A STUDY TO ASSESS THE PHYSICAL HEALTH PROBLEMS AND PSYCHOLOGICAL WELL-BEING AMONG RAG PICKERS IN SELECTED AREAS OF DISTRICT LUDHIANA, PUNJAB.

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ABSTRACT

Background of the study- Rag-pickers are always living in high risk areas; it is a source of various types of physical and psychological illnesses. Rag picking is one of the most neglected sectors in society, and they have lack of adequate information and magnitude of problems and substance abuse practices, hence the rag pickers are more prone for psychological problems. Rag pickers suffer from many problems such as skin problems, musculoskeletal problems and occupational health problems i.e. cuts, prick injuries, animal bite etc.

Aim of the study- To assess the physical health problems and psychological well-being among rag pickers

Methodology- A descriptive design was used to assess the physical health problems and psychological well-being among rag pickers in selected areas of district Ludhiana, Punjab. The sample of study was 200 rag pickers. Structured checklist and rating scale was used for data collection. Data was collected by interview schedule and analysed by using descriptive and inferential statistics.

Results- Findings of the present study revealed that all rag pickers had at least one or more health problems. Majority 185 (92.5%) of rag pickers suffered with integumentary problems. Maximum 172 (86%) rag pickers had foul breath followed by 86 (43%) were having discolouration of teeth, 173 (86.5%) subjects reported lice in hair, 24 (12%) subjects had skin itching. Half of subjects 100 (50%) had cuts and 96 (48%) subject had prick injuries. 96 (48%) rag pickers had low psychological well-being followed by 75 (37.5%) rag pickers had moderate psychological well-being and 29 (14.5%) rag pickers had high psychological well-being.

Conclusion- Present study concluded that all rag pickers had one or more physical health problems. Majority (92.5%) of rag pickers suffered with integumentary problems and (48%) rag pickers had low psychological well-being. It was found that there was significant association of musculoskeletal problems with psychological well-being and gastrointestinal problems with period of stay in slums.

Key words- *Physical health problems, Psychological well-being, Rag pickers*

INTRODUCTION

Waste is an unavoidable by-product of human activities. Economic development, urbanization and improved living standards in cities contribute to increase in the quantity and complexity of generated solid waste. If accumulated, it leads to degradation of urban environment, stresses natural resources and leads to health problem. Collection and disposing of solid waste is supplemented by rag-pickers.[1]

A rag picker, or Chiffonnier, was a 19th and early 20th century term for someone who made a living by rummaging through refuse in the streets to collect material for salvage. The word 'rag picking' has no precise meaning. However, it has been defined as a refuse occupation, which can support people when they have no other opportunity for earning. More precisely, the rag or paper picker is defined as one who makes his/her livelihood, by picking up waste paper, plastic, rags, bottles, tins, metal pieces, discarded and broken containers from roadside dustbins, streets, garbage heaps and sells them to nearby retailers.[2]

According to United Nations MDGs Report (2015) Twenty million people worldwide depend on rag picking as a livelihood while thousands more depend on recycling materials from waste for their livelihood. Improved waste collection and recycling rates through the formalized involvement of informal waste pickers could help achieve many of the sustainable development goals (SDGs), especially those related to health, the environment and cities (SDGs 3, 6, 11, 12, 14, and 15).[3]

Physical health is the state of being free from illness or injury. It can cover a wide range of areas including healthy diet, healthy weight, dental health, personal hygiene and sleep. Physical health is vital for overall well-being.[4]

Psychological well-being is the experience of health, happiness and prosperity. Psychological well-being consists of positive relationship with others, autonomy, a feeling of purpose and meaning in life, personal growth and development. Psychological well-being is attained by achieving a state of balance affected by both challenging and rewarding life events.[5]

REVIEW OF LITERATURE

Mirza Faheem and Indulkar Pranali S (2018) conducted an exploratory study among 50 rag pickers in Okhla, Delhi. Purposive sampling technique was used to select respondents and interview schedule used for data collection. Result showed that out of 50 rag pickers 60% were having one or more physical health problems i.e. 77% had dermatitis, 64% had stomach infections and 60% had back pain.[6]

Ghansham SG et al. (2018) carried out a study to assess health problems and the factors affecting health seeking behaviours among 200 women rag pickers in Mumbai. The results showed that 100% rag pickers were having joint pain followed by 67.5% had respiratory problems, 75% had fever, 71.6% had skin problems, 59% were having eye infections and 100% were having cut injuries.[7]

Balu N. M et al. (2016) conducted a cross sectional study and gathered data by interviewing 120 rag pickers in Mumbai slums. Findings showed that 31.7% suffered from common cold, 65% muscular pain, 16.7% skin diseases, 40% had back pain, 72.5% had cut injuries, 14.2% had dog bite and 50.8% were having respiratory problems.[8]

Batool Z, Akram M (2015) conducted a study to assess occupational hazards and health status of rag pickers in Faisalabad, Pakistan. 250 rag pickers selected with snowball sampling technique. Result revealed that 62.8% rag pickers had cut injuries, 15.6% had digestive problems, 13.6% had skin problem, and 9.2% were suffering from respiratory problems.[9]

