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A Study on Impact of Occupational Hazards on Physical and Social Health Condition of Ragpickers

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ABSTRACT

Chiffonier commonly known as rag pickers are those who pick rags, collect recyclable materials from trash, dumping sites, road sides and from large populated areas. It is blind alley work adapted by many impecunious people due to pennilessness and lack of education. These destitute peoples generally live in slum areas, road sides in extreme onerous conditions facing a lot of health problems related to contact to chemical substances, physical hazards, biological hazards, and general health problems. Rarely very few of them use safety equipment like gloves, masks, sticks etc. Unhygienic and deplorable working condition give directly impact on health. Rag pickers are discriminated by society due to their job. With a growing population, the numbers of people adopting these activities also increases day by day. Illiteracy, lack of job opportunity and poverty are the main causes of adopting this occupation. The paper aimed to explore the various health problems faced by rag pickers by percentage, examining their hygienic and sanitary practices and the study of their socio- economic condition. Therefore, the study will help in understanding the occupational hazards of rag picking and helps to work for the physical and social health of rag pickers. The data was collected by using a questionnaire and interview method. A total of 300 respondents were selected but 10 had not responded. The method of sampling technique was convenience sampling technique. The findings of study reveal that rag pickers are suffering from various health issues and stigma. Low income makes their life extremely arduous to fulfil the basic need of life. The study shows that majority of rag pickers are suffering from various health and social problems. They suffer from health problems like dermatological problems (86.56) %, eye problem (84.49), cough and cold frequently (13.79) %, muscular pain (26.89) %, joint pain (13.79) %, road accidents (14.48) %. (70.3%) Majority of the rag pickers does not use safety equipment like mask, gloves, separate clothes. Social problems like domesticviolence (28.62) %, physical abuse (11.72) disrespect (34.13) % are also common.

Keywords: Chiffonier, Trash, Dumping Sites, Impecunious, Pennilessness, Deplorable, Malaises, Hazards, Arduous.

Introduction

Today about half of the population are living in cities and in the coming future it will grow up to 80% of the urban population of the world. This rise in population gives rise to many problems like shortage of food, exploitation of labour, poverty etc. which directly impacts the lower income groups. This also makes lower income groups from poor to indigent and indigent to destitute. In this case, these destitute people



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are compelled to do rag picking. Rag picking makes little money to them by which they rarely fulfil their needs. Even with suffering from a lot of problems, they wear an innocent smile with a hope that next day may makes them a good money. Rag pickers start their job since before sunrise and work till the sun sets. After working for more than 8 - 10 hours, their family income rarely goes to rupees 10000 per month which is not fixed for every month. They mostly collect recyclable wastes such as plastic bottles, containers, woods, metals, plastic etc. from the trash dumping sites, road side trash, stations, and other busy populated places. In a day the mostly collects about 8 - 12 kg rags on which their income is based by selling them. Most of the rag pickers are extremely poor, uneducated and have migrated from rural areas. Most of them have started this job at the age of 5 to 8 years. (Kamat, 2007).

Rag pickers live and work in very dirty and peril conditions. On railway stations, bus stands, auto stands, all the useful trashes are picked by them searching for some food in the dustbin. As they are extremely destitute, each day they eat half stomach which results in malnutrition. There is high prevalence of diseases among rag pickers as they pick various unknown substances from medical waste and get indirect contact with chemicals, used syringes, other medical and laboratory waste which makes them suffer from eye and skin problems and some infection. While working, injuries by sharpen objects, animals and insect bites, road accidents are also common in rag picking. They got indirect contact of chemicals and infections. Diseases like tuberculosis, cancer, typhoid infection are very common because of their exposure to harmful germ containing materials. (Kamat, 2007) They are easily vulnerable to numerous communicable and other hazardous illnesses (Devi et al.2014) Hygiene practices are very poorly practiced by rag pickers. They work barefoot, do not use masks, gloves, stick while rag picking which causes numerous bacterial and fungal diseases.

