# An Assessment of Health Status and Standard of Living of Rag pickers in an Urban Area of Ahmedabad

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## Abstract:

Introduction: We are in era of "Swatch Bharat Mission" and emphasized to keep clean our surroundings. The rag pickers are the main pillars of it but the irony of present times is; they are highly neglected. Aims and Objectives: 1. To study socio demographic profile of rag pickers.2. To assess the health status of rag pickers. 3. To study standard of living of rag picker families. 4. To evaluate utilization of health services. **Method:** The study design adopted for present study is cross sectional study. The study population included rag pickers residing in Bhavaninagar and Bapunagar area of Ahmedabad. The sample size was 100 which were selected by purposive sampling. The study period spanned from August 2016 to September 2016. The statistical analysis was done using appropriate software. The exclusion criteria for the current study is non consenting family members, closed houses, houses in which no adult family member was there to answer. **Results:** Out of total 119 rag pickers, 78% were female. 34.45% of rag pickers were of 40 to 49 years age group.48% rag pickers was illiterate. As oral tobacco consumption (58.3%) was higher among male while female were used to have snuffing (28%).68.37% rag pickers were hypertensive. Rag- pickers were mostly suffering from body ache (34%) and also suffered from backache (20%), dizziness (20%) and skin allergy (19%). The rag pickers got 8 kg/day of waste on an average. **Conclusion:** Female predominance was seen in rag picking. Illiteracy rate was higher than urban population. Living condition of rag pickers was poor and some of them did not have access to basic amenities like toilet and sufficient safe drinking water supply and separate bathing facilities.

Key words : Addiction, Health services, Health status, Literacy, Rag pickers

## Introduction:

Round the clock 24 by 7 a lot of waste is generated by the community. The waste material can be a nuisance and the sources of pollution in air, water and soil, if not treated appropriately. Consequently, a high incidence of illness is caused, such as dysentery, typhoid, fever, enteritis, cholera and diarrhea. It is very common to find large heaps of garbage lying in a disorganized manner in and around the cities due to the inability of municipal corporations to handle the large quantity of waste.<sup>[1]</sup> It is a matter of great importance that how this waste is being managed. Numbers of people are working for the removal of this waste from the street the betterment of the society by disposing off the waste the community generates. They are rag pickers; correctly called as the invisible environmentalists who have adapted waste collection and disposal as their mode of living.

Most of the rag-pickers are extremely poor, illiterate, and belong to rural immigrant families. Many commence their profession at the young age of five to eight years. Most of them never attend any school or have any formal education.<sup>[1]</sup> In Ahmedabad, more than 50,000 rag pickers slog daily to unload at local garbage collectors.<sup>[2]</sup> They work for a meager income but have an irreplaceable impact on our lives. As they are exposed to number of health hazards, they are prone to get many communicable and noncommunicable diseases. Although these are the people who help in keeping the environment clean, the irony of present times is that; this group of people is highly neglected by the health system. Apart from the health problems, they also face many social problems like social stigma. It is a need of the hour to focus on this particular group of the society so that they too can enjoy a healthy life full of dignity. The

current study was carried out to obtain the health status of the rag picker families and the problems confronted by them.

#### **Objectives**:

- 1. To study socio demographic profile of rag pickers.
- 2. To assess the health status of rag pickers.
- 3. To study standard of living of rag picker families.
- 4. To evaluate utilization of health services.

### Method:

The study design adopted was the cross sectional study type. The population selected was rag pickers residing in Bhavaninagar and Bapunagar area of Ahmedabad. The exclusion criteria for this study is non consenting family members, closed houses, houses in which no adult family member was there to answer. The sample size of the study was 100 and the sampling technique was purposive sampling. Only those participants were selected who had at least one family member working as rag picker. The study used a semi structured questionnaire. The consent of study population was ensured to conduct the study and the permission was taken also from concerned Medical Officer of respective Urban Health Center. The Statistical analysis was done using appropriate statistical parameter.

