

Sanitation and Hygiene Practice of Street Children Living in the Kathmandu Valley

Dr. Mala Kunwar

Research Expert,

Nepal Philosophical Research Center, Kathmandu

Email: malakharel@gmail.com

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Abstract

Street children are spending the unhygienic life in street though they look happy to live in street. There is no exact data of street children in Nepal. Kathmandu is main city where more street children are seen begging in the street. The study was conducted to identify the sanitation and hygienic practice of street children living in the Kathmandu valley. There was total 234 street children selected for this study. The study found that majority of street children used to take path one time in every week. Similarly, majority of street children used the public toilet whereas 24% street children were using open space (open defecation) which was not good from the environmental perspective. The study also found that majority (58.12%) of street children used to take food from street shop. The food available in street shop is not hygienic because of the weak sanitation of surrounding environment. There is high chance of contamination due to dust pollution and use of untreated water for cooking food.

Keywords: Hygiene, Kathmandu, Sanitation, street-children

Introduction

'Street children' are children who rely on the streets for survival, whether they live, work, or have support networks on the streets, or a mix of the three. Sometimes the term streetism is also found to describe the street children but 'Streetism' is a relatively new term which means "living on the streets or being of the streets". It is sometimes used to describe the street children especially in Anglophone Africa (Consortium for Street Children, 2019). Street children are divided into two groups. The first category is known as 'Youngsters of the Street,' which refers to children who are homeless and rely on the streets of cities as a source of income and a place

to sleep and live. The second group is referred to as "children on the street," who work and live on the streets during the day but come home at night to sleep, though some of them do sleep on the streets on occasion (UNCHS (Habitat), 2000).

There are street children in all major cities of Nepal. The number of children living and working on the streets is growing as the population expands and urban poverty extends. Many street children are abused and exploited due to the harsh nature of their conditions and a lack of adult support. Most of these children will eventually get locked in the cruel cycle of street life, with little or no support. In Nepal, there is no exact data of street children. One report has shown that the number of street children is rising in Nepal's cities, particularly in Kathmandu. In Kathmandu, there are currently 1000 street children. Over 4000 street children live in Nepalese cities outside of Kathmandu, including Pokhara, Biratnagar, Dharan, Nepalgunj, Bhairawa, and others. 90% of the children living on the streets are male and 10% are female (Third Eye Foundation, 2022).

The study found some relevant international study done among the street children to identify their sanitation and hygiene practice. One study of Nigeria conducted among 99(94.3%) of males, and 6(5.7%) females, with mean ages of 13.6 ± 2.3 years. The study found that only 36(34.3%) street children used soap+water to wash their hands after using the toilet. 26(24.8%) and 14(13.3%) respondents respectively were moderately and severely stunted, while 24(22.9%) and 19(18.1%) were moderately and severely underweight respectively (Sosanya & Ibrahim, 2014). Similarly, a study was conducted with the objective to assess intestinal parasitic infestation and hygiene practices among the students of the specialized school for the street children in Dhaka city of Bangladesh shows that out of 81 children, 44.4% of the them were stunted that is height for age less than -2 z score and 39.5% of the children were underweight in that is z score less than -2 . The overall nutritional status indicated that 43.2% of the children were normal and 56.8% were malnourished (Sultana, et al., 2015). The review literature found another cross-sectional study recruited 845 SIYP age 10–24 years in two States in Nigeria to determine if there was an association between oral hygiene practices and water and sanitation hygiene (WASH) practices among street-involved young people (SIYP). The study found that the proportion of SIYP with good knowledge of oral hygiene was low (31.2%), and fewer had good oral hygiene practice (8.9%). There were significant associations between knowledge and practice of tooth cleaning, use of fluoride-containing toothpaste, dental flossing, consumption of sugar between meals, and frequency of dental check-ups ($p < 0.001$ respectively) (Folayan, Obiyan, & Olaleye, 2020).