Chokhandre P, Kashyap G C (2017) conducted a cross sectional study among waste pickers working at dumping site in Mumbai. 200 waste pickers were randomly selected. Waste pickers engaged in waste-picking at the dumping site at least for a year and aged 18 years and above were considered for the study. Result showed that around 70% of the respondents scored low on the GHQ-12 and a sizable proportion (30%) of them scored high, indicating an unhealthy psychological state.[10]

Sanyal Debashish, Thankam D Liza (2014) conducted a descriptive survey to assess the subjective well-being status of elderly slum dwellers in Kolkata. The data was collected from 60 subjects by total enumerative sampling. Result revealed that 52% subjects had high psychological well-being and 48% had low psychological well-being.[11]

Ananthakrishnan S, Patil R (2012) conducted a descriptive cross sectional study among 156 rag pickers in Chennai. Results showed that 56.6% were having minor psychiatric disorder.[12]

NEED AND AIM OF THE STUDY

Rag picking is probably one of the most dangerous and dehumanizing activity in India. Rag pickers are working in filthy environments, surrounded by cows or dogs under any weather conditions and have to search through hazardous waste without gloves and shoes. They often eat the filthy food remnants they find in garbage bins or in the dumping ground. [13]

As the researcher visited in the slum areas where rag pickers were residing, the researcher observed that the rag pickers have to face many physical health problems like cuts, infections, and some injuries and they experience many psychological problems because of their occupation. Rag picking is one of the most neglected sector; therefore the researcher conducted a study to assess the physical health problems and psychological well-being among rag pickers.

METHODOLOGY

A descriptive design was used to assess the physical health problems and psychological well-being among rag pickers in selected areas of district Ludhiana, Punjab. The sample of study was 200 rag pickers. Structured checklist and rating scale was used for data collection. Data was collected by interview schedule and analysed by using descriptive and inferential statistics.

DATA ANALYSIS AND RESULT

Table 1:- Frequency and percentage distribution of rag pickers as per their socio demographic characteristics

N=200

Socio-demographic characteristics	f	%
Age(in years)[#]		
7-15	131	65.5
16-25	045	22.5
26-35	013	06.5
36-45	011	05.5
Gender		
Male	075	37.5
Female	125	62.5
Religion		
Hindu	194	97.0
Sikh	004	02.0
Muslims	002	1.00
Education status		
Illiterate	052	26.0
Elementary	095	47.5
Secondary	051	25.5
Senior secondary	002	01.0
Marital status		
Married	040	20.0
Unmarried	160	80.0
Type of family		
Nuclear	160	80.0
Joint	040	20.0
Engaged in rag picking(in years)		
1-5	135	67.5
6-10	034	17.0
11-15	020	10.0
>15	011	05.5

[#]*Mean age =13.98±7.98*

it can be concluded that more than half 131 (65.5%) rag pickers were in age group of 7-15 years. 125 (62.5%) rag pickers were female. Majority 194 (97%) of rag pickers belonged to Hindu religion. Less than half 95 (47.5%) of rag pickers were educated up to elementary level. Majority 160 (80%) of rag pickers were unmarried. Majority 160 (80%) of rag pickers belonged to nuclear family. Majority 135 (67.5%) of rag pickers were engaged in rag picking from 1-5 years.
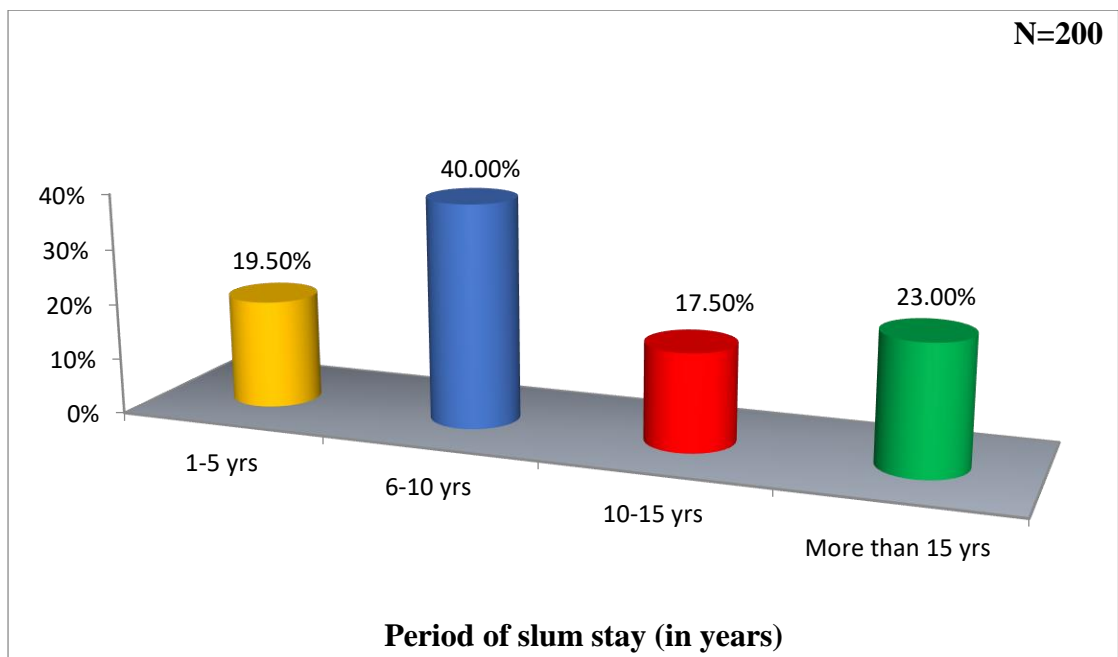

