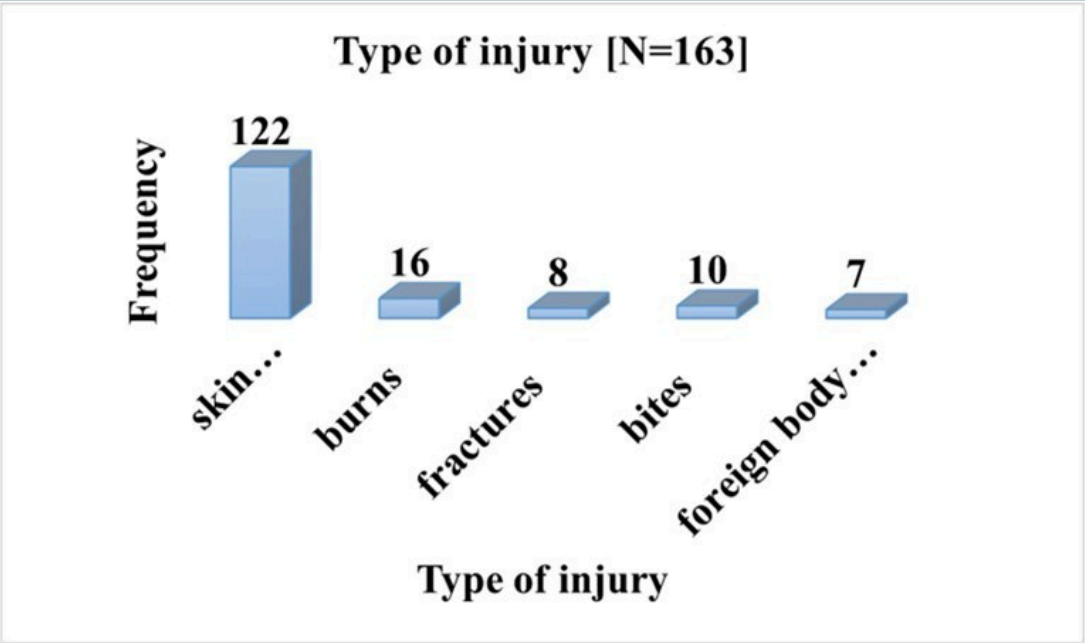

Figure 1. Frequency and type of unintentional childhood injuries reported

when the mother is a housewife (57.1%), and higher when both parents are educated. None of these variables are statistically significant, which warrants further studies with larger samples. As there are no variations in gender and also type of family regarding reporting an injury, it very much hints that there is a greater likelihood that the microenvironment i.e. living conditions and social behaviour of the child cause the injury, rather than the care rendering factors. The most common injury type reported was skin lacerations or tears, with a substantial number of 122(58.21%) among the children (Figure 1). Burns were the second most frequently reported injuries followed by bites, fractures and foreign body ingestion. The most common locations for injuries were playgrounds or farms, accounting for 41% (Figure 2). This was closely followed by injuries that happened at home, whether by oneself, a neighbour, or a relative, which made up 36% of the cases and 20% of injuries occurred outside the home or residential premises. Majority of the unintentional injuries were sustained in upper limbs and lower limbs, with 41% and 28% of the documented cases respectively

