Original Research Article

Evaluate the factors affecting health seeking behaviours of women rag pickers in Mumbai

Sumit Ghansham Wasnik[1]*, Kamaxi Bhate[2], Arjun Mehta[3], Mandar Sadawarte[2]

Department of Community Medicine, [1]Dr D Y Patil Medical College, Navi Mumbai, [2]Seth GSMC and KEMH, Parel, Mumbai, Maharashtra, India
[3]Dr D Y Patil Medical College, Navi Mumbai, Maharashtra, India

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*Correspondence:
Dr. Sumit Ghansham Wasnik,
E-mail: sumitwasnik9@gmail.com

ABSTRACT

Background: There are genuine reasons why rag pickers are considered one of the worst form of labour. The risk related to rag pickers' health and physical development, as well as the hindrance these work places have on their education and psychological development; make rag picking a particularly adverse occupation for women and children. The objectives of the study were to explore the health profile and to identify the factors affecting the health seeking behaviours of women rag pickers.
Methods: This study was done with the help of NGO working for women rag pickers. 120 rag pickers were participated in the study during study period (Jan 2012 to July 2012).
Results: Almost all rag pickers were having some or other type of physical or mental ailments in minor or major form. It is seen that ignorance about health and disease is because of illiteracy, lower socioeconomic condition, unavailability of good health care facility nearby to their locality, difficulty in getting time to visit nearest health care facility from their 10-12 hours of duty etc.
Conclusions: It was found that these rag pickers prefers to visit private clinics as they are open in evening time and most of the time were affordable for minor ailments.

Keywords: Rag pickers, Health seeking behavior, Municipal solid waste

INTRODUCTION

Waste picking is considered to be at the bottom of the social and economic hierarchy of activities within the unorganized sector and requires neither education nor specific skills.[1] Rag pickers play an important, but usually unrecognised role in the waste management system of Indian cities. These activities require no skills and are a source of income for a growing number of urban poor's.

During 2001–2011 the population of the India increased by 181.4 million and there is increase in urban areas is 91.0 million. Its urban population grew at a rate of 31.8% during the last decade but it does not have enough resources or adequate systems in place to treat its solid wastes.[2]

The per capita waste generation rate in India has increased from 0.44 kg/day in 2001 to 0.5 kg/day in 2011, fuelled by changing lifestyles and increased purchasing power of urban Indians. Urban population growth and increase in per capita waste generation have resulted in a 50% increase in the waste generated by Indian cities within only a decade since 2001.[3]

With fast pace of urbanization in the country, the management of solid waste has posed a tough challenge to municipal authorities and policy makers at different

levels in Government. At present, urban India produces about 54.75 million tonnes of municipal solid waste annually i.e. 1.50 lakh tonnes per day (LTPD).[4]

Mumbai, for example, generates nearly 7,025 tons of waste on a daily basis, according to the Bombay community public trust. Around 11-13% of the total volume of the waste in this city is handled by approximately 80,000 door to door waste collectors and 50,000 to 60,000 who collect waste on the streets and dumping ground.[5]

The rag pickers primarily wade through piles of unwanted goods to salvage easily recyclable materials such as glass, metal and plastic, which are then sold to scrap dealers, who then process the waste and sell it on either to be recycled or to be used directly by the industry.

Most studies report that waste pickers constitute disadvantaged and vulnerable segments of the population.[6]

Rag picking is probably one of the most dangerous and dehumanizing activity in India. Rag pickers are working in filthy environments, surrounded by crows or dogs under any weather conditions and have to search through hazardous waste without gloves or shoes. They often eat the filthy food remnants they find in the garbage bins or in the dumping ground. Waste pickers are considered to be self-employed having no legally tenable employer employee relationship either with the municipalities or the recycling industries to which they contribute. Being unprotected manual workers they are not recognized and do not enjoy any form of social security or legislative protection.[7]

Objective

1) Identify the factors affecting the heath seeking behaviors in women rag pickers.
2) Explore the health profile of women rag pickers.
3) Educate them about common health problem like TB, needle stick injuries etc.

METHODS

Study was conducted with the help of NGO working for women rag pickers in Mumbai. Study period was Jan 2012 to July 2012 (6 month) and was conducted in NGO office where these women rag pickers were called for interview and health check up 3-4 times per month. 120 women rag pickers were agreed to participate in the study during study period. Only women rag pickers were included in the study as concerned NGO is working on Women rag pickers.

Inclusion criteria

All those women rag pickers registered with concerned NGO and available during study period were included in the study.

Exclusion criteria

Male rag pickers and women rag pickers not registered with concerned NGO were excluded from study.