Rag pickers play an important part in waste management in our society. Their indirect chief role in cleaning our society is unnoticed. Rag pickers face isolation and discrimination in our society. (Sachdeva, 2011) Common people call them abusive names, disrespect them, female rag pickers get sexually harassed and authority also troubles them. Most of the Slum areas of Patna are hub of rag pickers. Various injuries marks on their body are the reflection of the poor condition. After consumption of toxic substances, they create domestic violence to their family. Due to lack of education and skill, they adapt this activity and feel satisfied as they are not able to have a good job. According to UNICEF, picking is the worst form of child labour. Small children get engaged in rag picking which increases child labours and makes them in contact with bad company. They are unaware of the rights they have.

Review of Literature

Rag picker is a term which is denoted to anyone who picks rags of any type for meeting their basic needs and requirements. They pick a variety of materials. In Japan, large number of materials used in industry are regain from discarded objects. Rag pickers plays an important role in industries of Japan by giving the materials as raw materials from the rags they pick (Tiara. 1968). Rag picking is the most unsafe and unhygienic work in waste collection. Mostly children of lower caste (SC_s/ST_s) are indulging in this activity. They collect recyclable materials like plastic, iron from trashes. They get injured by the sharpen objects, glasses, iron. They are working like this to get rid of their hunger and faces various health problems like tetanus and skin diseases (Mirza 2018). The ragpickers implored around the whole day as soon as the garbage gets deposited by the people as well as by municipality workers. It is not easy to collect garbage from the garbage dump area in the morning, segregate it and sell out the collected garbage. In their work they suffer many health issues and physical harms like animals and insect bites, and injuries



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(Mohadand *etal*.2008). They suffer from mental hazards too. The main cause to adopt this occupation is lack of skills and very low daily income which they get by selling of their collected rags. Most of them are alcoholic and addicted from some kind of toxic substance (Mote *etal*. 2016). Rag pickers are treated very badly. They are still alive in most of the developed countries. They are at extreme high health risk, prone to many diseases and bad habits. Their poor condition indulges them into criminal and anti-social activities when they grow up (Nuzhat 2020). There is an extreme need to work on health issues, social progress, working condition and income of the rag picker to make changes in the employment structure of an economy (Padolkar *etal*. 2021).

Problem of the Study

Rapid growth in population leads to increase in waste production, shortage of food, poverty, lack of opportunity etc. Due to this destitute, people adapt this job of rag picker as it does not require skill and find it easy way to earn some money. Rag pickers are not aware of their occupational hazard on health. Nowadays ragpickers are getting infected by many malaises due to lack of hygiene. Illiteracy too is one of the main reasons of rag picking. Ragpickers are not aware about need of hygiene and long-term hazards on health. They also face many social problems like discrimination in terms of status, caste and sometimes religions too. Less knowledge of the rack pickers, their incorrect picking practice and less awareness regarding hygiene practices is the primary cause of their health problem this research study will be carried out among ragpickers of Patna to find out the health problems and the social condition of ragpickers.

Need of the Study

Rag picking is being practiced in India largely. It has many hazards on health such as asthma, eye infection, skin infection etc. Many times, case of spot death due to accident and animal bites have been also reported. There is a need to make people understand that rag pickers are also part of our society and they have equal rights. Many people humiliate, insults and give no respect to rag pickers because high society people call them musher, chor, kachra and sometimes abuse them. These things force them to leave isolated from the society and in many cases, it also led them to participate in criminal activities. Even after these problems they are doing their job. There is ignorance of sanitization also. It is very important to explore the problems and create awareness about the hygiene and sanitation practices and their rights in this society. Despite all the government schemes and policies, and the efforts of government and non-government agencies, the health condition of the rap because is not improving. The present study will be carried out for help fill the knowledge gap. The main aim of the study will be to access the different materials picked by rag pickers because that disposal practices there in environment and health effect and the management of the waste the findings will be helpful to make people and rap because aware of determining the various waste management options for the different types of materials at different and other commercial level.

Objective of the Study-

- O1. To explore the various health problem faced by the rag pickers.
- **O2**. To examine their hygiene and sanitary practices.
- **O3**. To study the socio-economic conditions of rag pickers.

Hypothesis-

Objective 2 is related to Hypothesis 1



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H1: Unhygienic practises and working condition are responsible for their health problems.

