



BRAC SCHOOL OF
JAMES P GRANT PUBLIC HEALTH



Informal Child Labor in Dhaka City: Exploring the Pull Factors and Health Sufferings of Children Involved in Waste Management

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International
Labour
Organization



Introduction

- Child labor is a global issue since it exposes a labor issue that is intricately intertwined into the structure of an unequal society.
- Global estimates show that 160 million children engaged in child labor at the beginning of 2020 among them 63 million are girls and 97 million are boys accounting for nearly one-tenth of all children.
- The magnitude of child labor is significantly greater in developing countries, one in every four children (ages 5–17) is engaged in industry and non-industry occupations in these regions

Scenario of Bangladesh

- In Bangladesh, majority of the population lives below the poverty line and the low-income families are unable to provide enough care for their children.
- Child laborers are a prominent feature of everyday life
- Young children serving at roadside tea stalls and selling goods to motorists are quite common here
- According to the Child Labour Survey Bangladesh 2013, among 39.65 child population, almost 3.45 million are working children aged between 5 and 17 years.
- Though a lot of children are involved in the waste management(WM) sector in Bangladesh informally, there is no reliable data on child waste workers.

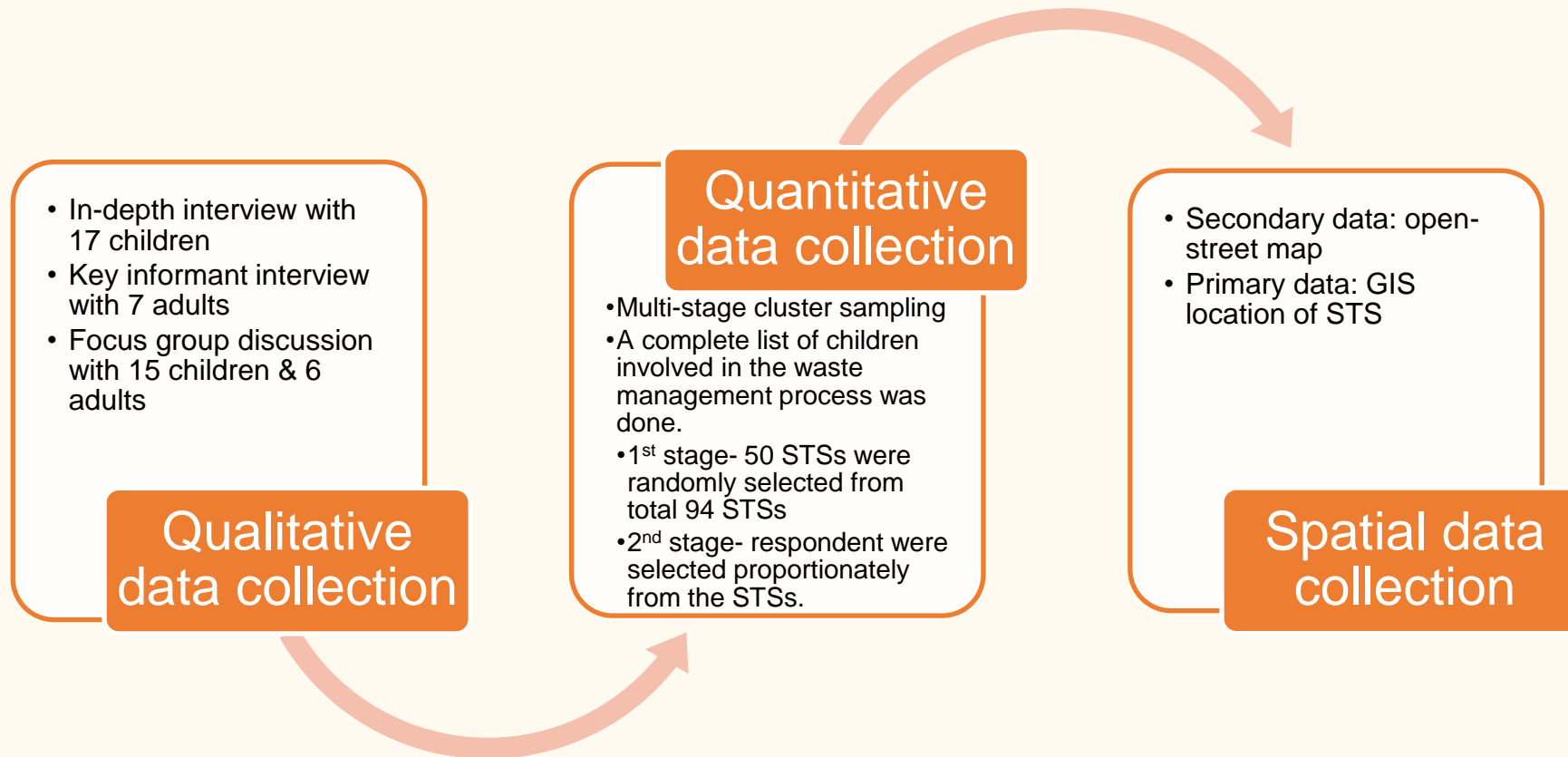
Objectives of the study

- To determine the socio-demographic characteristics of children and track the pathways in getting involved in the WM sector
- To examine their knowledge, and practices in collecting & sorting waste
- To determine the associated health suffering.
- To assess the effect of COVID-19 on their employment & daily life.

Methods

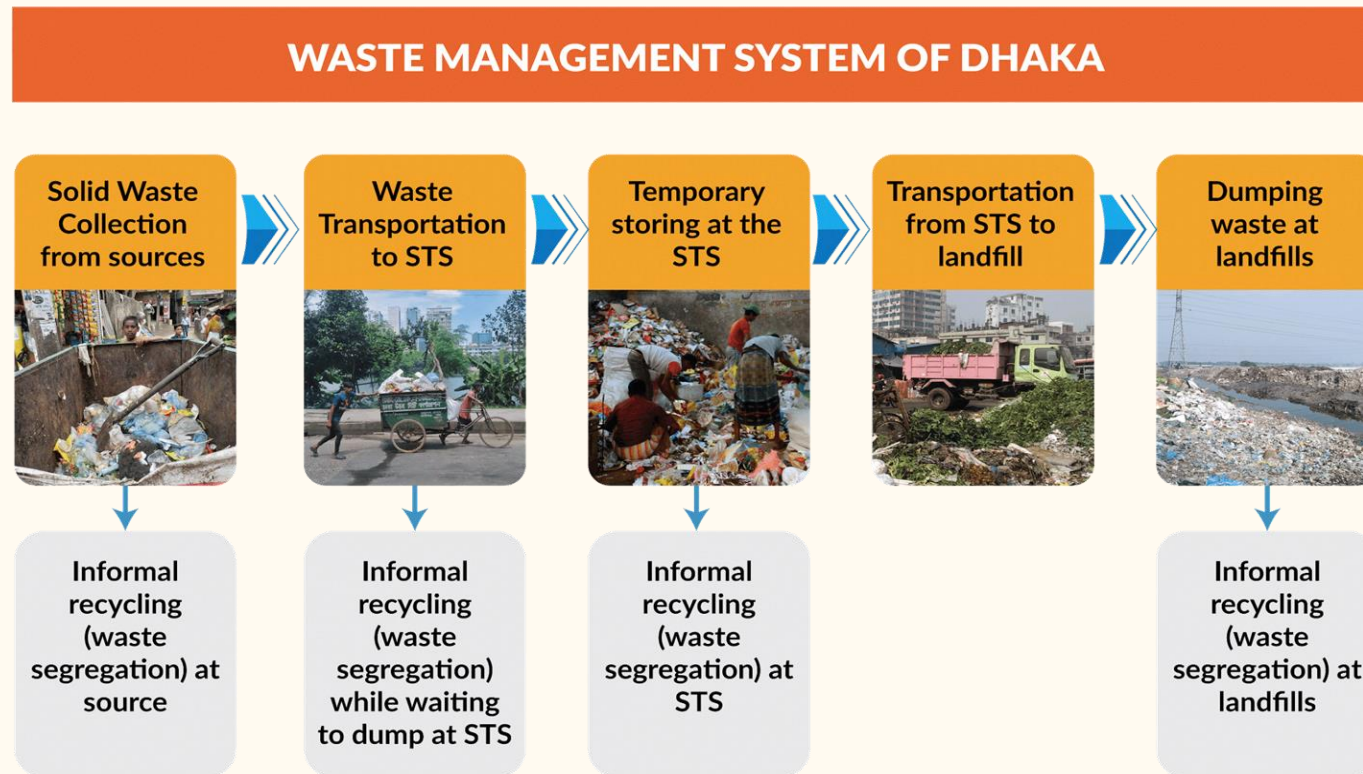
- This study adopted an exploratory sequential mixed-methods research design