Figure 1: Percentage distribution of rag pickers as per period of slum stay

Figure 1 illustrates that 80 (40.0%) of rag pickers were staying in slums from 6-10 years, followed by one fourth 46 (23.0%) of rag pickers were staying in slums from more than 15 years, 39 (19.5%), 35 (17.5%) subjects were staying in slums from 1-5 years and 11-15 year respectively.
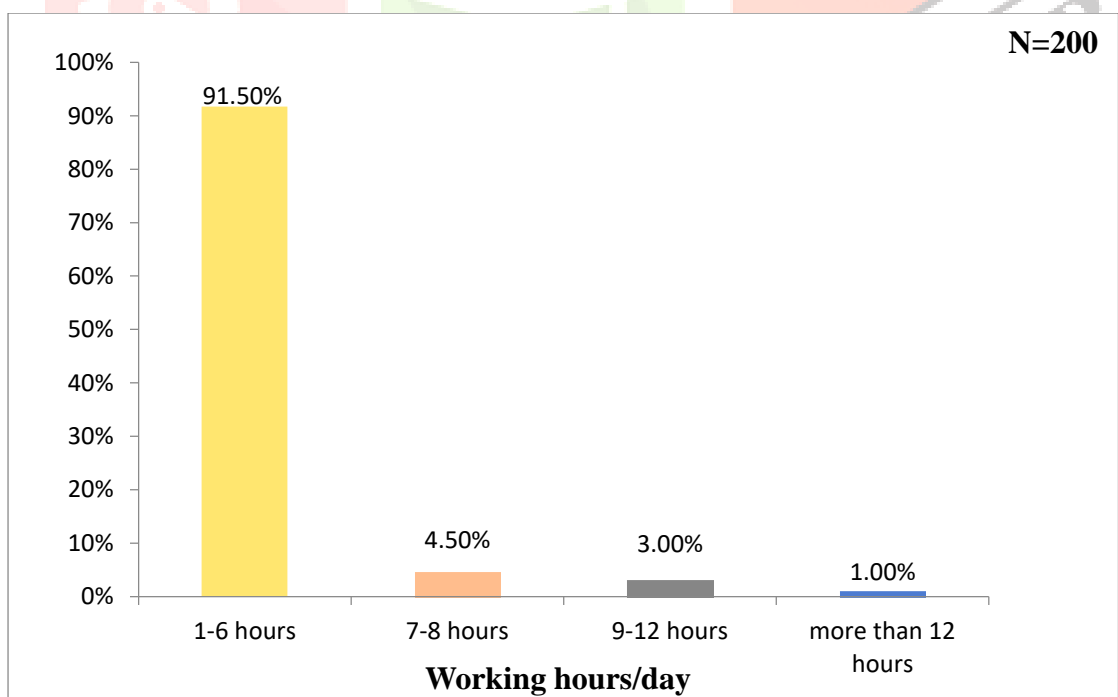
Figure 2: Percentage distribution of rag pickers as per working time
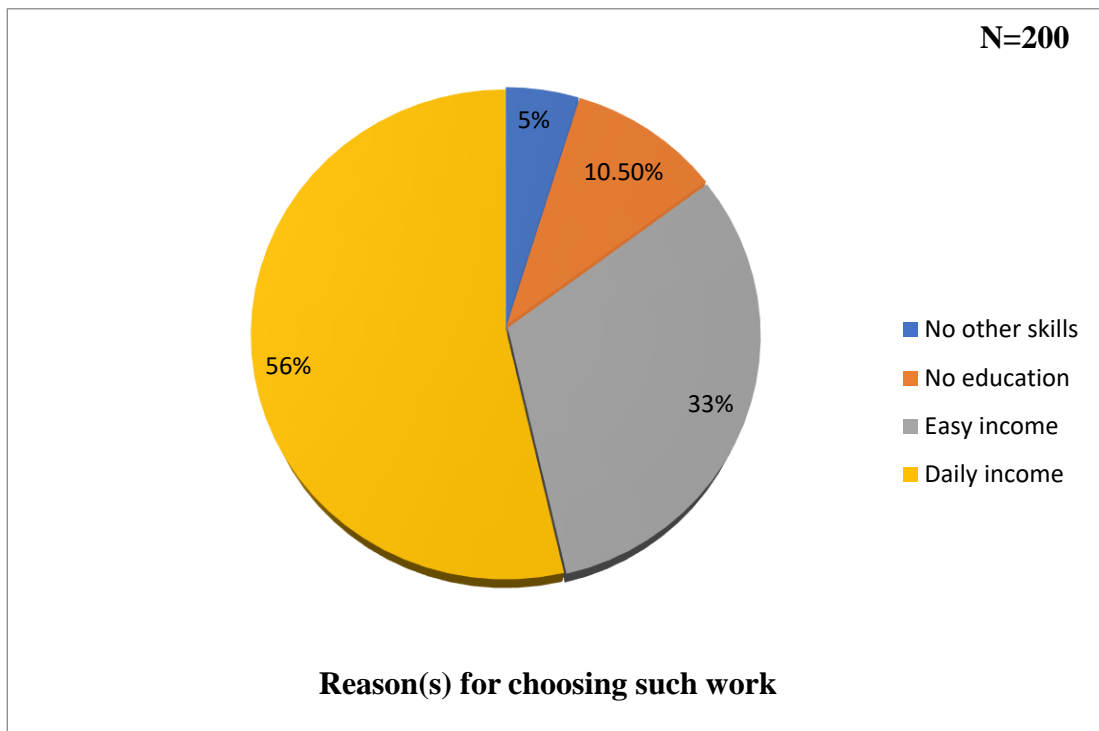
Figure 3: Percentage distribution of rag pickers as per reason(s) for choosing such work