Objective 2 is related to Hypothesis 2

H2: There is relationship between handwash habits by soap before eating and educational qualification. Objective 3 is related to hypothesis 3

H3: There is relationship between work satisfaction and fulfilment of basic needs.

Methodology

- **Research Design-** Descriptive research design and explanatory research design was adapted for the research study.
- Area of the study: Respondents from given areas of Patna were taken: -
 - Govindpur
 - Kidwaipuri
 - AIIMS Road Walmi
 - GPO Golumber
 - Railway Stations
 - Digha Ghat (Chaminade Training Institute)
- Sample size- Sample of 300 respondents were selected. 290 did not responded.
- Sampling Method- Purposive Sampling technique was used because this sampling allows to select samples according to the requirement of the research subject.
- Tools and Techniques of Data Collection- Primary data was collected by scheduled method. As most of the rag pickers were illiterate so interview was conducted orally and their responses were noted in questionnaire. Interviewing one rag picker took about 20 minutes. Interview was carried at their work place and residence area. Pilot study was conducted but data were not included in analysis.
- **Pilot Study** To know the issue, a small- scale preliminary study was conducted with 40 respondents in the actual area of the study. Pilot study pointed out some new issues which needed a little bit of modifications. The small changes were suitably incorporated before finalizing the questionnaire.
- Coding of Responses- After data collection process, numerical code was decided and given to every specific response.
- **Scoring-** All coded relevant information given by the respondent were transferred in a master chart which makes a basis for statistical analysis and provides an overview picture of respondent's score and then responses were used for statistical analysis.
- **Data Analysis-** Statical analysis of data was done by statical package for the social science (SPSS) version 20.0. Frequency of responses was used to analysed the data. Chi-square test was used to test the hypothesis.

Result Discussion and Data Analysis

The results obtained during the period of study were subjected to strong matches of statistical analysis and systematically presented.

Variables	Percentage (%)
Age (years)	
10-19	12.41
20-29	21.37
30-39	31.03



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20 ahaya	25.17
39 above	35.17
Gender	
Male	43.44
Female	56.55
Caste	
SC/ST	93
OBC	4
Other	2
Educational Qualification	
No education Primary	84.82
Education	10
Secondary Education	5.17

Table 1: Demographic profile of respondents

Interpretation: The age group was divided into four sections i.e. 10-19, 20-29, 30-39 and above 39 years. Tables shows that majority (35%) respondents were above 39 years of age and very few respondents were from age group 10-19 years. Most of the respondents i.e. 56.55% were females and rest 43.44% were male. Majority (93%) rag pickers belongs to schedule caste and schedule tribes and very few belongs to OBC and others. Maximum i.e. 84.82% rag pickers had not attained any education, 10% had attained primary education and rest 5.17% had attained secondary education.

Place of rag picking

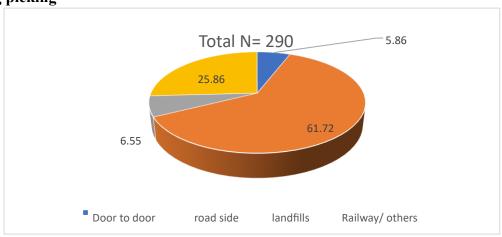


Figure: 1 Place of work

Interpretation: Figure shows that maximum (61.72%) rag pickers pick rags from road side waste dumps this is because it easily to reach and shops dustbins contains many plastic bottles, containers and sometimes they also get something to eat. 25.86% picks from railway stations because passengers throw food package containers, plastic bottles, papers etc. in large amount which ragpickers can pick to make money. 6.55% goes to landfill and rest 5.86% goes door to door to collect rags. They prefer railway stations and road sides bine most due to its busy rout and large peoples passes from there which leads to heavy waste generation.