First of all the areas in which the rag pickers were residing were identified namely Viratnagar and Bapunagar. Medical officers of both the UHC's were contacted and requested to facilitate the survey. The information was gathered by house to house survey. Interview of one family member was taken using the study questionnaire.

Housing condition was observed to evaluate quality of life. To get better quality of information the help of ASHA workers was taken.

#### **Measurements:**

Standard of living: Based on their housing condition Basic amenities: Inspection

Blood pressure: Using sphygmomanometer

Vaccination status: Mamta card, Verbal questioning

Social stigma: Interview of rag pickers

Utilization of services: Asking for cards

#### **Result:**

Total 100 houses in which at least one of the family members was engaged in the profession of rag picking were visited. There were total 119 rag pickers from 100 houses. Female preponderance was seen as out of total 78 % rag pickers were females. All rag pickers were following Hindu religion. Half of the rag pickers had own houses while half of them were living in a rented house. 51 families were BPL card holder while 96 families and 51 families had at least one member holding Election card and Aadhar card respectively. Average family size was 4.6% persons /family

Table 1 shows that nearly one third of rag pickers were in age group from 40 to 49 years (34.45%). It was also found that in a house five year old child was accompanying her grandma for rag picking as there was no body to take his care.48% of them were illiterates.

As observed in figure 1, Out of 119 rag pickers 46.21 % rag pickers had addiction of tobacco or alcohol. 57 % male and 40 % female rag pickers had atleast one addiction. As oral tobacco consumption (58.3%) was higher among male while female were used to have snuffing (28%). Out of total 119, 98 rag pickers were present at home at the time of survey and could be interviewed and screened for health status.

Table 2 shows Distribution according to blood pressure measured among rag picker. As per JNC-7 criteria of hypertension, out of them 68.37 % rag pickers were hypertensive. Among them 69.05 % females had hypertension while 64.29 % males had hypertension.

Table 3 shows For Major illness 57% families preferred a Government Hospital followed by Municipal clinics 22%, private clinics 17%. Only 1% family preferred Trust and 3% preferred others for major illness.

All Rag-pickers were asked about health problems and social stigma they perceived because of rag picking. Table 4 shows Rag-pickers mainly

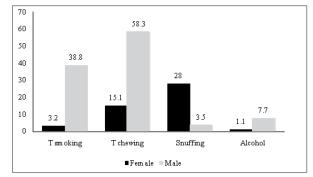
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Age in years	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
<20	1	1.1	5	19.2	6	5.04
20-29	12	12.9	6	23.1	18	15.12
30-39	23	24.7	2	7.7	25	21
40-49	33	35.5	8	30.8	41	34.45
50-60	19	20.4	3	11.5	22	18.48
>60	5	5.4	2	7.7	7	5.88
Total	93	100	26	100	119	100
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Illiterate	50	53.76	7	26.92	57	47.90
Primary	30	32.26	11	42.31	41	34.45
Secondary	12	12.9	7	26.92	19	15.97
Higher secondary	0	0	1	3.85	1	0.84
College	1	1.08	0	0	1	0.84
Total	93	100	26	100	119	100

 Table 1: Socio demographic profile of Rag Pickers

 Table 2: Distribution of study participants according to blood pressure measured

Blood	Female		Male		Total	
Pressure	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Hypertensive	58	69.05	9	64.29	67	68.37
Normotensive	26	30.95	5	35.71	31	31.63
Total	84	100	14	100	98	100

#### Figure 1: Type of addiction among rag pickers



suffered from bodyache which was almost 34%. And also suffered from backache and dizziness which was 20% followed by Skin allergy which was 19%. These problems, they perceived because of rag picking. While none of the Rag-pickers felt any social rejection because of rag picking.