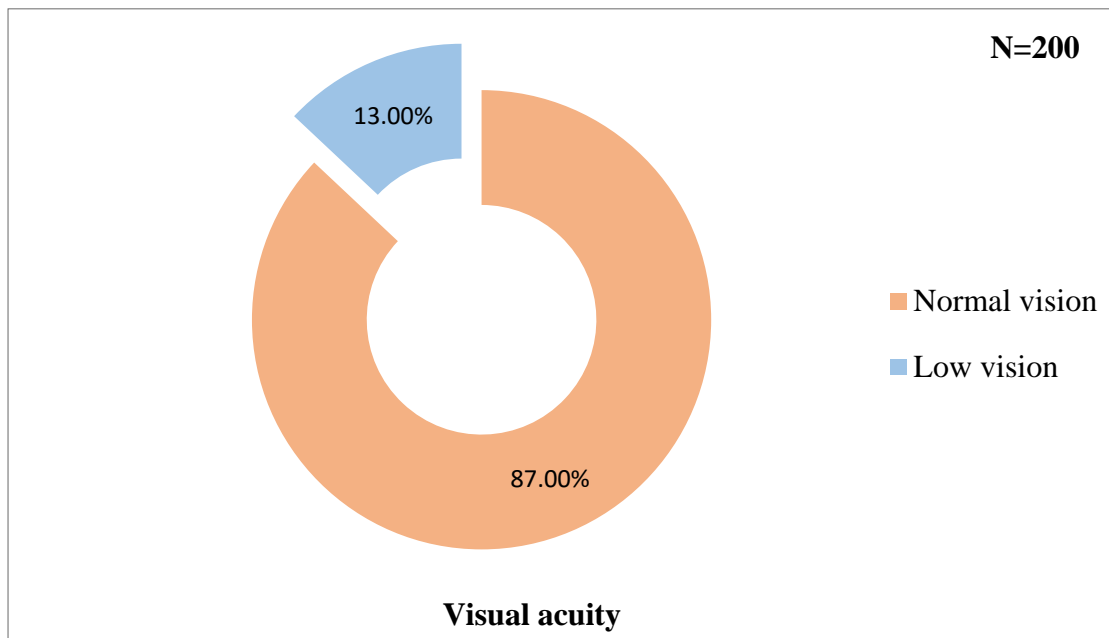**Table 2: Frequency and percentage distribution of rag pickers as per BMI**

N=200

BMI Calculation	f	%
For children[#] (n=155)		
• Underweight <5 percentile	090	45.0
• Healthy weight 5 to 85 percentile	065	32.5
For adults* (n=45)		
• Underweight	016	8.00
• Normal weight	029	14.5

#As per CDC scale (2014)   **As per WHO scale (2007)*
Children =Mean (BMI) =18.55±0.49   *Adults= mean (BMI)=20.34±0.65*

Table 2 interprets that among children maximum 90 (45%) were underweight followed by 65 (32.5%) were having healthy weight. Whereas in adults 29 (14.5%) were having normal weight followed by 16 (8%) were underweight.

N=200

Visual acuity

As per WHO scale (1977)

Figure 4 depicts that majority 174 (87%) rag pickers had normal vision followed by 26 (13%) had low vision.