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Types of materials collected by rag pickers

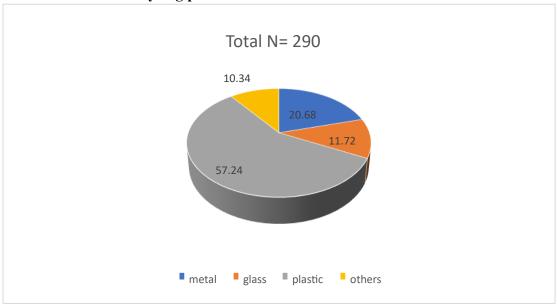


Figure: 2 Types of materials

Interpretation: Figure shows that maximum preferred material for rag pickers to collect is plastic (57.24%) as plastic materials are used widely so it is produced widely too are available so easily too, 20.68% collects metals as they can get good money on selling them. Very few (10.34%) collects glass and rest 11.72% collects other wastes like biochemical wastes, paper, wood, cardboards etc.



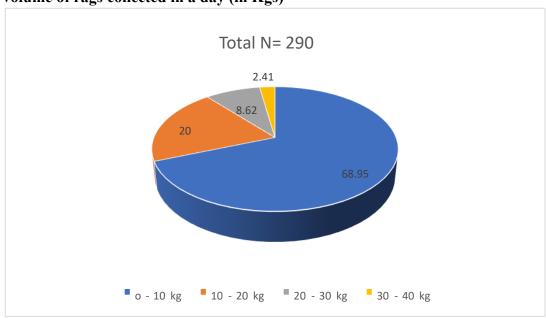


Figure: 3 Weight of rags collected in a day

Interpretation: Figure shows that maximum (68.95%) rag pickers collect 0-10kg rags in a day. 20% collect 10-20kg, 8.62% collect 20-30 kg rags in a day and rest 2.41% collect 30-40kg rags in a day working from morning to evening. They travel long distance barefoot carrying this heavy weight collected rag mostly on their back.



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Objective 1: To explore the various health problems faced by the rag pickers. Physical hazards during work

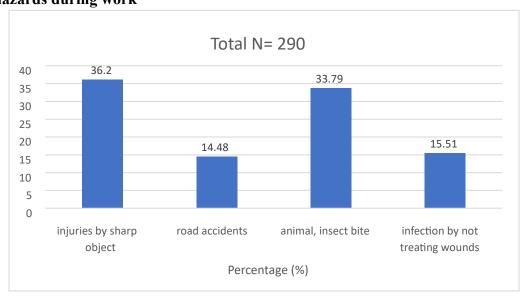


Figure: 4 physical hazards

Interpretation: Figure shows that case of injuries by sharpen objects like iron nail, broken glass pieces etc, during work is maximum i.e. 36.2%. 14.48% faces road accidents and many times they caught to spot death, 33.79% faces animal and insect bite which is very common among them. Rest 15.51% suffer from infection because they do not treat their wounds and injuries which causes infection.

Eye and skin problem

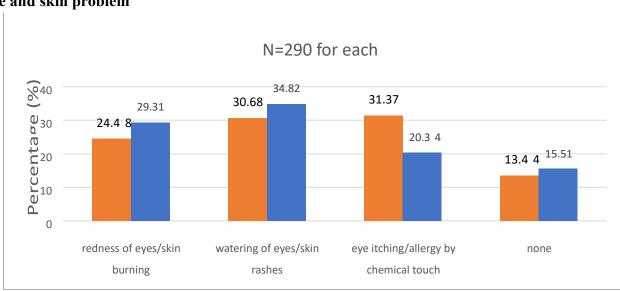


Figure: 5 Eye and skin problem

Interpretation: Figure shows that, most of the rag pickers are suffering from eye and skin problems. Maximum (30.68%) are suffering from eye itching, 24.48% are suffering from redness of eyes, 30.68% are suffering from watering of eyes these problems are mainly due to not using mask, gloves and stick as because they touch their eyes by filthy hand. Very few i.e. 13.44% have no eye problem. It was seen that some of them who are free from eye problems uses mask, gloves, stick etc.