Informed and written consent was taken from all participants before starting the study and those who were not willing to participate in the study were excluded. A semi structured, pre tested questionnaire was used for data collection in Hindi and Marathi. Health information regarding common diseases like TB, needle stick injuries, etc. was given to all participants after interviewing them. Ethical permission from Seth GSMC and KEM hospital Parel, Mumbai was taken before commencement of study.

Data collected was entered in MS office excel and analyzed using SPSS version 20.0.

RESULTS

Age and religion/community of rag pickers

Total number of rag pickers who consented for study was 120, out of which 45% were from age group of 36 to 50 years of age. It was found that 85% of women rag pickers from Buddhist community whereas only 13% and 5% were from Muslim and Hindu community respectively (Table 1).

Table 1: Age group and religion of rag pickers.

Age in Years	No. of rag pickers (%)	Religion	No. of rag pickers (%)
18 to 25	25 (20.83)	Buddhist	102 (85)
26 to 35	30 (25)	Muslim	13 (10.83)
36 to 50	54 (45)	Hindu	5 (4.17)
More than 50	11 (9.17)	Total	120 (100)
Total	120 (100)		

Educational level of rag pickers

79% of rag pickers were illiterate whereas 14% have educated up to primary school. Only 4% and 3% were educated up to middle and secondary school respectively (Figure 1).
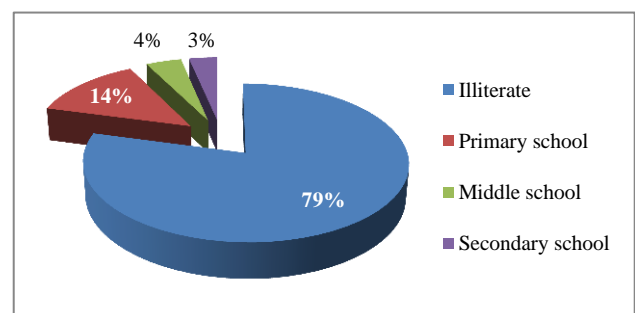

Figure 1: Educational level of women rag pickers.

Socioeconomic classification

It was observed that all the rag pickers were belong to lower class of socioeconomic status according to Kuppuswami classification.[8]

Working hours of rag pickers

It was found that 80% of rag pickers work for 6-10 hours per day whereas only 20% of rag pickers work for less than 6 hours per day. It was observed that all rag pickers work for 2-3 week per month.

Diabetes, hypertension and BMI rag of pickers

5% of rag pickers had history of both Diabetes and Hypertension and on treatment whereas 7.5% and 9% had history of diabetes and hypertension respectively. On examination 35% of women rag pickers found to be hypertensive and were called for follow up in concerned NGO.

On calculation of body mass index, 28.3% of rag pickers were found to be low BMI, 65.8% had normal BMI and 5.8% had higher than normal body mass index (Table 2).

Table 2: DM, HTN and BMI.

DM, HTN and BMI		No. of rag pickers	Percentage (%)
Diabetes (DM)		9	7.5
Hypertension (HTN)		11	9
DM and HTN		6	5
BMI	Underweight (<18.49)	34	28.3
	Normal (18.5-24.99)	79	65.8
	Overweight (>25)	7	5.8

Common morbidities that rag pickers have suffered in last one year and the health care facilities preferred by them for treatment

Joint pain was present in all women rag pickers whereas history of respiratory and GIT problems was found in 81 and 88 rag pickers respectively. Past history of TB was present in 7.5% rag pickers. 37 rag pickers (30.83%) preferred health facility provided by NGO working for them while 66 (55%) rag pickers preferred private practitioners near in their residential area (Table 3).

Reasons given by rag pickers for not going to any hospitals for any ailments during last one year (multiple choice).

It was seen that 75% rag pickers had not shown to any health facility for any major or minor ailments during last one year because of no free time available for them to any hospital.

Table 3: Common morbidities and the health care facility preferred by rag pickers.