In Nepal, the study had not found any recent published research articles on sanitation and hygiene practice of street children. There is research gap to identify the health, sanitation and hygiene practice of street children because it is one neglected topic for the researcher. But many government efforts, such as 'Streetchildren' and 'Namaste Children Nepal', are attempting to assist these street children. However, neither the government's authorized budget nor their vision is effective. The government is still defending its position, and the country is still in a

state of political unrest. So far, there haven't been many effective strategies and efforts implemented by government agencies. And as a result of not receiving the level of help that they are supposed to receive from government institutions, the lives of these street children have become far more difficult (Kathanurag, 2021). In such condition, situation of street children become neglected issues. The study had not found published research-based report on the sanitation and hygiene practice of street children of Nepal so considering this gap, the study will be useful for the future researcher to know the sanitation and hygiene practice of street children of Kathmandu valley.

Objective of the Study

The main objective of this study is to identify the sanitation and hygiene practice of street children living in the Kathmandu valley. Specifically, the study has explored the bathing practice, use of toilets and eating place of street children.

Materials & Methods

The study had adopted the quantitative method to collect the data. It had applied the structured questionnaire survey among the street children to know their sanitation, and hygiene practice. Total 234 children were interviewed and analyzed the data from statistical software (SPSS). The sample size was calculated by using the standard formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n = is the sample size,

N= is the population size of street children which is assumed 1500 by CWIN in Kathmandu valley,

e = is the level of precision

$$n = \frac{1500}{1 + 1500 * (.06)^2}$$

$$n = \frac{1500}{1 + 1500 * .0036}$$

$$n = \frac{1500}{1 + 5.4}$$

$$n = \frac{1500}{6.4}$$

Final sample size= 234

The study carried out the pre-testing of survey tool to test the reliability and validity of research instruments. Based on the feedback of pre-testing, the instrument was finalized and final data was collected.

Result & Discussion

The following figure 1 shows the demographic information of street children who were participated in the study. Janajati caste group (49%) street children were in more number than the other caste group like Brahmin, Chhetri, Madhesi, Dalit, Muslims and Others. In case of

gender distribution, male (81%) street children were found more at street than female number. The study reports that the age group between 11-15 years (61%) had more negative influence of leaving their home and spending their lives in street in comparison to other age group.