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Common diseases faced by rag pickers

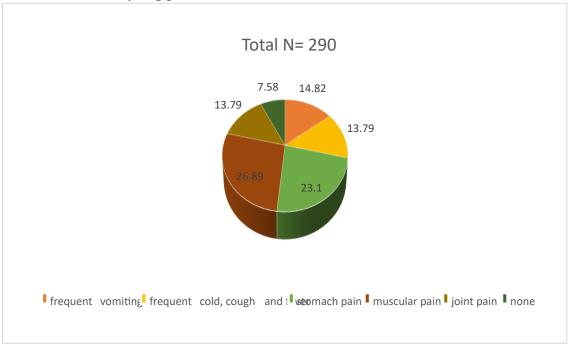


Figure: 6 Common health problems

Interpretation: Maximum (26.89%) suffers from muscular pain as they work in static posture, 23.1% and 14.82% suffers from stomach pain and frequent vomiting as they eat in unhygienic way which leads to infectious diseases, 13.79% suffers from joint pain as they do not eat nutritive foods so may there is deficiency of calcium, protein etc. 13.79% suffers from frequent cold, cough and fever due to weak immunity system due to improper diet. Only 7.58% are free from these diseases.

Health hazards due to water borne disease and insect bite

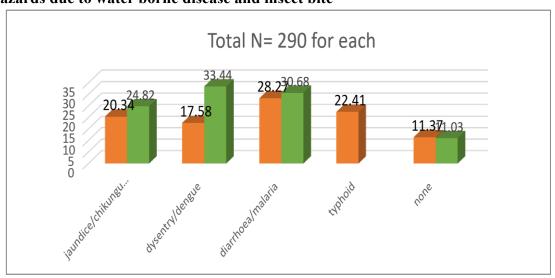


Figure: 7 Water borne disease and insect borne disease

Interpretation: Figure shows that rag pickers are suffering from both insect and water borne diseases. Due to unhygienic drinking water they caught to water borne diseases like jaundice (20.34), dysentery (17.58%), diarrhoea (28.27), typhoid (22.41%). As they live in dirty environment to insect borne diseases are common among them like chikungunya.



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Consumption of toxic substance

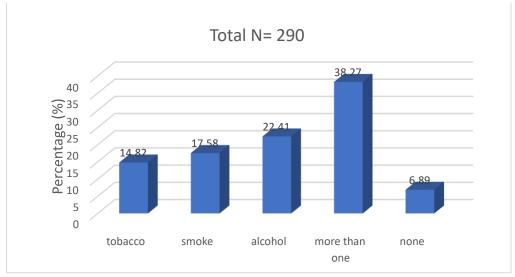


Figure: 8. Drinking/smoking/toxic substance consumption

Interpretation: Figure shows that maximum rag pickers (38.27%) consume more than one toxic substances like tobacco, cigarette, alcohol. On the other hand,14.83%, 17.58%, 22.41% consumes only tobacco, cigarette, alcohol respectively. Only 6.89% does not consumes any toxic substance. After taking toxic substances they create violence in society and domestic violence at home

Objective 2: To examine their hygiene and sanitary practices.

Use of personal protective equipment and separate cloth during work

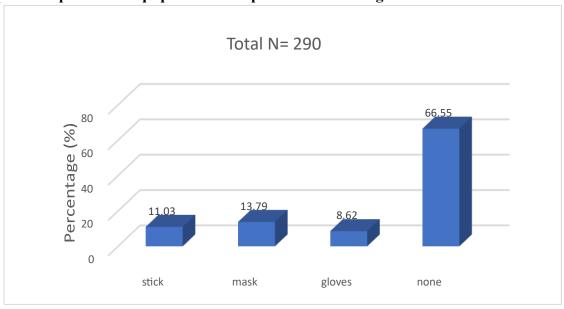


Figure: 9. Use of equipment by rag picker

Interpretation: The figure shows that most rag pickers i.e., 66.55% did not use any personal protective equipment and separate cloth during rag picking. 11.03% uses stick. Only 13.79% uses a mask and the rest 8.62% uses gloves.



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H1: Unhygienic practices and working condition are responsible for their health problems. For testing this hypothesis, Chie- square value was calculated by using Chie- square test in Table 2.

	suffering from eye disease							
Sanitary tools	redness	watering	itching	none	Total	df	Chi- Square	p Value
Mask	10	12	7	11	40			
Stick	8	8	6	10	32	9		
Gloves	7	6	6	6	25	9	12.737	0.001
None	46	63	72	12	193			
Total	71	89	91	39	290			

Table 2 * Significant at 0.05 at alpha 5%

Hypothesis No. 1 was formulated keeping in mind that unhygienic practices and working condition are related to health problems. In Table 2, those who uses sanitary tools are less prone to eye diseases as compared to those who does not uses any sanitary tools.