Study population : Children aged 5-17 years involved in waste management



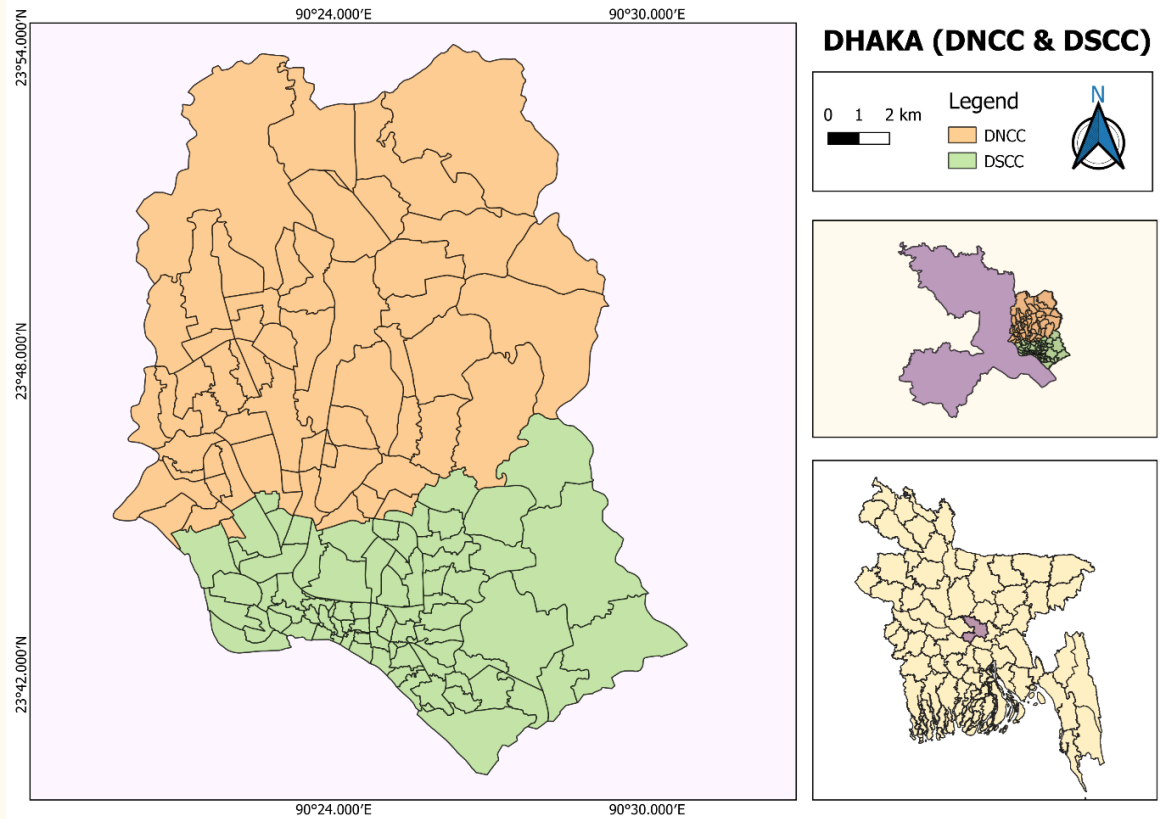
Overview of Study area

- Dhaka is the capital of Bangladesh. It is referred to as a “megacity” as more than 10 million people live here
- To facilitate waste management services in the city, landfills and Secondary Transfer Stations (STS) have been built by city corporations. Secondary Transfer Station (STS) is also known as Waste Transfer Station. It is a location where wastes are temporarily stored.

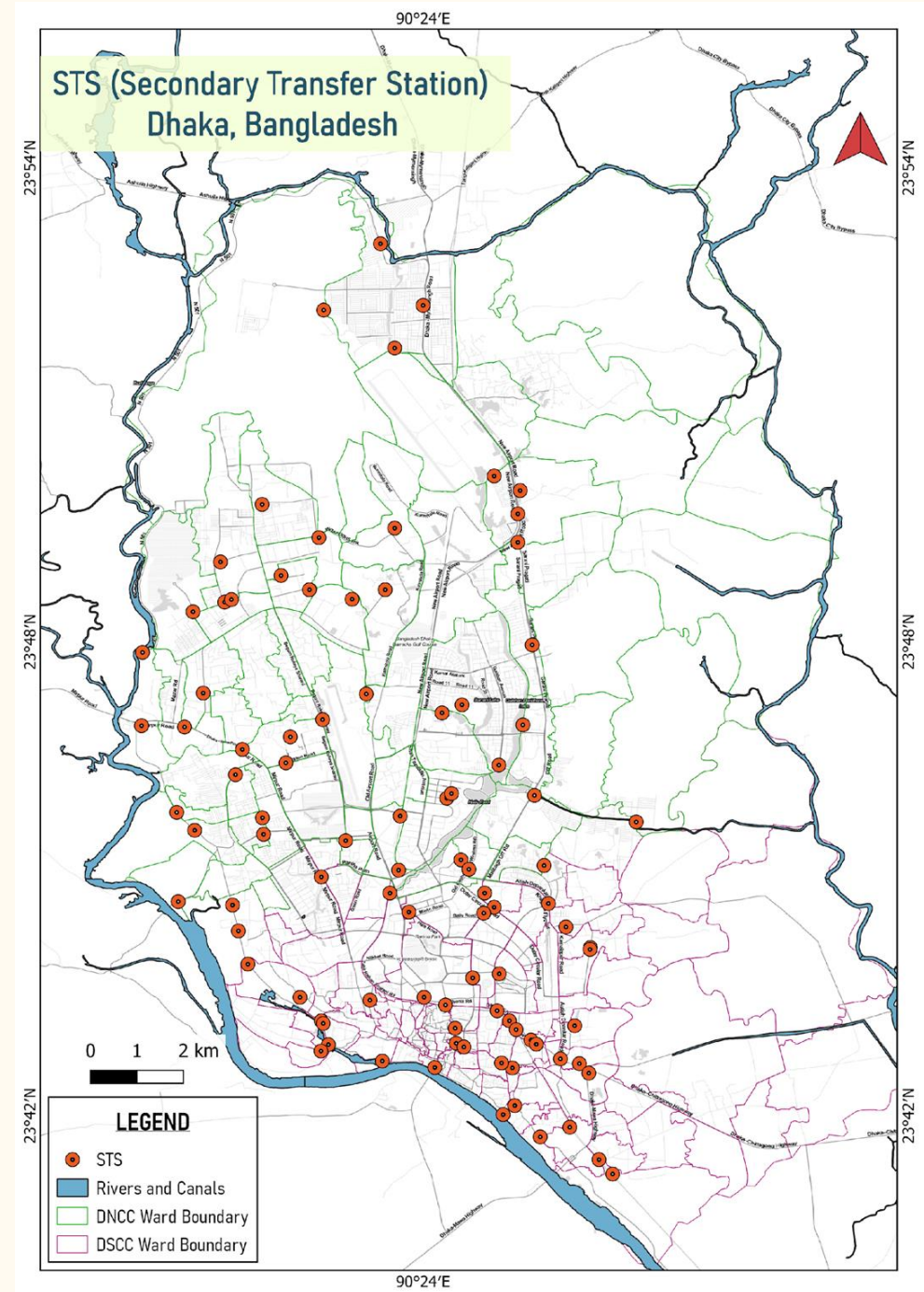


Study Area

Map of Dhaka city



STSs location in study area
* Red circle denotes the STSs



Secondary Transfer Station



Matuail Landfill



Recycling Zone



Data Analysis software

Qualitative data

- Nvivo Software

Spatial data

- Kobo toolbox & QGIS

Quantitative data

- Kobo toolbox, SPSS, and Stata

Ethical considerations

- Ethical approval for conducting this research was obtained from the Institutional Review Board (IRB) of BRAC James P Grant School of Public Health, BRAC University.
- Written informed consent was obtained from all the adult respondents.
- Since this study include children aged below 18 years, informed consent was obtained from the parents or guardians including assent from the respondents.
- In the case of low literacy, a verbal assent and consent was obtained.
- All qualitative interviews were recorded & pictures were captured with the respondents' permission.