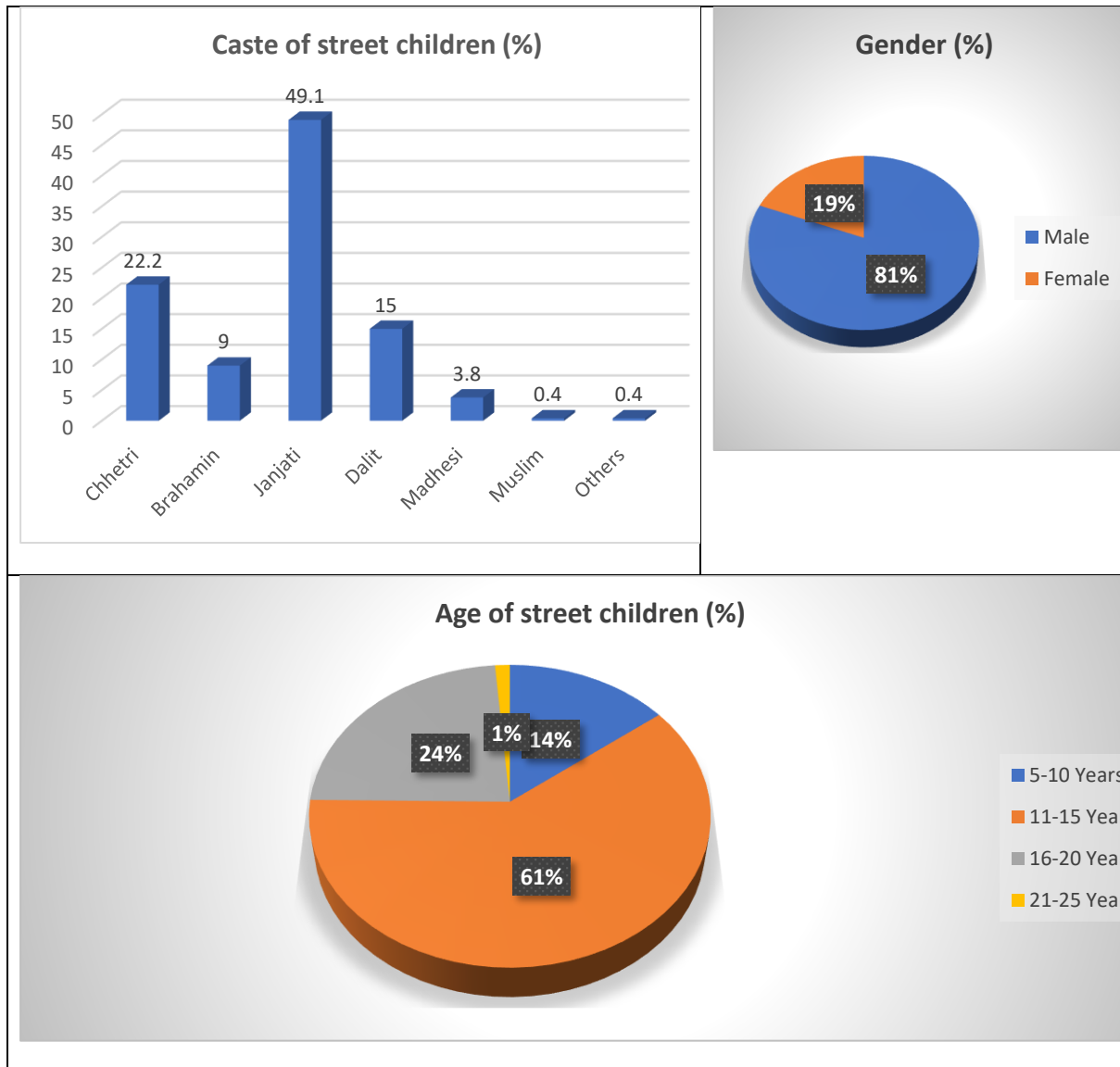


Figure 1: Demographic Information of street children

Frequency of taking bath

The given table justified that the majority of street children were not take a bath even once a week because the given answer is below 50.0% which indicated the negative results to taking bath by them along with. However, in total the majority of street children were taken bath once a week along with 40.6%. To make stronger the point, it has been taken from the social demography of street children who were more willing to take bath or any other reasons.

Table 1: Frequency of taking bath

| | Caste | | | | Sex | | Age | | | | Total |
|-------------------------|------------------|---------|--------|--------|--------|--------|------------|-------------|-------------|-------------|--------|
| | Brahamin/Chhetri | Janjati | Dalit | Others | Male | Female | 5-10 Years | 11-15 Years | 16-20 Years | 21-25 Years | |
| Every day | 23.3% | 18.3% | 31.4% | 18.2% | 24.7% | 9.1% | 8.8% | 25.4% | 20.0% | 33.3% | 21.8% |
| Every 2 days | 6.8% | 11.3% | 2.9% | | 6.8% | 13.6% | 5.9% | 7.7% | 10.9% | | 8.1% |
| Twice every week | 32.9% | 25.2% | 31.4% | 45.5% | 26.8% | 40.9% | 38.2% | 28.2% | 27.3% | 33.3% | 29.5% |
| Once every week | 37.0% | 45.2% | 34.3% | 36.4% | 41.6% | 36.4% | 47.1% | 38.7% | 41.8% | 33.3% | 40.6% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Similarly, the street children from Brahmin/Chhetri community, the majority of street children were taken a bath once a week along with 37.0% which is below 50.0% so the street children from these caste group even have no willingness to keep healthy and knowledge about it. In the same way 45.2% street children form Janajati community were taken a bath once week which is also the below 50.0%. Thus, this indicated that the Janajati street child even does not have willing to keep sanitation and healthy life due to the various reasons. Likewise, the majority number of street children form Dalit community along with 31.4% was taken a bath once a week. However, the street children from other community group along with 45.5% were taken a bath twice a week and 36.3% street children were taken a bath once week from the same community.

