

A Study to Assess Health Profile, Morbidities and Health Insurance Coverage amongst Female Rag Pickers from Wardha District

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ABSTRACT

Background: Majority of the people regards rag pickers as antisocial elements. Even some of the well-educated people, consider them as an embarrassment to the community. Little do they know that their contribution to society and ecology is of such a great importance?

According to studies, the garbage they gather is reused and creates a quarter of the paper, packing materials, egg carrying trays, metals and plastic household items, and other objects used in houses. This proves to be of great importance to society and the environment greatly by reducing the cost of household items and delaying the destruction of already endangered wildlife and forests.

There is a huge informal sector of rag-pickers in India who make a living by collecting garbage from the streets, dustbins, and waste dumps. These rag-pickers are thought to collect around 5-10% of total garbage produced in major cities and transfer it on to recycling businesses through different degrees of middlemen. As a consequence, these rag-pickers save local governments several million rupees a year in collection, transportation, and disposal costs, as well as land fill space. Furthermore, disturbing details about child labour in the industry are presented.

Objective: The purpose of this study will be to assess health profile, morbidities and health insurance coverage amongst female rag pickers from Wardha district.

Methodology: This cross sectional study will include 100 female rag pickers randomly selected from Wardha city. Using a structured pretested questionnaire data will be collected from all participants.

Expected result: The analysis of the data and appropriate statistical tests will be contemplated in the result.

Conclusion: The conclusion will be drawn after the completion of the proposed study.

Key words: Rag pickers, Health insurance, Health profile

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INTRODUCTION

Rag pickers typically collect rags from garbage cans or dumping grounds. Needles, injections, used contraceptives such as condoms, plastic bottles, dirty gloves, and other hospital trash, as well as plenty of plastic and iron products, poses a risk to most women and children. Rag pickers have a variety of health issues,

including respiratory problems, worms, anaemia, fever, and other issues. Talking globally, about 33% of a kilogram me of waste was produced per human each day. However, there was a significant disparity in composition between high- and low-income countries. With increased economic success, the quantity of solid trash created composed primarily of luxurious waste such as cardboard, plastic materials, and other such things. On other hand, density of waste and moisture contents is much higher in developing countries [1].

According to the World Bank, unless we take immediate action, worldwide garbage generation would increase by 70% by 2050. As of now, 7.6 billion people produce two billion tons of rubbish per year. The situation could be exacerbated by population growth. However, it is the high levels of consumption in a few wealthy countries, as well as their gross waste management that have resulted

in this environmental disaster. The United States produces the most garbage per capita in the world, with each individual producing an average of 808 kilograms per year, nearly a tonne, which is more than double that of Japanese inhabitants [1].

Garbage-filled roadways and poor control of solid waste are perhaps two of the worst setbacks of economic progress for a country like India. Fortunately for us, rag-pickers have converted India's garbage into a source of income for their families and relatives. They collect recyclable rubbish from the side of the road and sell it to support their families. Call it the virtue of need, but these rag-pickers unwittingly make sure that recyclables, which would normally be accumulating along roads and open grounds and harming the environment, make it to the recycling cascade [2]. The saddest, and perhaps most ironic, aspect of their narrative is that, despite their extraordinary contribution, our society denies these women their dignity. The job of these rag pickers is assumed menial by society, and they are considered to be a castaway by a big portion of our community.

Consider a single part of their daily lives to get a sense of the exploitation that these women face. Majority of middleman dealers who buy recyclables take foul advantage of these ladies by using rigged scales and providing prices that are lower than appropriate, taking supremacy of the illiterate and poor rag pickers. At a market cost of Rs 8/kg, a lady collecting 20 kg of rubbish should have been paid Rs 160. However, her collection is weighed at 18 kg, and she is paid Rs 6 per kg, bringing her total returns to Rs 108. Consider this: every single day, the impoverished lady loses nearly 60% of her fair compensation [2].

The difficulty of waste management has arisen as a result of India's rapid urbanization. As more people migrate to cities, the amount of waste produced is rapidly increasing, and waste management is set to be a major concern in the future [3]. Those involved in rag picking jobs, which is named that despite the fact that they pick up anything but rags, are the most vulnerable among street youngsters. They pick scraps along all the corners of roads, grounds, garbage bins, and waste cans, collecting items such as cardboard, plastic, iron scrap, tin containers, and broken glass pieces, as well as anything else thrown away by factories, shops, households, or other companies that can be bought by dealers, for reusing the same. Children, men and women, start their rounds early at dawn, carrying heavy sacks of scrap on their malnourished shoulders as they roam the streets for waste picking, covering huge distant kilometers, if not more, every day. Young children particularly move in groups, and are occasionally accompanied by an adult female who is also a junk picker [3].