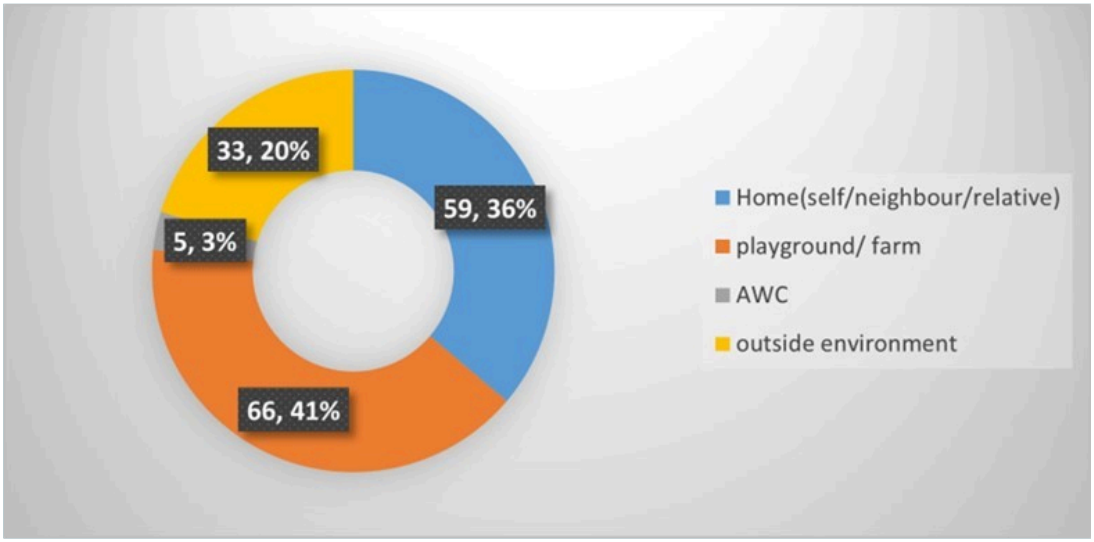

Figure 2. Place of occurrence of injury (N=163)

Table 2. Association of socio-demographic variables with unintentional childhood injuries. (N=280) *(df)

Variables	Variables and their levels	Injury Yes	Injury No	Chi-square test, P value, df
Respondent No. & Relationship with the Child	Mother	135 (82.8%)	95 (81.2%)	.288 (2) .860
	Father	23 (14.1%)	19 (16.2%)	
	Grandmother	5 (3.1%)	3 (2.6%)	
	Total	163	117	
Age group of Respondent	10-20	1 (0.6%)	1 (0.9%)	2.758 (4) .649
	21-30	121 (74.7%)	83 (70.9%)	
	31-40	34 (21.0%)	28 (23.9%)	
	41-50	1 (0.6%)	3 (2.6%)	
	>50	5 (3.1%)	2 (1.7%)	
	Total	162	117	
Religion	Hindu	130 (79.8%)	98 (83.8%)	.749 (2) .709
	Muslim	25 (15.3%)	14 (12.0%)	
	Sikh, Christian and others	8 (4.9%)	5 (4.3%)	
	Total	163	117	
Caste	General	83 (50.9%)	60 (51.3%)	2.750 (2) .252
	OBC	42 (25.8%)	38 (32.5%)	
	SC & ST	38 (23.3%)	19 (16.2%)	
	Total	163	117	
Gender	Male	89 (54.6%)	64 (54.7%)	.000 (1) 1.00
	Female	74 (45.4%)	53 (45.3%)	
	Total	163	117	
Type of family	Nuclear	77 (47.2%)	66 (56.4%)	3.888 (2) .137

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Table 2 (continued)

Variables	Variables and their levels	Injury Yes	Injury No	Chi-square test, P value, df
	Joint	80 (49.1%)	50 (42.7%)	
	Extended	6 (3.7%)	1 (0.9%)	
	Total	163	117	
No. of Family members	Less and equal to 4	84 (51.5%)	72 (61.5%)	2.763 (1) .113
	Above 4	79 (48.5%)	45 (38.5%)	
	Total	163	117	
Educational Status of Mother	Illiterate	27 (16.6%)	25 (21.4%)	2.105 (3) .596
	Primary, Middle & Intermediate school	48 (29.4%)	29 (24.8%)	
	High school and above	87 (53.4%)	63 (53.8%)	
	Graduate & above	1 (0.6%)	0 (0.0%)	
	Total	163	117	
Educational Status of Father	Illiterate	15 (9.2%)	8 (6.8%)	.783 (2) .684
	Primary, Middle school	48 (29.4%)	32 (27.4%)	
	High school & above	100 (61.3%)	77 (65.8%)	
	Total	163	117	
Occupation of Mother(Maximum time spent in the last 1 year)	Unemployed, housewife	93 (57.1%)	65 (55.6%)	.802 (3) .888
	Unskilled worker & Labour	66 (40.5%)	48 (41.0%)	
	Semi profession	1 (0.6%)	2 (1.7%)	
	Profession	3 (1.8%)	2 (1.7%)	
	Total	163	117	
Occupation of Father(Maximum time spent in the last 1 year)	Unemployed	7 (4.3%)	3 (2.6%)	7.527 (3) .050
	Unskilled worker, labour	84 (51.5%)	44 (37.6%)	
	Self-employed, skilled	34 (20.9%)	28 (23.9%)	