In the same way, the street children between male and female, both took a bath once week along with 41.6%, however female street children taken a bath twice a week along with 40.9%. The given percentage of taking both by male and female has been proven that the male street children can easily take a bath even in the open places and in the context of female street children could not freely taken a bath in open places.

In the same way, the age group from 5 to 25 years, the majority of street children from this age group were taken a bath once a week along with 47.1%.

Types of toilets used by street children

The given table shown that majority of street children use the toilet rather than in open places, it is because the given total number of percentages along with 59.4% which indicated the above number of 50.0% shown the positive results.

Table 2: Types of toilets used by street children

| | Caste | | | | Sex | | Age | | | | Total |
|------------------------------|----------------------|-------------|------------|------------|------------|------------|-------------------|------------------------|------------------------|------------------------|------------|
| | Brahamin/C hhetri | Janja ti | Dalit | Othe rs | Male | Fem ale | 5-10 Year s | 11- 15 Year s | 16- 20 Year s | 21- 25 Year s | |
| Public Toilet | 54.8% | 60.9 % | 65.7 % | 54.5 % | 56.8 % | 70.5 % | 61.8 % | 54.9 % | 67.3 % | 100. 0% | 59.4 % |
| Government toilet | 1.4% | .9% | 2.9% | | 1.6% | | | 2.1% | | | 1.3% |
| Open space | 26.0% | 21.7 % | 22.9 % | 36.4 % | 27.4 % | 9.1% | 29.4 % | 26.1 % | 16.4 % | | 23.9 % |
| Others | 17.8% | 16.5 % | 8.6% | 9.1% | 14.2 % | 20.5 % | 8.8% | 16.9 % | 16.4 % | | 15.4 % |
| Total | 100.0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% | 100. 0% |

Thus, from the social demographical dimension, the street children from Brahmin/Chhetri community were used public toilet along with 54.8% instead of using open place and government toilet. Similarly, the street children from Janajati group were even has knowledge to use toilet so they use public toilet along with 60.90%. Likewise, the street children from Dlait community, the majority were used public toilet along with 65.7% in regarding the using of any other toilet or open places. In the same way, the other community street children also used public toilet along with 54.5%.

The street children between male and female, the majority of Female Street children were used public toilet than the male street children along with 70.5%.

The group between 5 to 25 years, this table justified that the majority of street children from 21 to 25 years were all used public toilet along with 100.0%. In the same way, the street children from 5 to 20 years eve use public toilet instead of any other toilet or open place along with 60.0%.

Eating Place of street children

The given table elaborated that generally the majority of street children were eating in the street shop along with 58.12%.