Rag pickers play a crucial, yet often underappreciated, part in India's waste management system. They sift through trash, searching for recyclables that can be bought by scrap dealers (paper, cardboard, metal objects, tin). This kind of work requires no considerable

amount of skills, though it is still an increasing source of income for the urban poor. Scrap collectors are divided into two categories: rag pickers, who are primarily young, mostly girls, who collect waste on dumping areas in resident neighborhoods, or in street bins, and wandering purchasers, who buy waste directly from families, workplaces, and workshops [4].

Young people below 12 are among the most marginalized members of society, and they frequently live-in unauthorized slums in some of the poorest areas. According to surveys, rag pickers are mostly migrants who have departed their city or town due to difficult living conditions [4].

Waste pickers' occupational health risks stem from two factors: lack of financial aid and the nature of their work. Diseases are particularly prevalent among garbage pickers mainly due to the fact that they belong to the lowest and most impoverished sector of the urban population. As a result, they are even more vulnerable to occupational health risks. Rag pickers who are not even more than 12 years old work in unsanitary circumstances, are accompanied by crows or dogs, and must rummage through dangerous garbage without any protective aid such as hand gloves or any sort of required footwear in all weather conditions. They frequently consume dirty food scraps found in rubbish bins or dumping grounds. When children use the dumping ground as a play area, they risk coming into touch with a variety of potentially hazardous things [5]. Rag pickers operate in dangerous environments, therefore education and awareness of occupational and environmental risks are critical. With the foregoing in mind, the following study was carried out to investigate rag pickers' understanding of different occupational and environmental health dangers, to raise awareness of environmental and occupational health hazards among them, and to evaluate the efficacy of the awareness programme [6].

In addition to illiteracy, child marriage, alcoholism, and domestic abuse, children rag-pickers suffer several common societal concerns. There is no written documentation of their age because they were born in the house and had no schooling. They do not have access to existing official papers such as driver's licenses or election voter identity cards. Poor diet and difficult working circumstances rob them of their youthful innocence. Similarly, reading is not a need for scrap gathering, nor does it help to their overall self-assurance. Due to a lack of resources (money and time) and life goals (making a living), education is pushed to the side, and employment begins as early as infancy [7]. In the informal sector of metropolitan areas, rag picking is a fast-growing trend of child labour. The most harsh and inhumane type of child labour is rag picking. Rag-picking is the most filthy and hazardous task in scrap gathering. They gather plastic, tin, iron, and bottle trash from rubbish and filthy areas in metropolitan areas [8].

Women fulfill a variety of jobs, with 'work' for the source of income being one of the most important. It not only

helps to increase household income (which in many cases is the only source of money for the family), but it also has a major impact on women's status and well-being. For one thing, it puts women's health on a knife's edge. According to studies, women's general health and well-being are not always a top concern for their families. This also applies to women's self-perceived health needs, which are often lower than their real needs. The great majority of Indian women who work in the informal sector experience a variety of health issues as a result of their jobs and their home lives. They labour as casual employees in the public sector or as home-based producers in the private sector, doing tedious, repetitive, and backbreaking jobs. Women make up to more than ninety-five percent of the workforce in the informal sector. Their labour is precarious, sporadic, and sometimes goes unnoticed. They juggle children, house, and job, and their pay isn't always commensurate with their efforts [1].

Organized and disorganized, or formal and informal sectors, are the two clearly visible divisions. As a result, it's important to look into one industry that employs low-wage workers. As a result, we've focused our research on the urban informal sector. India's government (1988). Many visible symptoms of poverty have followed urbanization in emerging nations.

Rag picking activities in the urban informal sector—estimates of the size and gender component of India's informal sector—are notable among them. In India, there were 252 million men and 118 million women working in informal jobs, including agriculture. 95.9% of all female employees are employed in the informal sector. The informal sector employed around 22 million female non-agricultural employees, accounting for 85.6 percent of all female workers. Women make up a whopping 57 percent of home-based employment. Women contribute 32 percent of the GDP in the unorganized sector, which includes agriculture [9].