Table 2 (continued)

Variables	Variables and their levels	Injury Yes	Injury No	Chi-square test, P value, df
	Professional	38 (23.3%)	42 (35.9%)	
	Total	163	117	
Age group of Child	2-4	121 (74.2%)	94 (80.3%)	1.426 (1) .253
	5,6	42 (25.8%)	23 (19.7%)	
	Total	163	117	

Table 3 clearly shows the knowledge gap among the care givers about the initial steps to be undertaken at the time of common injuries that occur in this age group. The gap was worse for injuries like foreign body ingestion and being stuck by lightning. The study site was a plains terrain. Drowning was uncommon and information was poor among caregivers regarding the maintenance care, but interestingly, this knowledge was better among caregivers of children who did not report an injury, which also can suggest that it protected the children from such exposures. 50.9% had knowledge of how to manage dog bites, which is a common menace in the city and 50% of those who reported falls could say what immediate care is essential.

Discussion

This study assessed the burden and patterns of unintentional injuries among children aged 2-6 years in urban slums of Bhubaneswar, Odisha. Most mothers (primary respondents) were aged 20-30 years, Hindu, and part of nuclear families. Among the children, 54.64% were males and 45.36% were females. Similar results were seen in a study done in a rural block of Tamil Nadu in which 51.2% were males and 48.8% were females. [10] Illiteracy among fathers was much less as compared to mothers where around 18.6% were illiterate, however, the level of education was limited as no one was educated beyond high school. Parental education significantly impacts injury prevention. Higher educational levels are associated with better knowledge and practices regarding child safety. However, the education of either of the spouses was found to be insignificant with regards to reporting of an injury. Around 16.6% of unintentional injuries were reported in children of illiterate mothers {p=0.596} which was not found to be statistically significant. A study by Pomerantz *et al.* (2007) found that educated parents are more likely to engage in proactive injury prevention behaviors.[11]

There was no statistical significance found which may be due to fact that small sample size used in the study but there were some variations found in the study. In educational status, it was seen that those who had high school and above level of education showed similar response with respect to reporting and non-reporting of injuries as they were more in number. Although the study was conducted in urban slums, where people were staying in compromised living conditions, the literacy rate among this population (including women) was good. Higher literacy rates may be the cause behind higher reporting of injuries irrespective of the magnitude of damage of injury.

The reporting of injuries in the case of unemployed respondents or homemakers was high because they stay at home and take care of their children which is not possible in case of working respondents, as they may be unaware of any day-to-day incidents. The maximum number of injuries were seen in the age group of 2-4 year age group, though this was not statistically significant as the study population was limited to a small sample which needs more exploration, along with time and budget.

163 (58.21%) of the 280 children in the 2–6 year age group in this study suffered unintentional injuries. This was comparable to the results of Mahalakshmy T et al., who discovered that the prevalence of injuries among children aged 1–4 and 5–14 years was 15.2% and 24.5%, respectively [12]. In a study of 1613 children under the age of 14, conducted in rural Puducherry, South India, the injury rate was

Table 3. Assessment of knowledge amongst the primary care giver regarding 1st essential steps in case of an injury (N=280)

Types of injury	Correct Response	Child with injury n=163	Child without injury n=117
Falls down has concussion & bleeding	-Apply firm pressure over the wound -Use ice packs over swollen area -Seek immediate medical help	50%	55.3%
Gets bitten by dog	-Wash the wound with running tap water & soap -Vaccinate the person with ARV	50.9%	48.4%
Gets bitten by a snake	-Wash the wound with soap and water -Apply firm bandage over bite -Take person to hospital immediately	44.8%	41.5%
Gets a burn Injury	-Hold the burn area under running tap water -Remove wearables from that area -Seek immediate medical help	46.2%	40.7%
Gets an electric shock	-Switch off the electrical point -Lie down the person on insulated surface -Call immediate medical help	46.2%	37.2%
Foreign body ingestion	-Stop feeding the person -Give thrust at back -Diaphragm thrust -Immediate medical help	**25.2%**	17.5%
Gets struck by lightning and thunderstorm	-Standing under tree, electric poles, open field is dissuaded -Look for airway, breathing and circulation -Seek immediate medical help	**21.5%**	17.4%
Drowns	-Remove wet clothes -Make the patient warm -Immediate medical help	**20.6%**	36.2%