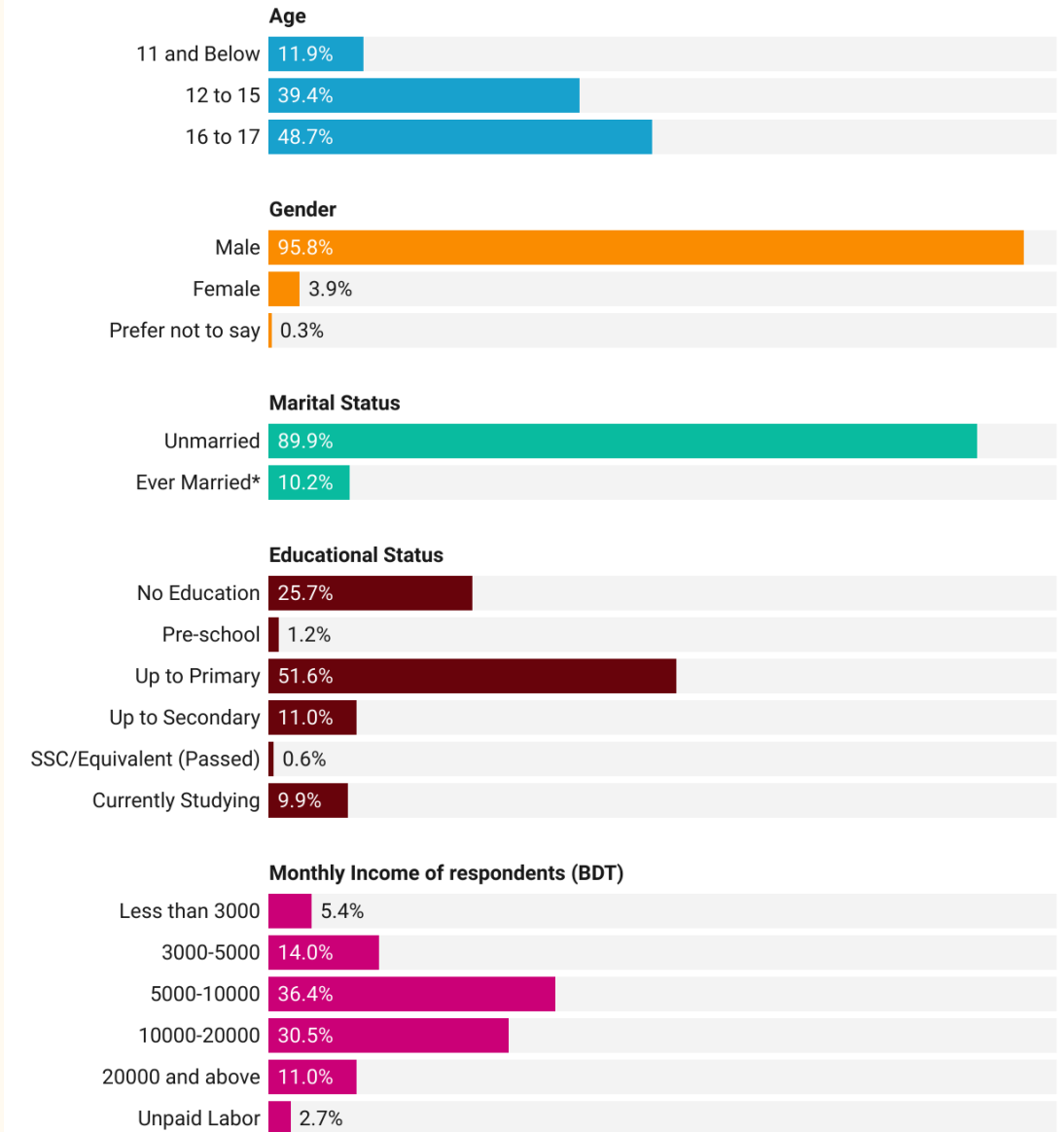
Findings of the study

Socio-demographic characteristics of study respondents

- Almost half of the respondent aged below 15 years.
- Most of the child waste workers were male and 10% of the respondent were married.
- Nearly one-fourth of the respondents did not enroll in any educational institutions where half of the respondent complete up to primary education
- Income was higher than other sectors for a child labor

[Socio Demographic Characteristics]

(Frequency, n=335)

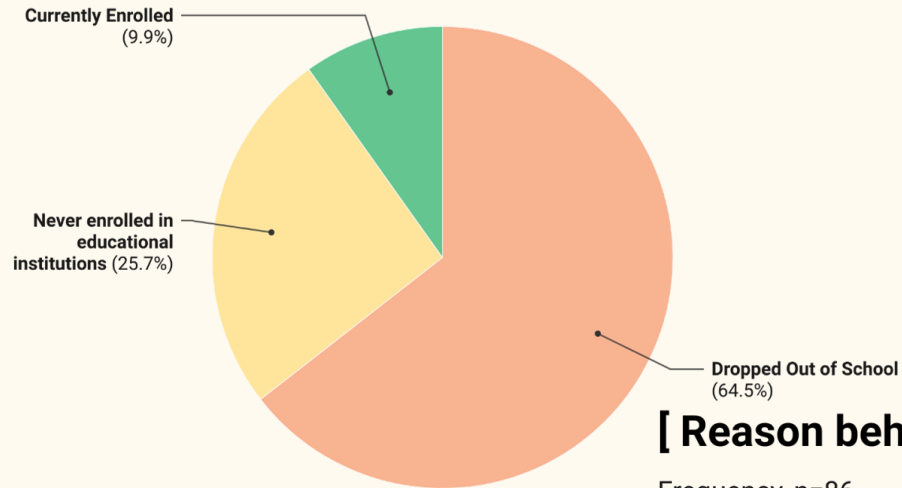


*Ever Married category represent the respondents who are currently married/widowed/separated

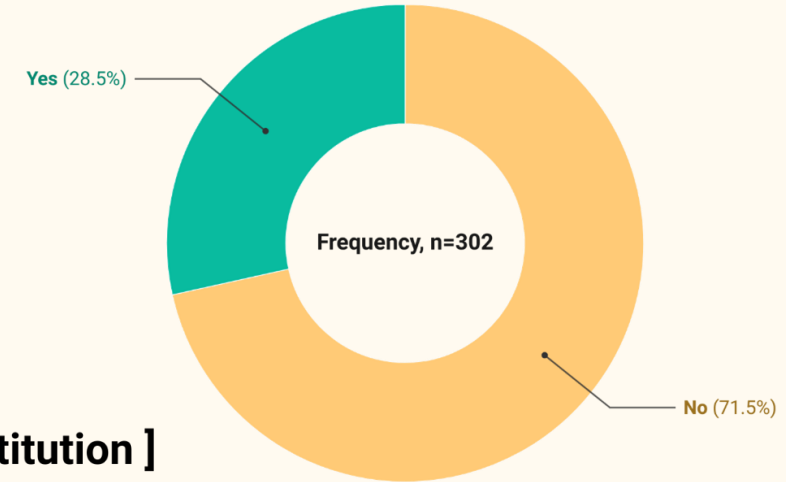
Respondent's schooling status

[Enrollment in educational institutions]

Frequency, n=335

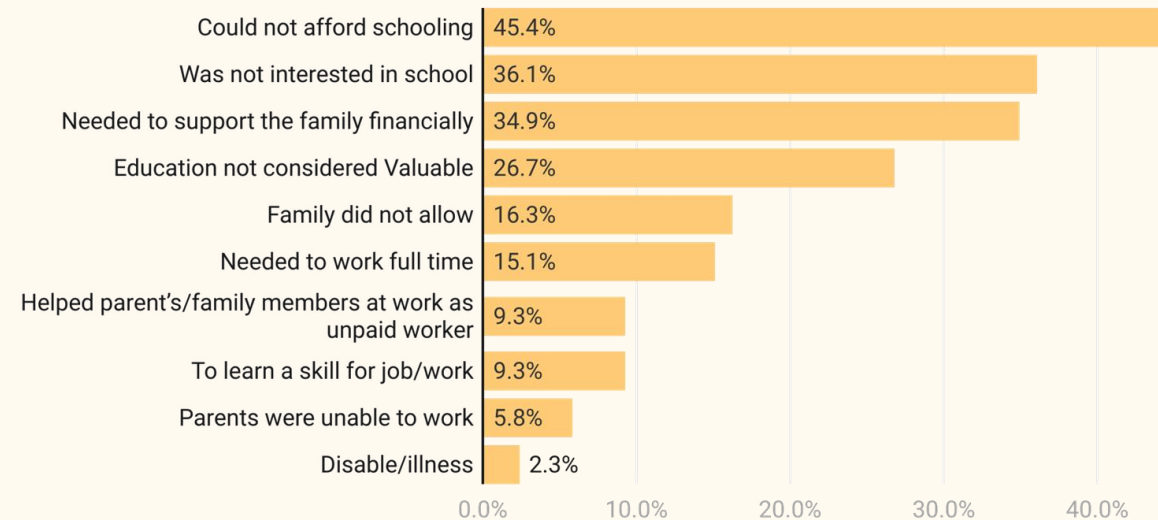


[Willingness to start formal education again]