The recycling industry is organized in the shape of a pyramid, with scrap collectors at the bottom and re-processors at the top. Waste-pickers, who collect scrap, are at the bottom of the heap. Itinerant buyers, who acquire tiny quantities of junk from houses, are just above them. There are many layers of traders between scrap collectors and re-processors, including retailers, stockiest, and wholesalers. The re-processors are in a league of their own. The majority of rag-pickers is not self-employed, but rather works for middlemen or contractors who buy separated material from them at pre-determined rates. Rag-pickers are considered independent contractors. They are not covered by any kind of labour regulation. There is no one to look after them: no employment, government, or office. They generally start as youngsters and work until they become physically unable to do so [10].

Harassment is an issue that has to be addressed. Waste pickers are often overlooked in public policy processes and may even be arrested or physically assaulted. They are treated as nuisances by authorities and with scorn by

the general public. They may be subjected to exploitation and intimidation by intermediaries, lowering their wages. Overall, 47% of garbage pickers polled in the IEMS said harassment was a major factor impacting their job [11]. More than 80% of garbage pickers in Bogota and Durban reported the problem [12].

Not only has society failed to prevent youngsters from becoming child rag pickers, but they have also been mistreated. The majority of poor children, aged five to eighteen, make a living by polishing shoes, washing vehicles, locating parking spots, rag picking, and so on, with average daily wages ranging from Rs 15 to Rs 20 depending on the nature of the labour. And these youngsters may readily be located near bus stops, train stations, movie theatres, and other places where they are battling for survival. Youngsters were sometimes forced to become rag pickers by the rag purchaser, while other times the children chose to become rag pickers on their own. And it was from here that their road of exploitation, involvement with criminals, and drug addiction began, none of which is beneficial for their development or for the society in which they live. Any type of child labour should be outlawed since it not only harms the children, but it also harms society as a whole. A country can only flourish if its future generations are safe and secure. And all children are guaranteed some essential rights for this reason, such as a decent livelihood, access to education, and safety from exploitation. However, it was discovered that their rights had been infringed for a variety of reasons [7].

Rag picking and scavenging were specified in Part-B of the Child Labour (Prohibition and Regulation) Act 1986 as one of the Prohibited procedures for the employment of children under the age of 14 in order to safeguard children from exploitation [13].

Rationale

Rag pickers make a living by gathering, sorting, and classifying trash before selling it. As a result, they are assisting in the clean-up of a substantial percentage of India's 62 million tons of scrap generated each year. It is our responsibility to know the social and health problems faced by that this subset of our community, so that we know the aspects which need improvement.

Aim

Assess the health profile, morbidities and health insurance coverage amongst female rag pickers from Wardha District.

Objectives

To assess the Health Profile of female rag pickers in Wardha District.

To assess the Health Insurance Coverage among female rag pickers in Wardha District.

METHODS

Study design

It will be a cross-sectional study.

Study setting

Present study will be conducted at Datta Meghe Institute of Medical Sciences (DU), Sawangi (Meghe) situated in Wardha District.

Study participants

The participant of the study will include the female rag pickers from the district of Wardha.

Sampling procedure & sample size

We approached a non-profit-organization involved with betterment of female rag pickers in Wardha for necessary permissions. Random sampling will be used to pick 100 female rag pickers for the study.

Data collection tools and process

Using a structured pretested questionnaire data will be collected from all participants. We will collect information about their sociodemographic profile, work related problems, health issues faced. We will also collect samples for basic lab investigations.

Inclusion criterion

Female.

The rag pickers residing in Wardha district.

Exclusion criterion

Unwilling to participate in this study.

Analysis plan

The data will be entered in Microsoft Word Excel and analyzed by Epi Info Statistical Software. Descriptive statistics frequency & percentages will be calculated. Association between various risk factors will be calculated using Chi-Square Test. The data thus analyzed will be presented in the form of tables, graphs and charts.

RESULTS

Proper evaluation of accumulated information along with application of relevant statistical tests will contemplate them.

DISCUSSION

Chandra Mohan, et al. focused on the problem of increasing waste with the country's growing population and the methods in which this problem might be solved with the help of waste collectors. Even if the 3-'R' principles are being used to make the necessary efforts, waste management must still be taken seriously by everyone in order to achieve a cleaner and greener environment [4].

Sarmila Malik et. al. claimed that rag-pickers had a notably higher (p 0.05) risk of worm infestation, pediculosis and scabies whereas those working in domestic areas had a remarkably higher (p 0.05) risk of pediculosis [5].