Use of soap, handwash, sanitizer after work and before eating/cooking food

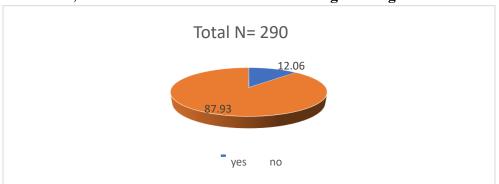


Figure: 10. Use of soap/handwash/sanitizer

Interpretation: Figure shows that very few only (12.06%) wash their hand by soap or hand wash or uses sanitizer before eating, cooking, and touching their face. It was found that some of the educated rag pickers have this hand cleaning habit and are aware of need of using soap, handwash and sanitizer.

H2: There is relationship between handwash habits by soap before eating and educational qualification. For testing this hypothesis, Chie-square value was calculated by using Chie-square test in Table3

Educational qualification	Washing hand	Total	df	Chi-	p	
Educational qualification	Yes	No	Total	u1	Square	value
No education	7	239	246			0.001
Primary Education	18	11	29	2	130.17	
Secondary education	10	5	15			
Total	35	255	290			

Table: 3 * Significant at 0.05 at alpha 5%



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Hypothesis No. 2 was formulated keeping in mind that the habit of washing hands with soap before eating would be related to educational qualification.

In Table 3, some educated rag picker washes their hand by soap before eating and p value is also 0.001 (less than 0.05). Hence, Hypothesis 2 i.e., There is relationship between handwash habit with soap before eating and educational qualification has been accepted.

Objective 3: To study the socio- economic conditions of rag pickers.

Working hours of rag pickers

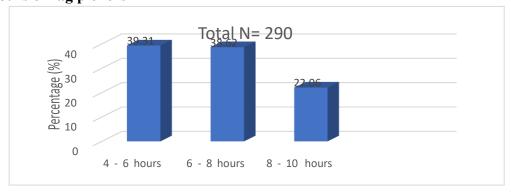


Figure: 11. Working hour

Interpretation: This figure shows that most of the rag pickers work for 4 - 6 hours (39.31) % and the rest of them work for 6- 8 hours (38.62) %, and 8- 10 hours (22.06) %.

H1: Unhygienic practices and working condition are responsible for their health problems. For testing this hypothesis, Chie- square value was calculated by using Chie- square test in Table 2.1.

	suffering from skin problem							
	skin				Total		Chi-	p
working hours	burning	rashes	allergy	none		df	Square	Value
4-6 hrs	76	24	5	9	114			
6-8 hrs	6	66	35	5	112	6	215.618	0.001
8-10 hrs	5	6	18	35	64	6		
Total	87	96	58	49	290			

Table 2.1 * Significant at 0.05 at alpha 5%

Hypothesis No. 1 was formulated keeping in mind that unhygienic practices and working condition are related to health problems.

In Table 2.1, those who are working for hours are suffering from skin diseases which shows that working condition effects the health of the rag pickers.

In table 2 and 2.1, those who uses safety tools are less prone to eye problem and, those who works for hours are suffering from skin diseases as p value is 0.001 i.e., less than 0.05(expected value). Hence, Hypothesis 1 i.e., Unhygienic practices and working condition are responsible for their health problems has been accepted.



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Social problems faced by rag pickers.



Figure:12. Social problem faced

Interpretation: Figure shows that maximum (34.13%) rag pickers face disrespect at their work place. Common peoples pass abusive comments calls them by unpleasant names and restricts them to pick rags many times. (28.62%) rag pickers are suffering from domestic violence. Mostly it is due to consumption of toxic substances and crisis of money. 11.72% faces physical abuse like people's comments on their skin colure, physical appearance etc. 15.17% works freely and lives independently in society as they do not have any kind of social problems, rest 8.62% faces harassment from authority like police force restricts them to do their jobs especially on railway stations.