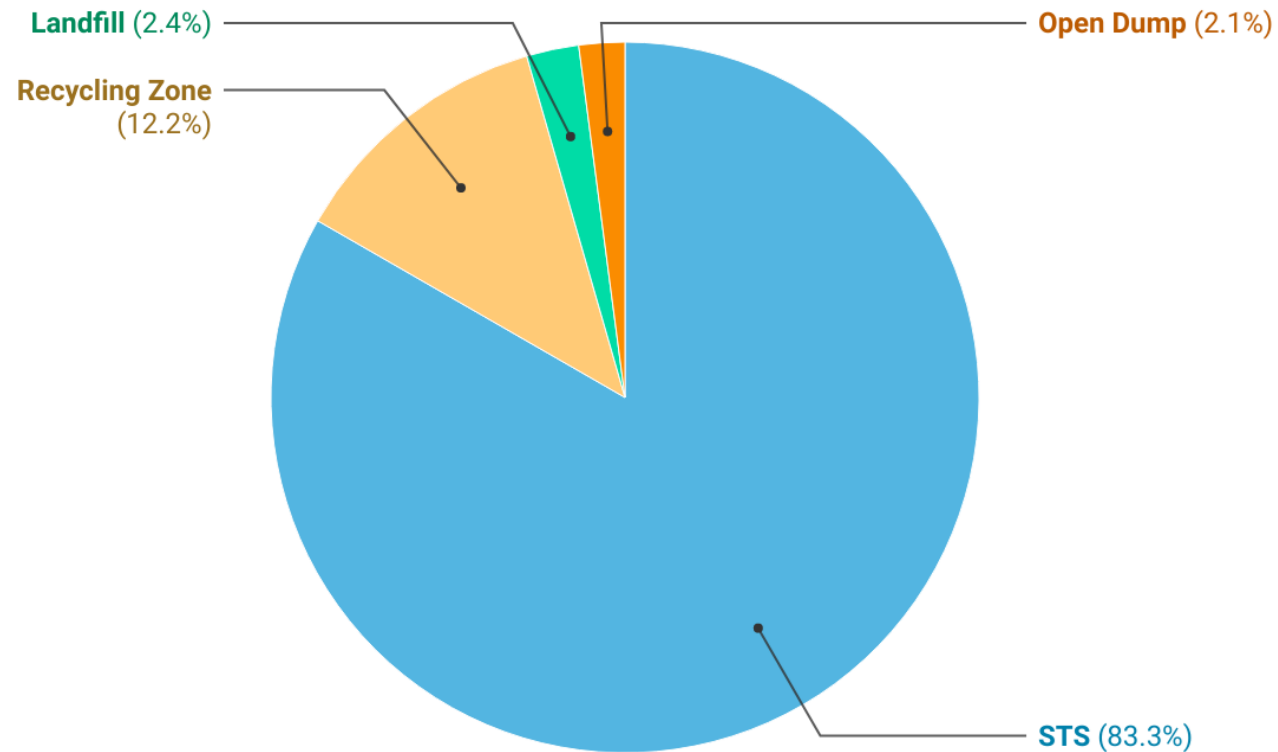
[Reason behind not enrolling in any educational institution]

Frequency, n=86



Findings: Cont.

[Respondent Children's Working Area]



Pathways to getting involved in the Waste Management sector

“

If you are the family's oldest son, you must do your share of the household chores. I don't want to be a burden to my parents. Their happiness is my number one priority. I care about making my parents happy. I don't want them to go through what I'm going through.

-15 years old, Bishanroad, Dhaka.

”

“

This is what my grandpa did for 27 years, and I learned it from him. My father and family member are used to it, so I'm doing it.

-14 years old, waste collector, Khamarbari, Dhaka

”

“

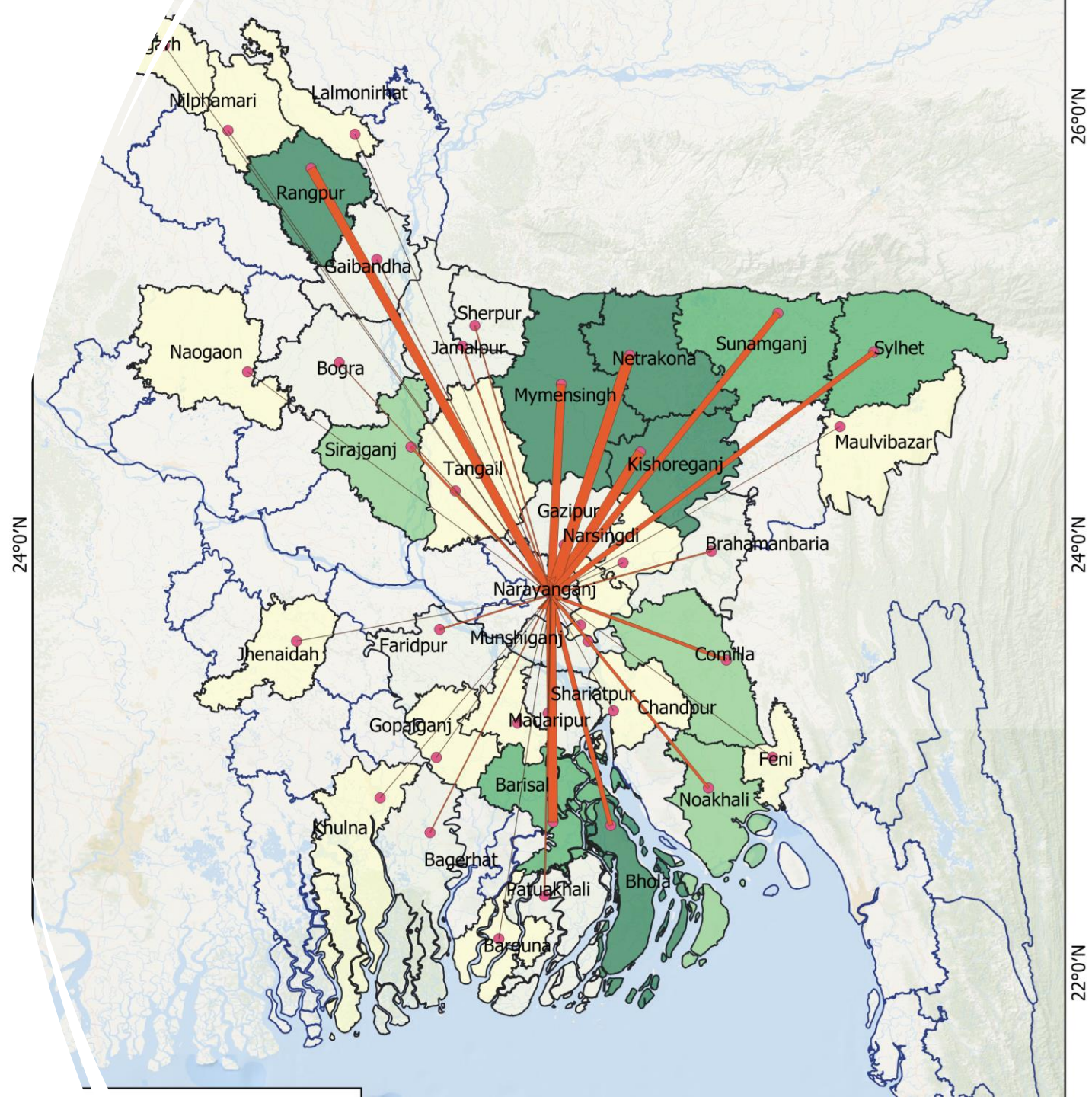
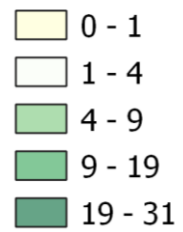
It was preferable to come to Dhaka rather than do nothing when the government announced that school would be closed for an unspecified amount of time, because I could take jobs during the school vacation and earn enough money to buy a cow for my father.