Table 3: Frequency and percentage distribution of rag pickers as per blood pressure

N=105

Blood pressure reading	f	%
• **For adults* (n=45)**		
Pre hypertension	009	20.0
Stage 1 hypertension	002	04.5
Normal	034	75.5
• **For adolescents# (n=60)**		
Normal <90th percentile	060	100

As per WHO scale (2013)
#*as per JNC scale (2003)*

Table 3 depicts that among adults 34 (75.5%) belonged to normal range followed by 09 (20%) belonged to pre hypertension stage and 02 (4.5%) belonged to stage I hypertension. Whereas in adolescents, all 60 (100%) rag pickers belonged to normal range.
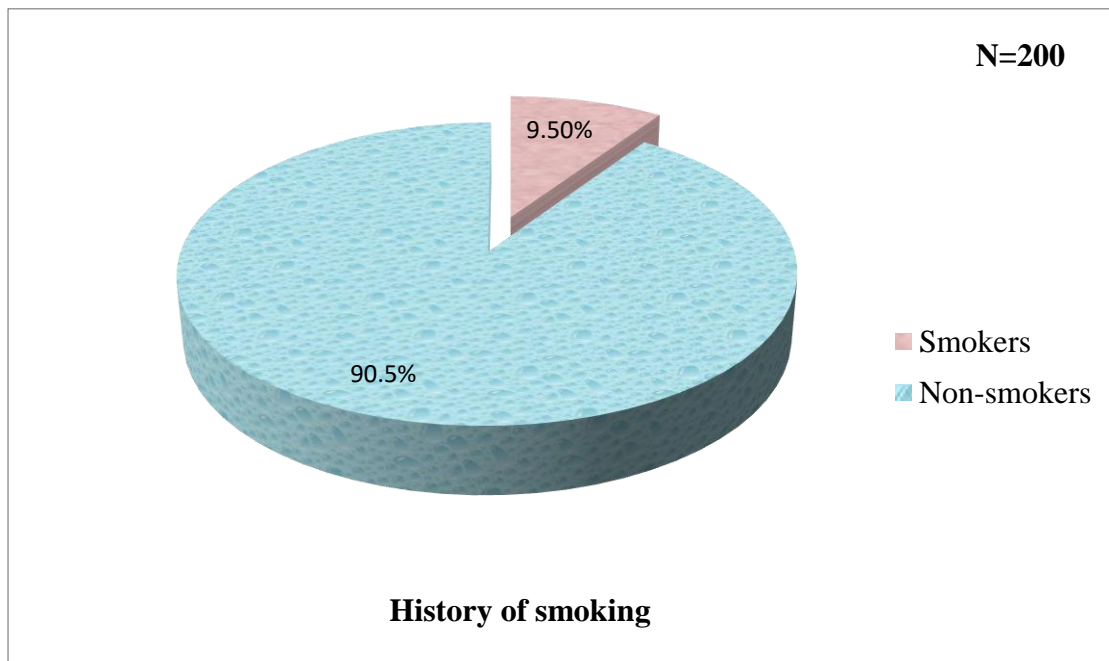
Figure 5: Percentage distribution of rag pickers as per history of smoking

Figure 5 depicts that majority 181 (90.5%) of rag pickers were non-smoker followed by 19 (9.5%) rag pickers were smokers.
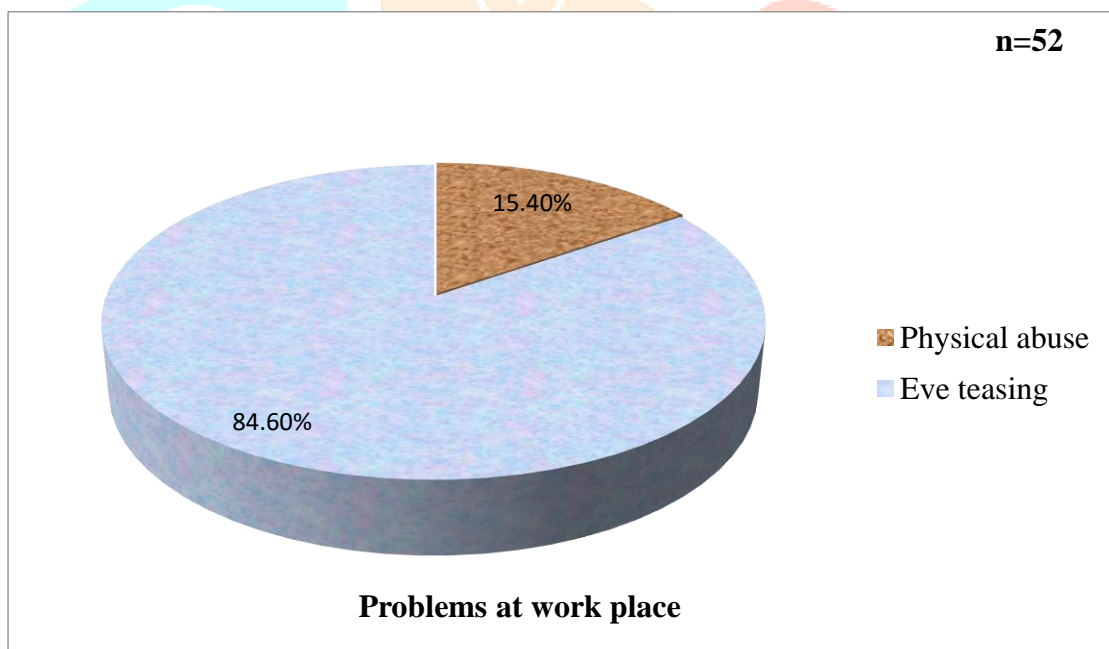

Figure 6: Percentage distribution of rag pickers as per problems at work place

Figure 6 depicts that among 52 rag pickers majority 44 (84.60%) of rag pickers were facing eve teasing at work place followed by 08 (15.40%) rag pickers were facing physical abuse at work place.