Name by which peoples calls rag pickers

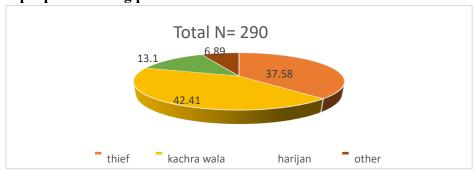


Figure: 13. Names given to rag pickers by common peoples

Interpretation: Figure shows that rag pickers are called by many unpleasant names like kacchara wala (42.41%), thief (37.58%), harijan (13.1%), and others names (6.89%) which includes abusive words by common peoples which hurts them a lot.

Fulfilment of basic needs of rag pickers

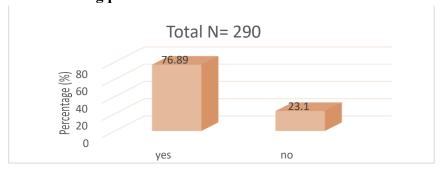


Figure 14. Basic Need Fulfilment



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Interpretation: Figure shows that maximum (76.89%) rag pickers basic needs get fulfilled but with a lot of compromises and problems rest 23.1% cannot fulfil their basic needs.

Monthly family income of rag pickers

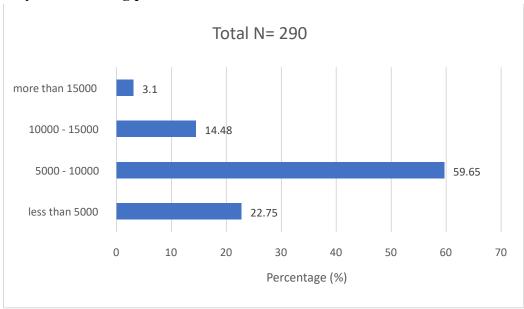


Figure: 15. Monthly income (in rupees)

Interpretation: Tables shows that maximum (59.65%) rag pickers family income is ₹5000-10000 in a month, very few i.e. 3.1% rag pickers family income is more than ₹ 15000. It depends on the weight of rags and type of material which they collect from trashes. They sell their collected rags of whole family collectively to the junk dealers, contractors, and brokers of scarps.

Reason of rag picker for choosing rag picking occupation

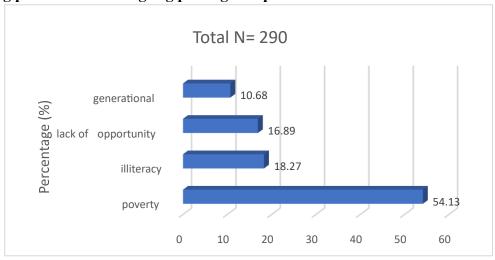


Figure:16. Reason of choosing rag picking

Interpretation: Figure shows that maximum (54.13%) rag pickers had adopted this dead-end job due to poverty, 18.27% due to illiteracy, 16.68% due to lack of job opportunity which is an outcome of rapid grow of population in urban areas and rest 19.68% due to generational hierarchy. Generational hierarchy reason is an outcome of caste system.



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Satisfaction of rag pickers from their job



Figure: 17. Satisfaction from work

Interpretation: Table shows that maximum (53.79%) is satisfied of rag picking work as because somehow, they fulfil their basic needs. Rest 46.2% are not satisfied and wants to do a better work like construction labours, cleaning staffs in shops etc., as they do not have eligibility and skill to do something else.

H3: There is relationship between work satisfaction and fulfilment of basic needs. For testing this hypothesis, Chie-square value was calculated by using Chie-square test in Table3

sung uns nypourous, ome sq.				1		
Work satisfaction	Basic need f		df	chi-	p	
work satisfaction	yes	no	total	uı	square	value
YES	135	21	156			
NO	79	55	134	_ 1	28. 359	0. 001
Total	214	76	290			

Table: 4 * Significant at 0.05 at alpha 5%

Hypothesis No. 3 was formulated keeping in mind that work satisfaction would be related to fulfilment of basic needs.

In Table 4, those whose basic needs are fulfilled are satisfied with their work and p value is 0.001 which is less than expected value 0.05. Hence, Hypothesis 3 i.e., There is relationship between work satisfaction and fulfilment of basic needs has been accepted.