- 14 years old, waste collector Khamarbari, Dhaka

”

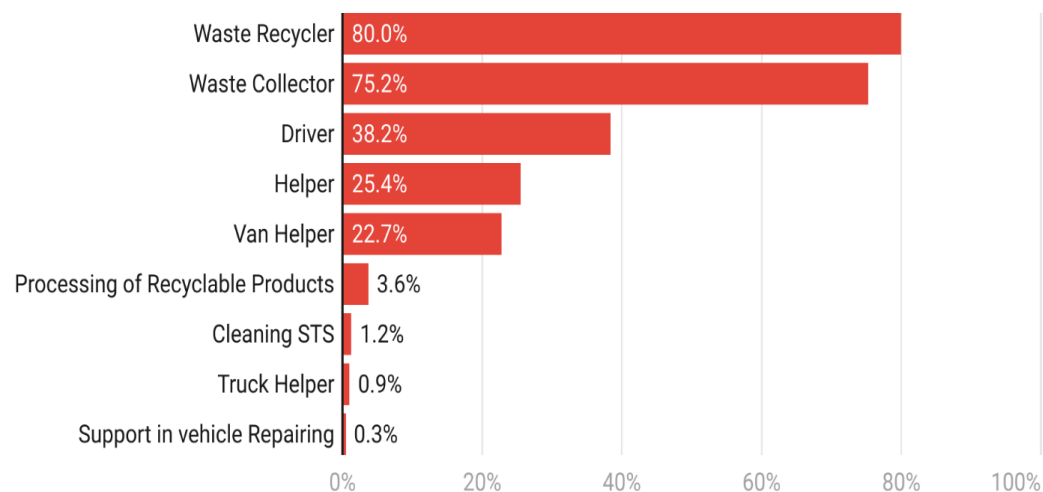
Key Findings

- ✓ **Family members' involvement is** a major driving factor
- ✓ **Financial crisis** urges for early employment
- ✓ **Limited employment opportunity** in the home district
- ✓ **One earning member in family can't earn enough for the whole family**
- ✓ **Income is relatively high** for child waste workers
- ✓ **No training/experience/exam required**
- ✓ **Easy access** to job



Factors related to child waste worker's workplace

[Role in the job]



[Access to facilities in terms of Working area]

	STS (n=279)	Landfill (n=8)	Open Dump (n=7)	Recycling (n=41)	Total
Only Access to Drinking Water	22	1	0	1	24
Only Access to Toilets	20	0	0	3	23
Only Place for eating	3	0	0	0	3
Access to both Drinking water and Toilet	17	2	0	7	26
Access to Drinking water, Toilet, and place for eating	12	0	0	8	20
No facilities	205	5	7	22	239

Workplace and Work Practice

Image 1- Children collect waste from household and then pulling the vehicle (waste collection van) towards STSs.

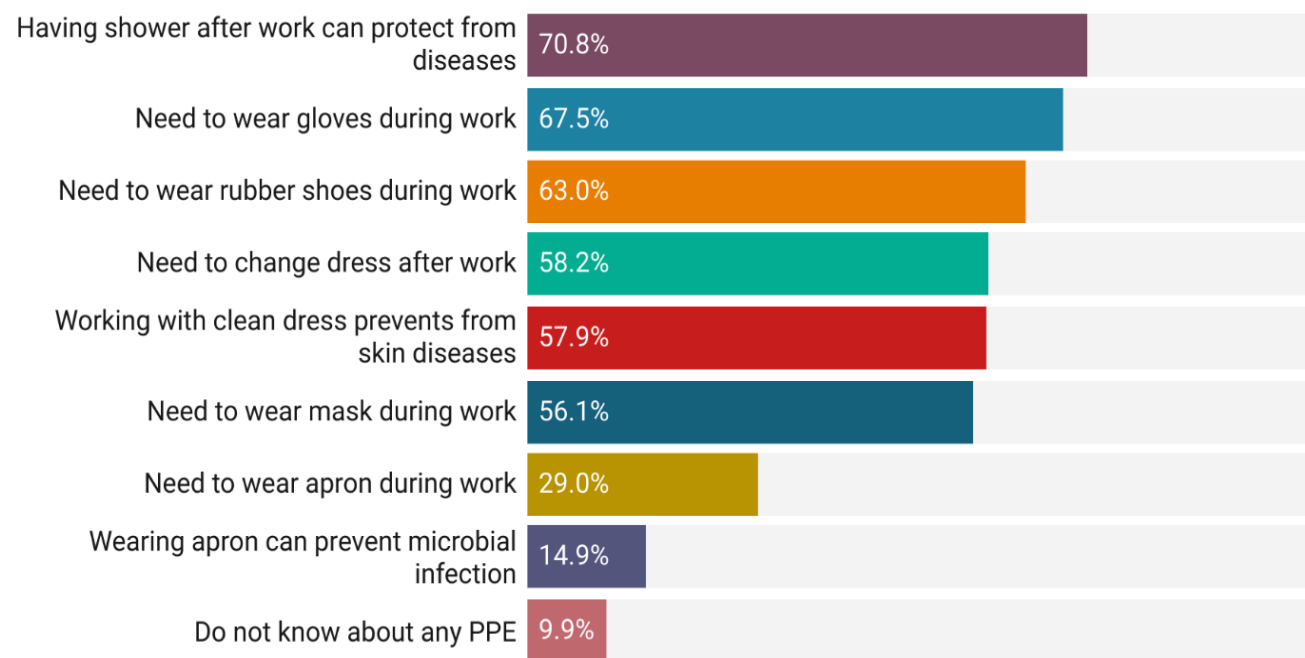


Image 2- Inside the STS, children work with their adult coworkers to separate the plastic waste from the collected household waste.



Knowledge & Practice about Personal Protective Equipment (PPE) & Health Safety

[Knowledge about PPE and Health Safety]



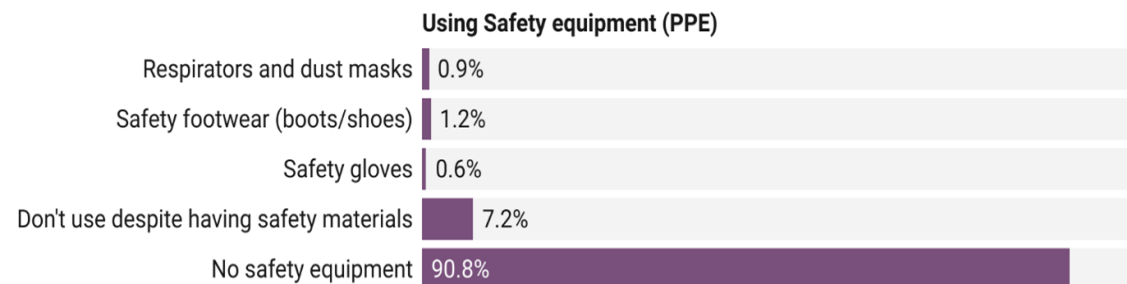
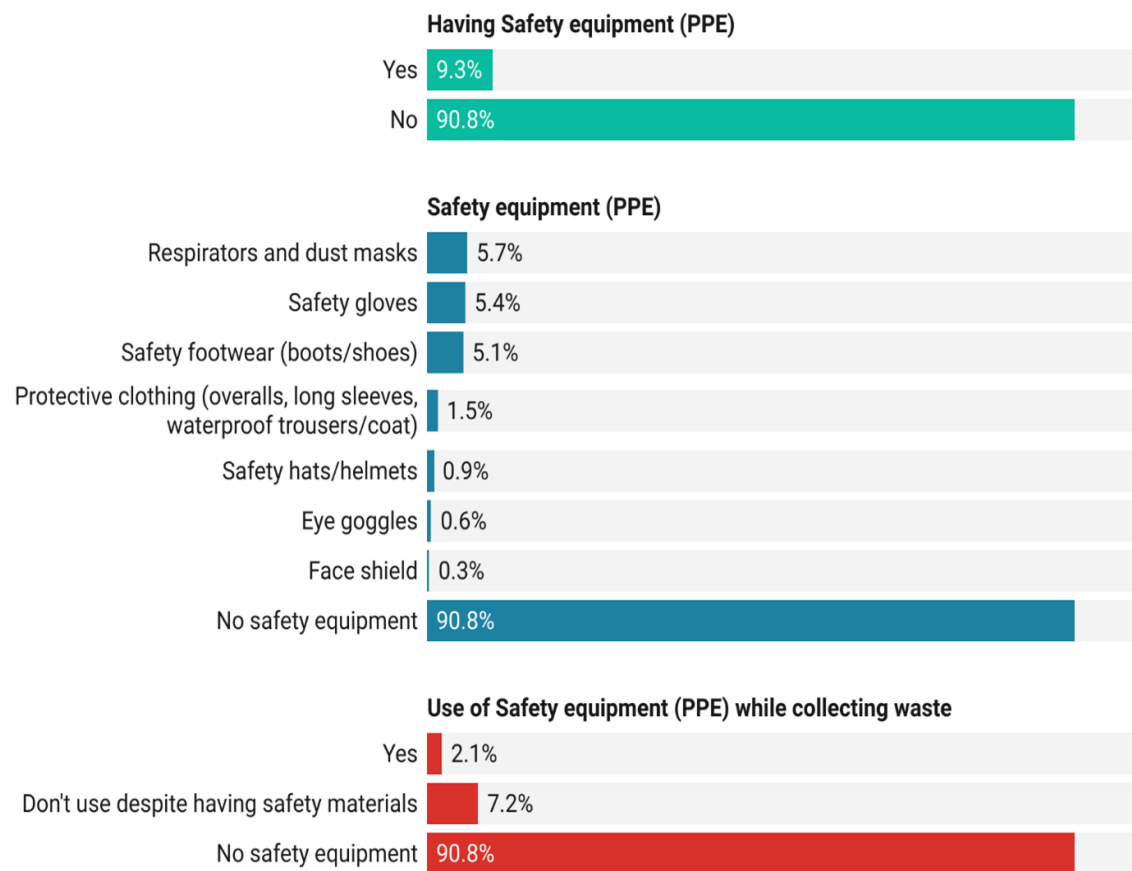
“

Yes, wearing musk is a good habit since it may lessen the odors that we are accustomed to on the insides of our bodies, which can be detrimental if they enter our bodies.