Fulwani, et al. analysed and differentiated genotoxicity and oxidative stress in samples from female rag pickers

operating at this location to females who exclusively pick up trash door-to-door (in domestic neighborhoods near the university area) as "controls." The rag pickers had substantially high proportions of Micronucleus (MN), Nucleoplasmic Bridges (NPB), and Nuclear Buds (NB) in the buccal Cytokinesis-Block Micronucleus (CBMN) test than the controls [6].

Ranjan, et al. came to the conclusion that women rag pickers were entirely oblivious of the dangers they faced. The investigation indicates that the rag pickers are undernourished and have budgetary limitations. The abnormal values of parameters such as low haemoglobin, high Red Blood Cell Count, and significantly high eosinophil count, as compared to controls, indicate future risks for occupation-related health hazards and infections/diseases, which may lead to impaired function of important organs such as the lungs, liver, and kidney [14]. Similar studies in different groups were reviewed [15-18].

SCOPE AND IMPLICATIONS

The study will evaluate and plot the health profile, morbidities, and insurance, as well as to educate and spread awareness, in order to identify, appraise, and synthesise existing research on effective initiatives that have the potential to eliminate, reduce, or mitigate precarious conditions and their effects on the health, safety, and well-being of female rag pickers and tavern workers.

INSTITUTIONAL ETHICS COMMITTEE APPROVAL

The study protocol will be submitted to the Institutional Ethics Committee of DMIMS (DU) for approval.

REFERENCES

1. Lal BS. World at work: Indian women ragpickers. Int J Inno Res Multidisc Filed 2020; 6:255-263.
2. <https://yourstory.com/2018/06/rag-picker-women-unsung-heroes/amp>
3. Soni P. Problem and situation of girl ragpickers in national capital territory of Delhi. J Alcohol Drug Dependence 2014; 2:1-7.
4. Chandramohan A, Ravichandran C, Sivasankar V. Solid waste, its health impairments and role of rag pickers in Tiruchirappalli city, Tamil Nadu, Southern India. Waste Manag Res 2010; 28:951-958.
5. Mallik S, Chaudhuri RN, Biswas R, et al. A study on morbidity pattern of child labourers engaged in different occupations in a slum area of Calcutta. J Indian Med Assoc 2004; 102:198-200.
6. Fulwani D, Banda D, Shah H, et al. Women rag pickers at a dump in Ahmedabad: Genotoxicity and oxidative stress. Mutat Res Genet Toxicol Environ Mutagen 2020; 858:503254.
7. Chatterjee P. Child ragpickers in India and violation of

- their human rights. Eur Res Series A 2015; 155-162.
8. Bhosale Savita G, Korishetti Vijaya B. Problems of child ragpickers. Int Res J Soc Sci 2013; 2:6-11.
 9. <https://escholarship.org/uc/item/4f48040t>
 10. Trivedi V. Understanding and addressing livelihood problem of rag-pickers in Surat city. IASSI Quarterly 2019; 38:423-437.
 11. Rawat S, Daverey A. Characterization of household solid waste and current status of municipal waste management in Rishikesh, Uttarakhand. Environ Eng Res 2018; 23:323-329.
 12. Dias SM. Waste pickers and cities. Environ Urban 2016; 28:375-390.
 13. Palanichamy A. Child rights, poverty and protection: An Indian perspective. J Rights Child 2016; 1:1.
 14. Ray MR, Mukherjee G, Roychowdhury S, et al. Respiratory and general health impairments of ragpickers in India: a study in Delhi. Int Arch Occup Environ Health 2004; 77:595-598.
 15. James SL, Castle CD, Dingels ZV, et al. Estimating global injuries morbidity and mortality: Methods and data used in the global burden of disease 2017 study. Inj Prev 2020; 26:125-153.
 16. James SL, Castle CD, Dingels ZV, et al. Global injury morbidity and mortality from 1990 to 2017: Results from the global burden of disease study 2017. Inj Prev 2020; 26:96-114.
 17. Khanam N, Wagh V, Gaidhane AM, et al. Assessment of work-related musculoskeletal morbidity, perceived causes and preventive activities practiced to reduce morbidity among brick field workers. Indian J Community Med 2019; 31.
 18. Wanjari MM, Wankhede MP. Assess the physical morbidity profile among the welders. Int J Modern Agric 2020; 9:116-119.