Table 4: Frequency and Percentage distribution of rag pickers as per various physical health problems

N=200

Health problems	f*	%
Oral health problems	175	87.5
CNS problems	30	15.0
Respiratory problems	94	47.0
Ophthalmic problems	149	74.5
ENT problems	29	14.5
Cardiovascular problems	04	2.0
Musculoskeletal problems	172	86.0
Gastrointestinal problems	127	63.5
Urinary problems	22	11.0
Reproductive problems	09	4.5
Integumentary problems	185	92.5

frequency may exceed due to presence of multiple problems among rag pickers
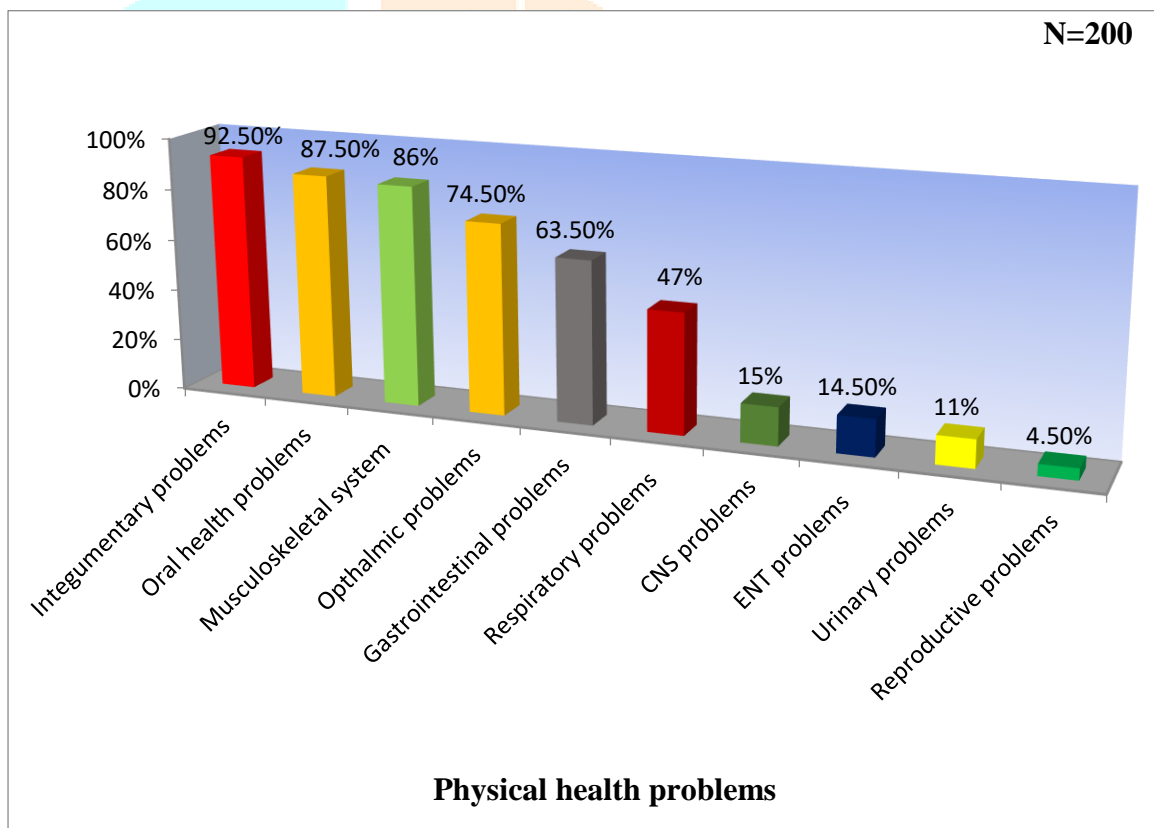
Table 7 depicts that majority 185 (92.5%) of rag pickers were having integumentary problems followed by 175 (87.5%) rag pickers had oral health problems. Majority 172 (86%) of rag pickers were suffering from musculoskeletal problems, 149 (74.5%) rag pickers had ophthalmic problems, 127 (63.5%) rag pickers had gastrointestinal problems and 94 (47%) subjects had respiratory problems. 30 (15%) subjects had central nervous system problems, 29 (14.5%) rag pickers were having ENT problems followed by 22 (11%) rag