-15 years old, waste collector, Bishawroad, Dhaka.

Practice about Personal Protective Equipment and Health Safety

[Safety Equipment's (PPE) Use]



“

I can't work while wearing gloves since it interferes with my natural workflow. If I wear gloves, it takes me longer to do my task. However, if I don't wear gloves, I can complete my tasks more rapidly.

-16 years old, waste collector, Khilkhet, Dhaka.

“

We don't wear these since the price is excessive and they aren't long-lasting. We are unable to pay the price.

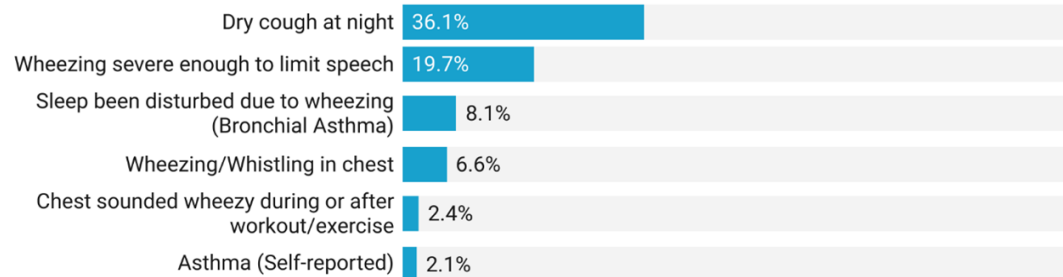
-15 years old, waste collector, Khamarbari, Dhaka.

Associated health sufferings among child waste workers

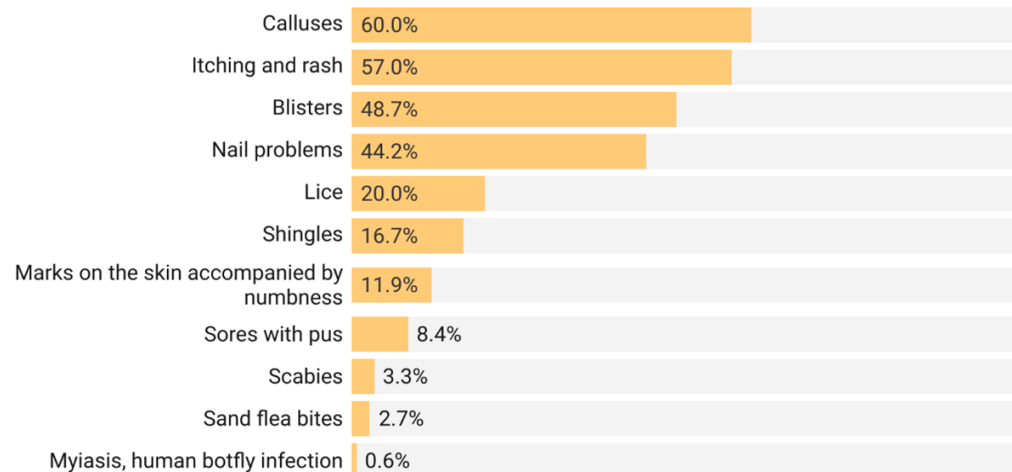
- Due to unhealthy and hazardous environment for the children, they face various types of health problems.
- Despite the risks, most of the children thought they were healthy (53.4%).
- Due to lifting and carrying heavy load, pain in shoulder, neck, hand, and lower side of the back were found more common. About 63% children had pain in their shoulder.
- Number of musculoskeletal problems in a children showed how vulnerable they were and how much affected. About 54.3% had four or more musculoskeletal problems

[Health Problems]

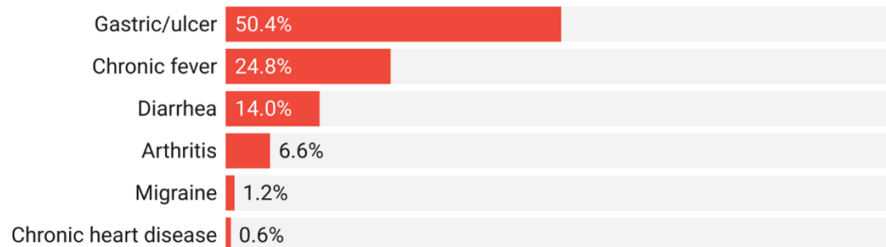
Respiratory Problems (52.53%)



Skin Problems (91.94%)



General Health Problems (67.46%)



“

I have trouble breathing when I'm holding something heavy. I can't do this alone. It's like driving underwater and having trouble breathing.

- 14 Years Old, Waste recycler, Kalshi, Dhaka.

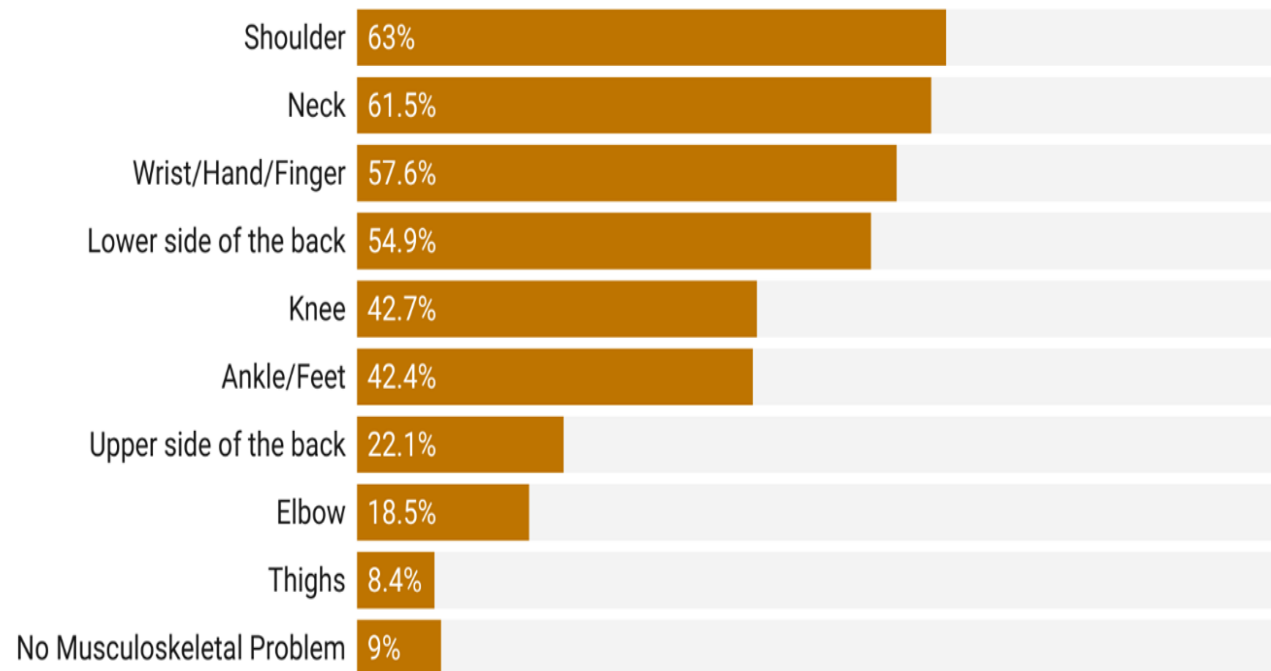
“

When I clean medicine gallons, I have to struggle for breathing from the toxic gases of medicine gallons. The struggle intensifies when I have to clean gallons for different types of medicines.

- 17 years old, female waste recycler, Islambag, Dhaka.

Musculoskeletal Problem

[Musculoskeletal Problems]



“

When the waste bucket is loaded fully, it weighs about 30 kgs. Sometimes 8 KGs or 7 KGs. Households which are of mess systems (bachelor housing) have wastes about 30 to 35 KGs.

-11 years old, waste collector, Khilkhet, Dhaka.