23.0%[13]. The disparity in the incidence may be due to a difference in local factors in each of the study settings and the demographic variations among the study populations. Since this is self-reported and

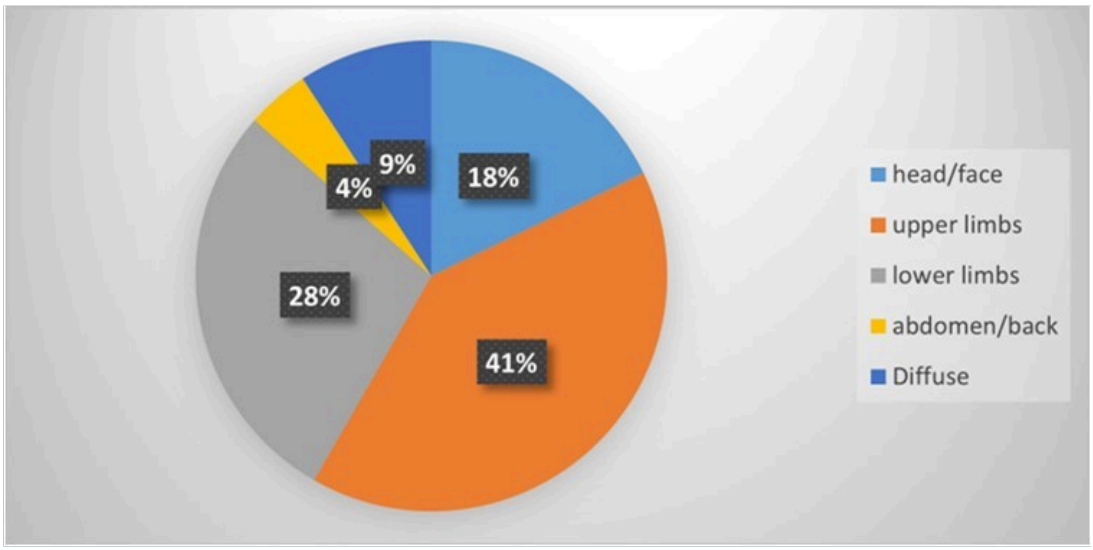

Figure 3. Body parts affected by Unintentional injury in sampled population

the study was done in the field practice area of a tertiary care hospital, may be there the people had easy access to health services and the response and awareness to report small injuries were high. Normally studies done addressed injuries in higher age groups, or were done in rural areas, as a hypothesis that these injuries are high in rural areas. No studies have been done in urban slums, where living conditions are conducive to injuries among the children, especially in the age group of 2-6 years.

The most common injury type reported was skin lacerations or tears, with a substantial number of 122(58.21%). Burns were the second most frequently reported injuries followed by bites, fractures and foreign body ingestion. The stark contrast between the high number of injuries sustained in the skin as compared to the other types of injuries in the sampled population might be due to the fact that in slums, the roads are clumsy, ill maintained and with open manholes (at certain sites) that increases the risk of exposure of the pre-school children while playing outside the house or on the roads; particularly resulting in skin injuries. Improvement in the outside environment, thereby making safe playing areas for children can curb these types of injuries.

A study conducted by Singh J *et al.* estimated the rate of rabies from animal bites at 80 per 100,000 populations. This rate was drastically higher for 5-14 years old children, with bites from stray dogs accounting for 90% of documented cases [14], and this study too hinted at similar results. A study done to look at the profile of accidents in children less than five years of age belonging to a rural community in Belgaum district reported abrasions (72.6%) and lacerations (11.8%) as the most common type of injury.[15]

(Figure 2) The most common location for injuries was found to be playgrounds or farms, accounting for 41%. This was closely followed by injuries that happened at home, whether by oneself, a neighbour, or a relative, which made up 36% of the cases. The third most frequent location for injuries was the outside environment, which constituted 20%; the least common location was the Anganwadi Centres (AWC), contributing only 3% of the reported injuries. The above-represented data indicates that playgrounds or farms and homes are the primary settings where injuries occur, collectively accounting for over three-quarters of all reported cases. This suggests that preventive strategies should be focused on these environments to effectively reduce the overall incidence of injuries. The relatively low frequency of injuries at AWCs indicates that these centers might have effective safety measures in place and also the vigil by the workers helps in safety of the attendees. Studies done in India[16], Nigeria[17] and Egypt[18] have reported a significant proportion of burns occurring at home especially in children. This might be because of the practices like cooking in the living area, cooking at the ground level etc and since younger children spend more time at home and they are the ones who need utmost supervision and care. It might also be a reflection of inability to supervise the children optimally.