pickers reported urinary problems, 9 (4.5%) rag pickers had reproductive system problems and very few 4 (2%) subjects had cardiovascular problems.
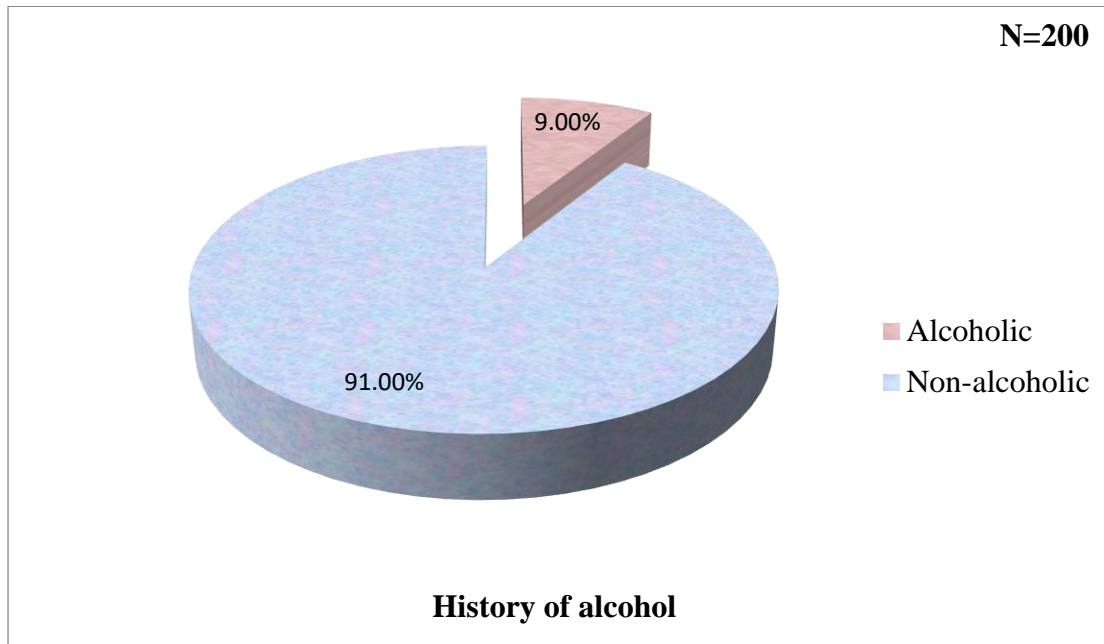