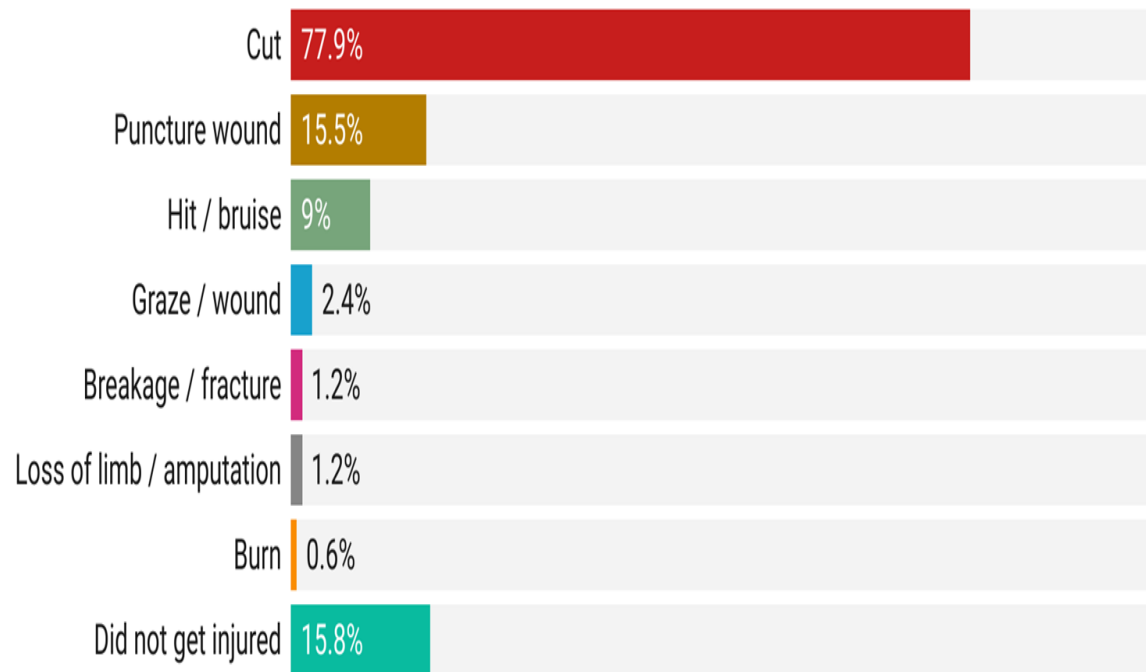
“

I have pain in the legs and in the hands about all the time. I feel this because I have to lift waste buckets with my hands have to walk more frequently. I have pain in my waist too.... I also have pain in my chest.

- 13 years old, waste Collector, Khamarbari, Dhaka

Injuries

[Injuries in last 12 months]



“

When I came here the first time, I got injured severely, my leg was cut by a piece of broken glass and after suffering for 4 months I recovered.

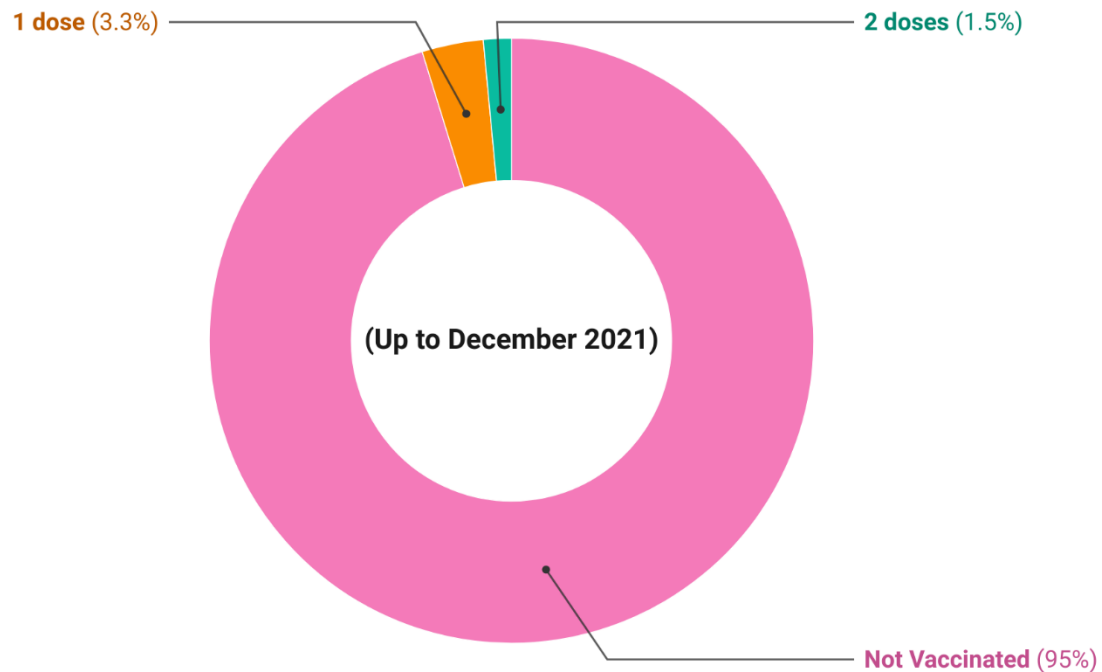
- 17 years old, Waste collector,
Dhanmondi, Dhaka.



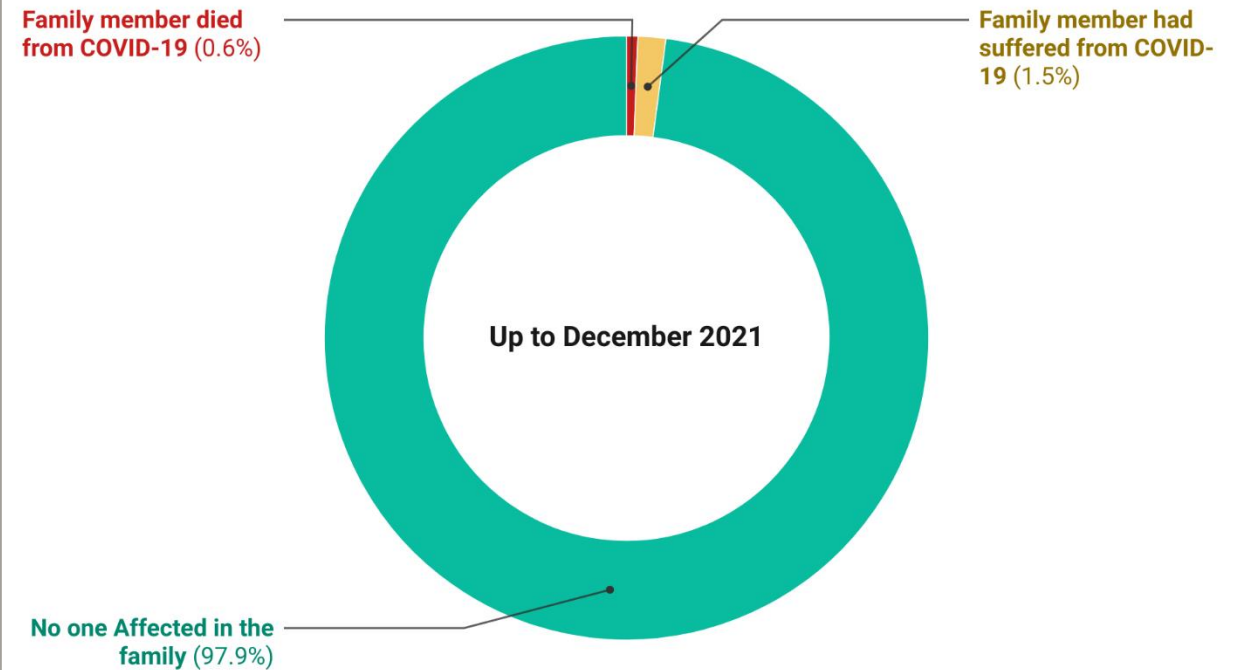
Cuts, Puncture wounds, Hit/Bruise

Impact of COVID-19

[COVID-19 vaccination status]