Table 3: Eating Place of street children

| | N | Caste | | | | Sex | | Age | | | | Total |
|--|----|---------------------|---------|-------|--------|-------|--------|---------------|----------------|----------------|----------------|-------|
| | | Brahmin/ Chhetri | Janjati | Dalit | Others | Male | Female | 5-10 Years | 11-15 Years | 16-20 Years | 21-25 Years | |
| Street shop | 41 | 66 | 24 | 5 | 116 | 20 | 19 | 86 | 30 | 1 | 136 | |
| | % | 60.30 | 62.90 | 80.00 | 62.50 | 68.20 | 48.80 | 70.40 | 64.70 | 61.20 | 50.00 | |
| | % | % | % | % | % | % | % | % | % | % | 2 | |
| Cook on the street with friends/other street children | 3 | 11 | 1 | 2 | 16 | 1 | 1 | 10 | 6 | 0 | 17 | |
| | % | 4.40 | 10.50 | 3.30 | 25.00 | 9.40 | 2.40 | 3.70 | 7.50 | 12.20 | 0.00% | |
| | % | % | % | % | % | % | % | % | % | % | 7.26 | |
| Collect food from dustbin | 0 | 4 | 3 | 0 | 7 | 0 | 1 | 4 | 2 | 0 | 7 | |
| | % | 0.00 | 3.80 | 10.00 | 0.00 | 4.10 | 0.00 | 3.70 | 3.00 | 4.10 | 0.00% | |
| | % | % | % | % | % | % | % | % | % | % | 2.99 | |
| Beg for food from restaurants | 6 | 15 | 3 | 1 | 18 | 7 | 1 | 15 | 9 | 0 | 25 | |
| | % | 8.80 | 14.30 | 10.00 | 12.50 | 10.60 | 17.10 | 3.70 | 11.30 | 18.40 | 0.00% | |
| | % | % | % | % | % | % | % | % | % | % | 10.68 | |
| Others | 26 | 38 | 6 | 3 | 52 | 21 | 7 | 46 | 18 | 2 | 73 | |
| | % | 38.20 | 36.20 | 20.00 | 37.50 | 30.60 | 51.20 | 25.90 | 34.60 | 36.70 | 100.00 | |
| | % | % | % | % | % | % | % | % | % | % | 0 | |

On the basis of social demographical dimension, among various caste groups like Brahmin/Chhetri, Janajati, Dalit and other community the following table clearly said that the majority of street children were ate in the from the street shop. In regarding the Brhamin/Chhetri caste community, the majority of street were going to street shop along with 60.30% rather than eating from the dustbin or cooked food by own in the street with their friends. Similarly, the street children from Janajati community, the majority of street children were agreed in go to street shop for taking meal. The street children were not eating from the dustbin and also not cooked food by themselves in the street. Likewise, in the street children from Dalit community, 80.0% street children were agreed about their eating in street shop rather than eating from dustbin and any other dirty places along. In the same way, the majority of street children from other community were agreed to go for street children to take food along with 62.50%.

However, between male and female street children the majority of street children from male category were go for street shop along with 68.20% than female street children. Therefore,

female street children along with 48.80% were go to street shop for eat and this result shown female street children were not so active to go for street shop because it has below 50.0%.

In regarding the eating pattern of street children, the majority of street children from 5 to 25 years were go for street shop it is because the following table shown above 50.0% of agreement in the point of eating in street shop.

The above data shows that majority of street children used to take food from street shop which has not maintained the proper sanitation and hygiene. According to research conducted by R. Tuladhar and A. Singh on Kathmandu's street food, sellers have poor hygienic practices in the production and handling of street food. Due to vendors' lack of awareness about the source of bacterial contamination and the lack of surveillance on street food, street food has a significant risk of foodborne illness. The risk associated with street food has been increased due to the lack of safety measures taken by the targeted consumers of street food, youngsters. Bacteria were found in all of the food samples tested. Panipuri had the greatest mesophilic count, whereas Chana tarkari had the highest coliform count. Aaloo chop had the smallest number of both (Tuladhar & Singh, 2012). In this connection, there may be high chances to be ill and infected by the communicable diseases caused by the unhygienic food.

Conclusion and Recommendation

The study found that majority of street children used to take path one time in every week. Similarly, majority of street children used the public toilet whereas 24% street children were using open space (open defecation) which was not good from the environmental perspective. All 77 districts in Nepal have been declared Open Defecation Free on 30 September 2019. The study also found that majority (58.12%) of street children used to take food from street shop. The food available in street shop is not hygienic because of the weak sanitation of surrounding environment. There is high chance of contamination due to dust pollution and use of untreated water for cooking food. Due to such hygienic food, there may be high chances to be ill and infected by the communicable diseases caused by the unhygienic food. So, the government authority and child protection center are recommended to manage the proper shelter for such street children and aware them about the need of proper sanitation and hygiene practice.

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Conflict of Interest

There is no conflict of interest.

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