Conclusion

This study depicts that rag pickers work for a very long time in a static poster. They suffer from various dermatological, eyes, insect and water borne disease. Frequent suffering from the cold, cough and fever is also seen along with unhygienic practices. Social problems are also seen such as domestic violence, disrespect, and physical abuse among rag pickers. Although rag pickers perform a chief role in waste management in our society. Their hard work is not noticed. Even their problems are not marked by the



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government and organization who should work for them and NGOs which are working for rag pickers are supported by very few peoples of our society. The issues like lack of sanitization and safety instruments, access to lack of government schemes, and access to nutritional issues should be the first issue of concern. Measures to improve their working condition, access to the toilet, access to health treatment, access to essential education should be taken. There is also need to make the rag pickers aware of their personal hygiene and social rights.

Suggestions

Based on the study, we like to suggest the following suggestion:

- Governments and Non-Government Organizations working for rag pickers should conduct some awareness programmes regarding need of use of sanitary tools during rag picking.
- Governments should look on the running programmes for below poverty line peoples like health facilities in government hospitals, government schools etc. are going on smoothly or not.
- For improving the status and condition of rag pickers ergonomic and safe practices must be established to lower the work exposure.
- Preventive and curative measures should must be taken.
- Peoples who have good economic or have enough good financial condition should make some donations or should setup an NGO which will work to improve ragpicker's problems.
- We should dispose our waste in segregated manner by putting all types of wastes separate bins and disposal bags.
- Family background shows that poverty is the main cause of adoption of rag picking so that, income generation programme should be raised.
- Rashan and Aadhar card should be provided immediately.
- Government and local NGOs provide safety equipment like mask, gloves, rubber shoes, stick etc. to rag pickers.
- There should be toilet facility at garbage dumping site.
- Clean and safe drinking water should be provided.
- Free health check-up camps should be organised at regular interval by state government, local governing bodies, and NGOs.
- Awareness regarding occupational health should must be spread among ragpicker so that, health issues like musculoskeletal disorder among them can be reduced.
- Vaccination against hepatitis A, B, and C, rabies, tetanus etc. should be provided free of cost to protect the health of ragpicker.
- Children who are involved in rag picking activity should be listed and enrolled in school to make them able to take good job in future by attaining education.
- Informal recycling of recyclable materials should must be organised in country since legitimized of rag picking would provide better working condition to rag pickers.
- More NGOs should be established to work for rag picker community.
- Some micro-finance group should be formed under National Urban Livelihood Mission (NULM) and National Urban Health Mission (NUHM) to help the rag pickers.
- Schemes like Ragpickers' Education and Development schemes (REDS) of Patna should be supported and taken as priority by government and non-government organizations.



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Recommendations for future researchers

- 1. Livelihood, social security and environmental condition of rag pickers should be explored by researchers.
- 2. Mental health condition of rag pickers should be explored.
- 3. Health promotion tips and hygiene importance knowledge should be given to them by the researchers during their study period and after study.

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References

- 1. Devi, K.S., Swamy, A.V.V.S., & Krishna, R.H. (2014). Studies on the social waste collection by rag pickers at Hyderabad municipal corporation India. International Research Journal of Environmental Sciences, 3, 13-22.
- 2. Mirza, Faheem and Indulkar, Pranali S. (2018); Rag picking: A factory of violations and infringement of child rights. Internet. J. Appl. Soc. Sci. 5(3&4): 247-284
- 3. Mohad, M. Omkara, S. (2008). 'Child Labour in India,' A Bitter Truth, Deep and Deep Publication, New Delhi.
- 4. Mote, N.B., Kadam, B.S., Kalaskar, K.S. Thakre S.B., Adhav, S.A., & Muthuvel, T. (2016). Occupational and environmental health-hazards (Physical and Mental) among rag pickers in Mumbai Slums: *A cross-section study Science Journal of Public Health*, 4(1), 1-10.
- 5. Nuzhat, H. (2020). Socio- Economic problems faced by rag pickers, Vol. 7, Issue 12 JETIR. Govt. First grade college.
- 6. Taira K, Ragpickers and Community Development:" Ants' Villa" in Tokyo Source: ILR Review, Vd.22, No.1(oct.1968) pp:3-19.