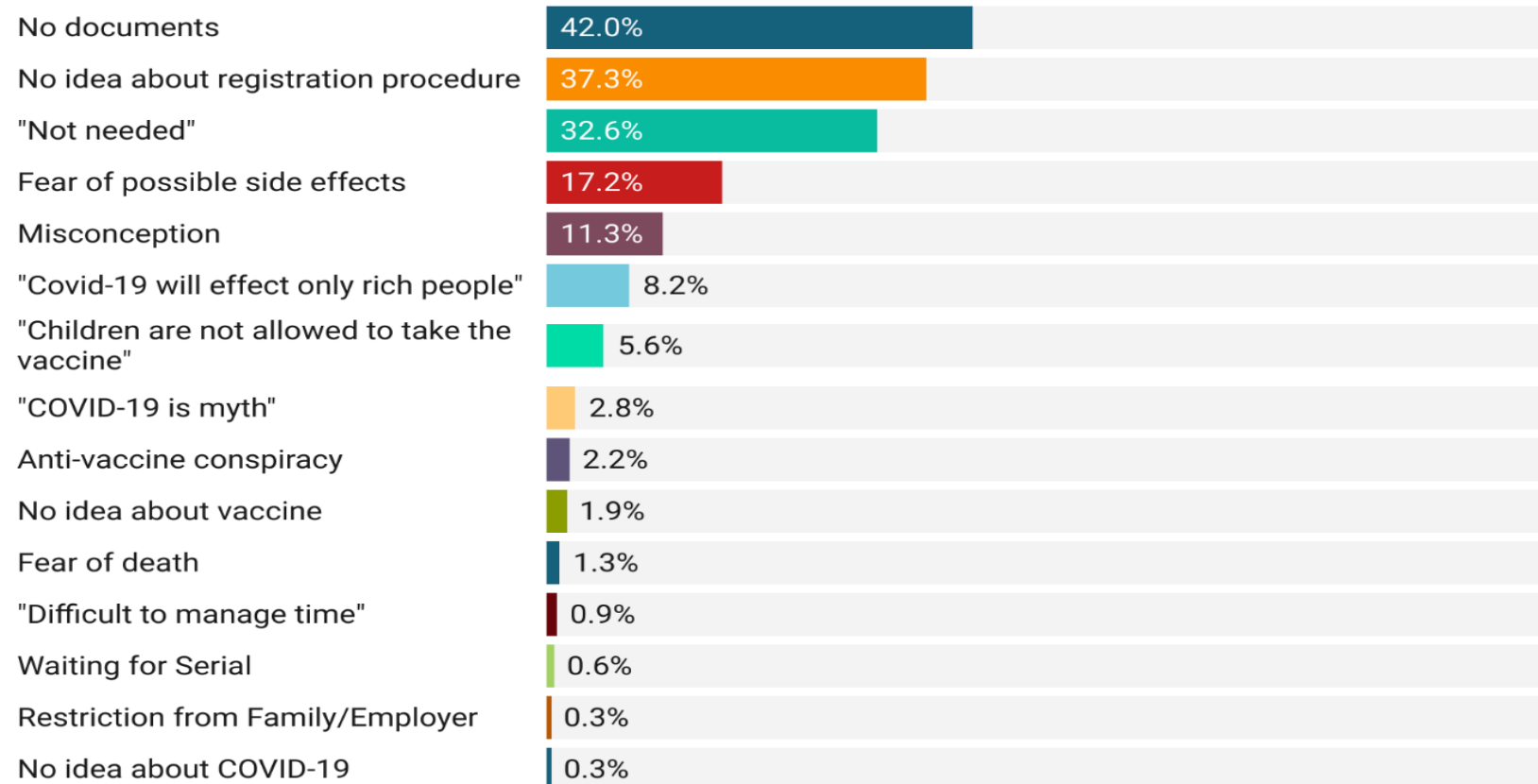


[Family Member Affected by COVID-19]



Reason for not getting Vaccinated

[Reason for not getting vaccinated for COVID-19]

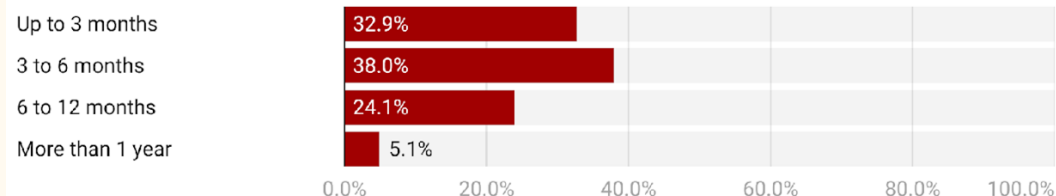


Effect of pandemic on employment and daily life

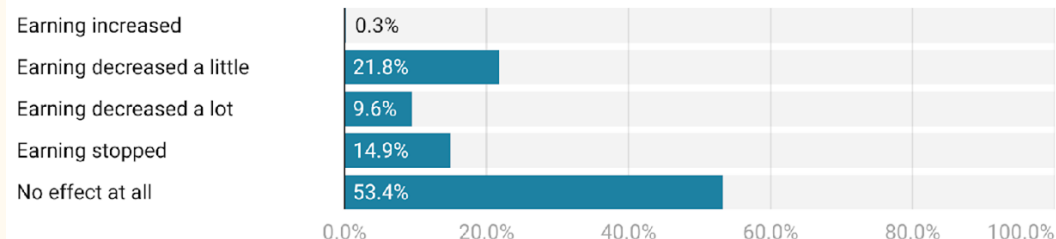
Employment during COVID-19 Pandemic (n=335)



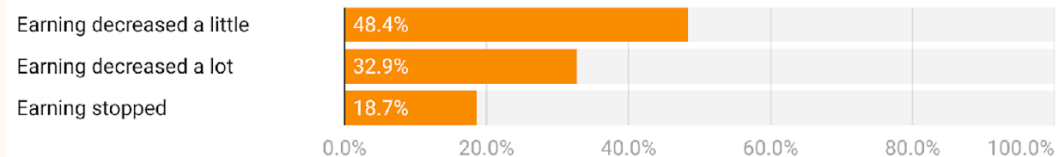
Unemployment Period (n=79)



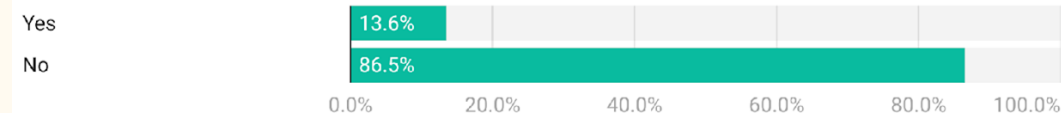
Lockdown effect on income (n=335)



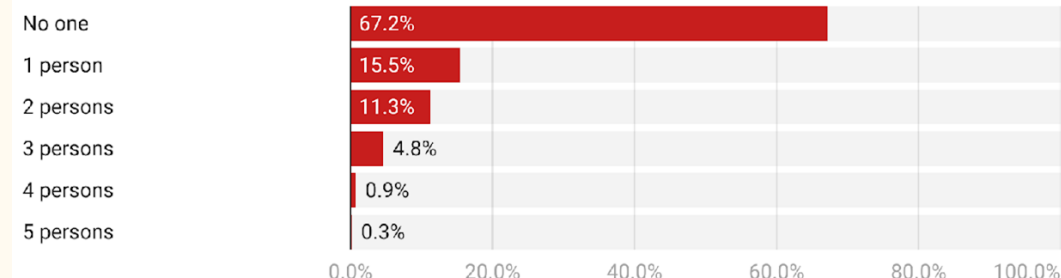
Lockdown effect on family income (n=155)



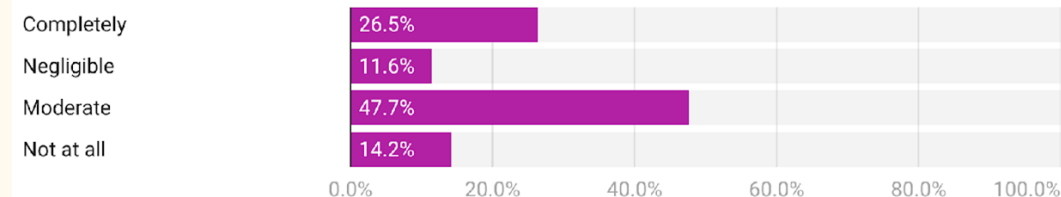
If earning reduced, Involvement in any other job (n=155)



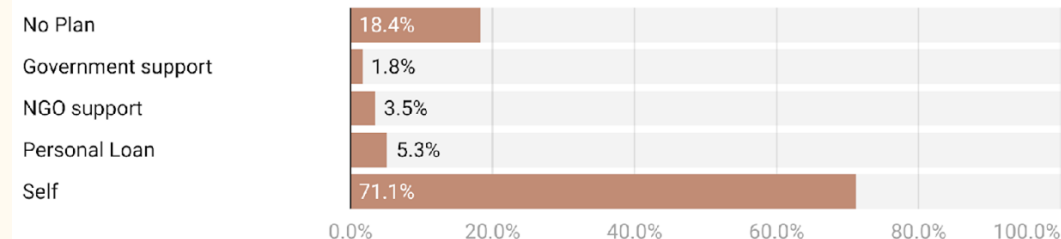
Earning family members have become/remained unemployed during lockdown (n=335)



Recovered the economic losses of pandemic after the strict lockdown (n=155)



Plan to recover (n=114)



Conclusion & Recommendation

- Occupational hazards were myriad among child waste workers.
- Working conditions and children's experiences, such as exposure to violence, as well as the surroundings in which children handle numerous tasks, all potentially influence children's health, development, and safety.
- Though many children are involved in waste management, they are typically excluded from mainstream child protection and support systems, making them more exposed to occupational harassment and injury.
- Policy makers should design specific programs for these vulnerable groups considering the below issues i.e.
 - Provide protective equipment like face-mask, gloves, footwear, and rag sorting tools to safeguard them from physical damage and illness
 - Ensure access to health care and provide basic nutrients to them.
- Furthermore, children should also have access to basic literacy education for their future development.
- Finally, but certainly not least, the government should think of alternative income-generating programs for these groups of children.

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Thank you, everyone!