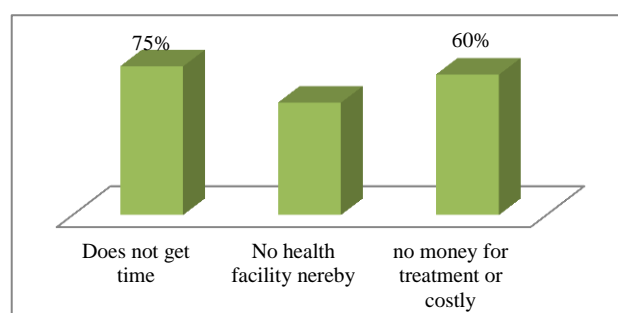|	No. of rag pickers (%)*
Disease	
Joint pain	120 (100)
Respiratory	81 (67.5)
Fever	90 (75)
Skin	86 (71.67)
GIT	88 (73.33)
Eye	71 (59.17)
Eye	60 (50)
Chest pain	37 (30.83)
Past H/O of TB	9 (7.5)
Cut injuries	120 (100)
Health care facility preferred most of the time	
NGO	37 (30.83)
Municipal hospital	17 (14.17)
Private	66 (55)
Total	120 (100)

*Multiple option.

Figure 2: Reasons given by rag pickers for not going to any hospitals for any ailments.

DISCUSSION

There are genuine reasons why rag picking is considered one of the worst forms of labor.

It was found that maximum rag pickers belong to one particular religion i.e. Buddhist religion (85%) (Table 1). Most of the women rag pickers (79%) were illiterate whereas only 3% women had history of education up to secondary school (Figure 1). This results can be compared with study conducted by Palnitkar et al which shows that 74.1% of women rag pickers were illiterate while 25.9% had studied up to primary school.[9]

In India, the Harijans, formerly untouchables (now Dalit) play an important role in garbage collection and recovery of recyclables from waste. In Muslim countries, non-Muslims usually perform refuse collection and recycling activities since contact with waste materials is considered impure.[10]

All rag pickers were comes under lowest class (lower lower) of Kuppuswamis's socioeconomic classification.

Working long hours is vital for rag pickers. Their earnings are directly related to the amount of solid wastes collected, which in turn depends on the number of hours they work. So working for long hour and carrying heavy weight of rags on their back is their working style that directly can affect their health.

Study conducted by Dhakal shows that majority of rag pickers work five to seven hours per day in the permanent land fill site area.[11] The major peak hour of the rag picking is morning hour i.e. 7 am to 10 am (78%).

About 66% of rag pickers had normal BMI and 28% had less than normal BMI at the time of examination. About 6% had more than normal BMI. High blood pressure was found in 9% whereas history of DM was present in 7.5% of rag pickers. 5% had history of both DM and hypertension and was on regular treatment (Table 2).

Crippling health problem faced by rag pickers in last one year shows that all rag pickers (100%) had history of back/joint pain and more than 80% had skin and GIT problem. Past history of TB was seen in only 7.5% of rag pickers, because remaining may have stopped working due to weakness (Table 3). It was seen that though they were in some or other ailments, rag pickers refused to visit health care facilities for treatment. The most important reason seen that no availability of time. As most rag pickers in the study were working for more than 6-10 hours per day, they hardly get time to visit any health care facility. Working long hours is vital for rag pickers. Their earnings are directly related to the amount of solid wastes collected, which in turn depends on the number of hours they work. So working for long hour and carrying heavy weight of rags on their back is their working style that directly can affect their health.

One study shows nearly all of the waste pickers had suffered cuts to their hands, feet and limbs.[11] Present study also reconfirmed these findings.

NGO 31%, municipal hospital 14%, majority of rag pickers (55%) visit private clinics for their body ailments as they are near to them and available at convenient time whereas 31% used health facilities provided by NGO working for them. Only 14% rag pickers said to use government or municipalities' health facilities.

About 60% of rag pickers told that they had no money for their treatment whereas more than 40% of rag pickers said that there were no good or government health care facilities nearby to their locality (Figure 2).

CONCLUSION

Although almost all rag pickers were having some or other type of physical or mental ailments in minor or major form, it is seen that ignorance about health and disease can be because of illiteracy, lower socioeconomic condition, unavailability of good health care facility nearby to their locality, difficulty of getting time from their 10-12 hours of duty etc. It was found that these rag pickers prefers to visit private clinics as they are open in evening time and most of the time these clinics were affordable for minor ailments.

Limitations

1) Male rag pickers were excluded from the study as no male rag pickers were registered with this NGO.
2) Rag pickers could be contacted during evening period only (after their working hours) so the rag pickers attended to meeting were less.
3) Non organized rag pickers are left without any help and they are the ones who are more vulnerable as they have less negotiate power. They are more prone to diseases and ill health. So the study results cannot be generalized.

Recommendation

1. Their working conditions presently are unregulated but they can be trained to ensure health safety at work site.
2. Regular health checkups should be carried out to these groups of people at the Community level. A regular meeting with the rag pickers and NGO/municipal corporation officials to resolve issues related to their health, sanitation and safety.
3. Health care facility to be near the dumping grounds to avoid delay in health seeking behavior.

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