A tertiary care hospital based study in New Delhi, India, by Verma *et al.* reported that home was the most common place of injury (60.8%), followed by streets/highways (16.8%), park/playground (16.4%) and school (3.5%) [19]

“Global childhood unintentional injury surveillance in four cities in developing countries: a pilot study” in Bangladesh, Colombia, Egypt and Pakistan also showed that the majority of the injuries occurred in and around the home environment (56%). These findings are somewhat similar to the findings of the present study.[20]

The developmental processes taking place in children, which have an effect on their ability to make judgments in the road environment, are closely related to age 6.

The majority of the unintentional injuries were sustained in upper limbs and lower limbs, with 41% and 28% of the documented cases respectively. A hospital-based study done among children presented with injuries in North Kerala also reported the head (49%) and lower legs (45%) as the most common body parts involved in injury.[21] These findings align with the findings of the present study.

Table 3 shows the number (in percentages) of correct responses regarding primary essential care that should be given in case of various types of injuries, that have been considered in this study. In both the groups, the knowledge response was nearly 50% or much less, which means that this care giver population as a whole had poor knowledge of how to handle or offer primary care in case of these injuries. Generically the entire population needs primary education as to what are the essential preventive steps if this kind of injury happens.

Highest correct response regarding knowledge of injury was seen in case a child falls down and had concussion or bleeding (50.9%) among caregivers those whose children had injury and 55% amongst those whose children did not have, the current findings can be comparable to the findings from the Karnataka study done by kumar *et al.* in 2021, indicating similar levels of knowledge i.e (50% for children with injury and 55.3% for children without injury) [21]and the poorest response was noted in case of foreign body ingestion. and lightning to be 25.2% and 21.5% in respondents whose children who had injuries, and 17.5% & 17.4% amongst those who did not have ,even though this incidence was very common in this age group and death might be eminent if immediate precautionary measures are not immediately taken. A similar study done in Andhra Pradesh by **Reddy, k,** et al. in 2016 found that 19% of caregivers knew how to handle foreign body ingestion.[22] In other cases, the correct responses varied from 25.2% to 50% in both groups.

While conducting the survey, we came to know about 1 death was reported in the study age group, because of foreign body ingestion which was excluded under our exclusion criteria. In general, the caregiver's information about the primary steps on how to deal with injuries is highly insufficient.

The study has brought about a much preventable cause of morbidity and stress among an age group i.e. 2- 6 years, in an area, where caregivers need information as well as amenities to address the problem of injuries. NGO or CBOs working for child health as well as ward members of slum areas can be stakeholders in child safety and help build up a livable and injury free environment for the children.

Limitations

The study is addressing a very small section of age group of children of 2-6 years, however risk of the unintentional injuries is alike for the higher than 6 age group too. However, this was done to understand the injuries that might be inflicted for longer stay in house and thus have relevance with housing. Only urban slum children were taken, non-slum children could not be explored. Rural children in the same age group were also excluded due to time and budget restrictions. Recall bias and reporting bias cannot be ruled out. Knowledge intervention could not be planned as it was a descriptive study. However, the key members in the slum as well as the ASHA male and female workers were given a small module about dos and don'ts for the common injuries discussed in this age group. The effort was appreciated by the community and had ramifications on the children of all age groups and more so caregivers were very responsive to the study team, for awareness on the 1st level care post various forms of injury.

Conclusion

This study highlights the significant burden of unintentional injuries among children aged 2-6 years living in the urban slums of Bhubaneswar, Odisha, with a reported rate of 58% and also brings out the dire need of awareness about immediate post injury care among care givers which would greatly limit any dire or poor outcomes among this vulnerable age group.

Competing Interests

The authors have no conflict of interest to declare.

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