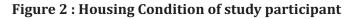
As observed in figure 2, 12% houses were no sanitary latrine facilities, 33% Houses had no bathing facility and 36 % houses had inadequate water

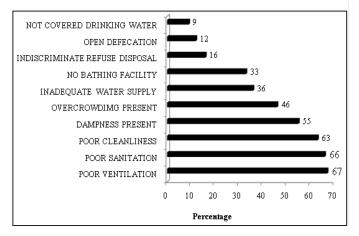
Table 3: Distribution according to illnesses suffered
and services preferred by participants

Hospital	Major illness		Minor illness	
	Frequency	Percentage	Frequency	Percentage
Government /municipal /trust	80	80	71	71
Private hospitals	17	17	23	23
Others	3	3	6	6
Total	100	100	100	100

Table 4: Perceived Health problems because of	
rag picking among study subjects	

Perceived Health problems	Frequency	Percentage	
Backache	20	20	
Body ache	34	34	
Dizziness	20	20	
Headache	4	4	
Leg pain	3	3	
Skin allergy	19	19	
Total	100	100	





supply. 66% household had poor sanitation and 67% of them had poor ventilation facilities.

## **Discussion**:

In our study out of total 119 rag pickers 78.2% were female while In a study conducted by Chandramohan in Tamil Nadu, men constituted 53%. In the same study 46% of the rag-pickers were between 30-50 years of age which was similar to present study in which majority (55.5%) belonged to 30-50 years age group. <sup>[3]</sup> About47.90% rag pickers was illiterate. Over all literacy rate was 52.1%. Literacy among male (73.08%) rag pickers was significantly higher than female(46.24%) rag pickers.( $\chi^2$  value 17.6 at d.f. =1, p < 0.001) The male literacy rate in Ahmedabad is 88.16% and female literacy rate is 83.48%<sup>[4]</sup>. in study conducted by Chandramohan in Tamil Nadu the rag pickers, 71% were uneducated and the remaining had education below 10th standard (15%, 5th and below 5th; 14%, between 5th and 9th)<sup>[3]</sup> in our study As oral tobacco consumption (58.3%) was higher among male while female were used to have snuffing (28%).56.3% rag pickers were hypertensive. Rag-pickers were mostly suffering from body ache (34%) and also suffered from backache(20%) and dizziness(20%) followed by skin allergy which was 19%, 40% suffered from skin allergies; another 40% from a mixture of illnesses; 15% suffer from asthma and 5% from whooping cough. The rag pickers get 8kg/day of waste on an average. In same study of conducted by Chandramohan in Tamil Nadu on an average, each rag-picker removes 13.6 kg day<sup>[3]</sup> Most of the families preferred government hospital for major and minor illness.

Majority of the families preferred a Government hospital for minor illness and it was about 44% which was followed by Municipal clinics 24%, Private clinics 23%.Only 3% family preferred Trust and 6% preferred others for minor illness. In males tobacco chewing (58.3%), smoking (38.8%) and alcohol consumption (7.7%) was more. And among the females Snuffing (28%) was more. $\chi^2$ value at d.f=1 P value >0.05.Among females the habit of snuffing was prevalent. The rag-pickers, 46% were found with the habit of chewing betel leaves, 19% smoking and drinking alcohol.

### **Conclusion:**

Female predominance was seen in rag picking. Illiteracy rate was higher than urban population. Living condition of rag pickers was poor and some of them did not have access to basic amenities like toilet and sufficient safe drinking water supply and separate bathing facilities. All of them did not feel any social stigma because of their profession.

#### **Declaration:**

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Conflict of interest: Nil

#### **References:**

- Youth kiawaz: your waste is someone's means of living: True image of Rag pickers in India by SakshiSachdev. November 14, 2011.
- Rag Pickers of India by K.L Kamat. www.kamat.com/ kalranga/people/rag\_pickers20/10/2006.
- Available at: https://www.researchgate.net /publication/257947139\_Solid waste\_Management\_and\_ro le\_of\_rag\_pickers 30/9/2009, Accessed on 18/01/2017
- 4. Ahmedabad metropolitan urban region population. www.census2011co.in-ahmedabad