Figure 8: Percentage distribution of rag pickers as per history of alcohol

Figure 8 interprets that majority 182 (91%) of rag pickers were non-alcoholic followed by 18 (9%) rag pickers were alcoholic.
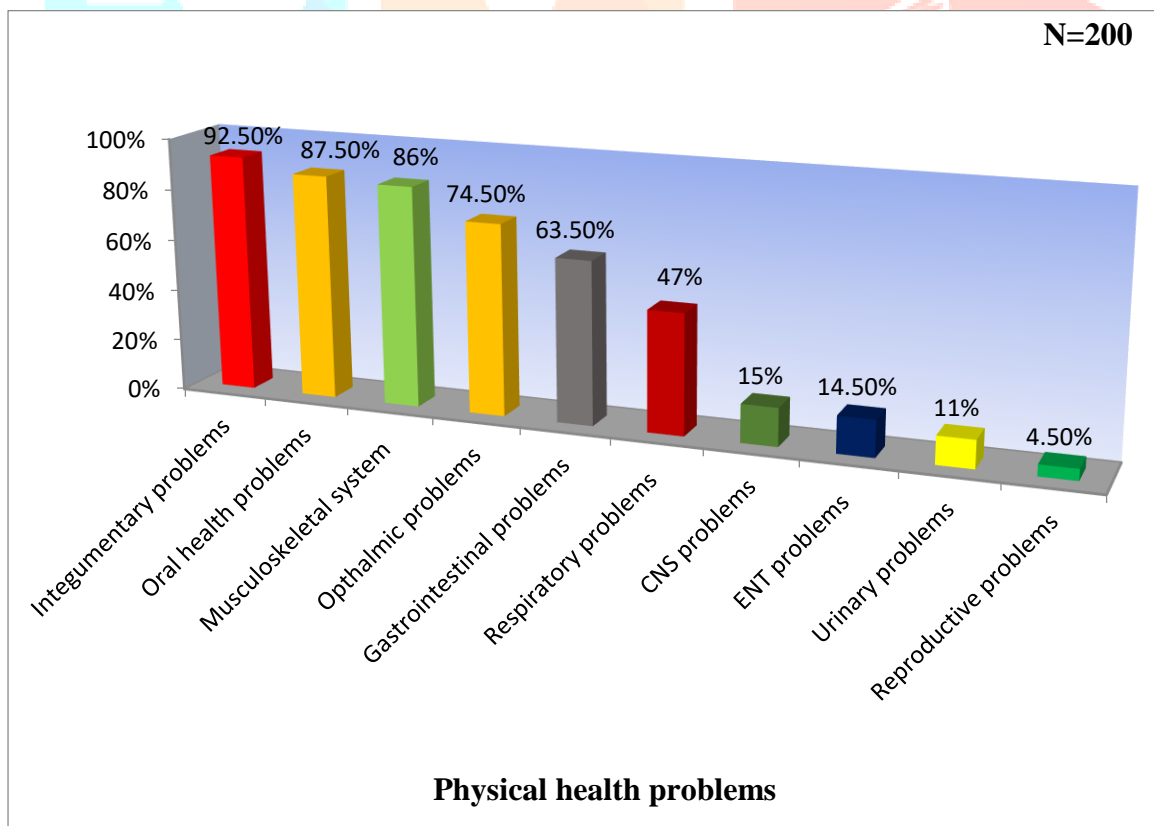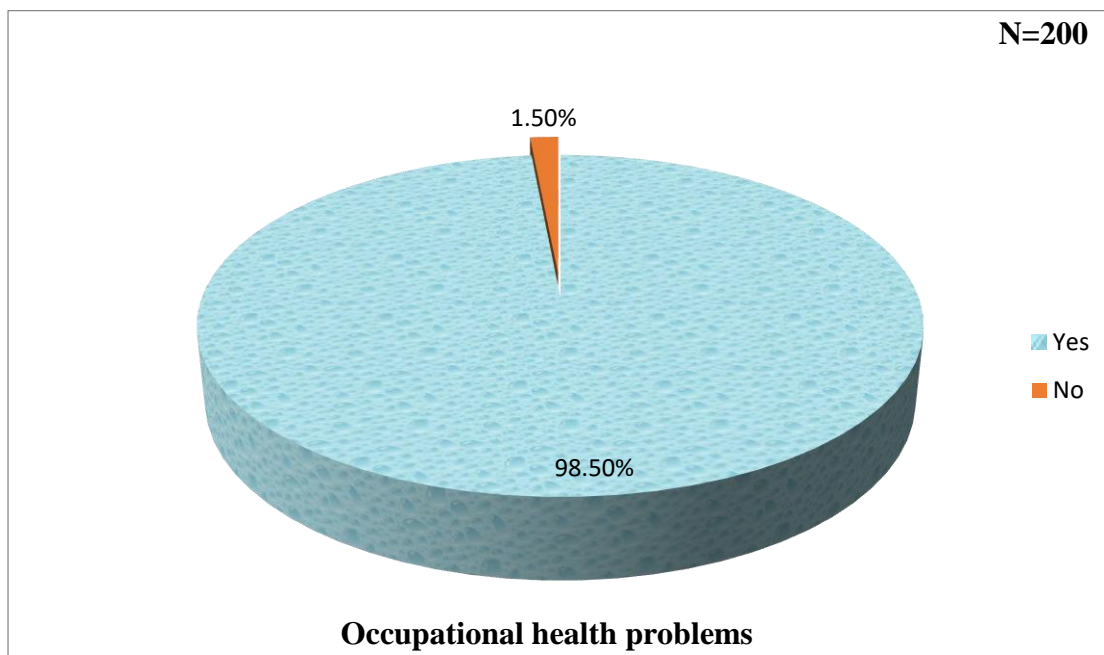

Figure 9: Percentage distribution of rag pickers as per various physical health problems

Figure 9 depicts that majority 185 (92.5%) of rag pickers were having integumentary problems followed by 175 (87.5%) rag pickers had oral health problems. Majority 172 (86%) of rag pickers were suffering from musculoskeletal problems, 149 (74.5%) rag pickers had ophthalmic problems, 127 (63.5%) rag pickers had gastrointestinal problems and 94 (47%) subjects had respiratory problems. 30 (15%) subjects had central nervous system problems, 29 (14.5%) rag pickers were having ENT problems followed by 22 (11%) rag pickers reported urinary problems, 9 (4.5%) rag pickers had reproductive system problems and very few 4 (2%) subjects had cardiovascular problems.

Figure 10: Percentage distribution of rag pickers as per occupational health problems

Figure 10 shows that majority 197 (98.5%) of rag pickers had occupational health problems and very few 3 (1.5%) of rag pickers were not having occupational health problems.

Table 5: Frequency and percentage distribution of rag pickers as per their level of psychological well-being

N=200

Levels of psychological well-being	Score	Frequency	%
High	48-60	29	14.5
Moderate	34-47	75	37.5
Low	20-33	96	48.0

Maximum score = 60
Minimum score = 20

Table 5 showed that less than half 96 (48%) of the rag pickers had low psychological well-being followed by 75 (37.5%) rag pickers had moderate psychological well-being and 29 (14.5%) rag pickers had high psychological well-being.

Table 6: Association of physical health problems with psychological well-being.

N=200

Physical health problems		n	Psychological well-being			Chi square (χ^2)
			High	Moderate	Low	
Oral health problems[#]	Yes	175	26	63	86	χ^2=1.344 df=2 p=0.51[NS]
	No	25	03	12	10	
Central nervous problems	Yes	30	06	09	15	χ^2=1.295 df=2 p=0.52[NS]
	No	170	23	66	81	
Respiratory problems	Yes	94	11	35	48	χ^2=1.308 df=2 p=0.52[NS]
	No	106	18	40	48	
Ophthalmic problems	Yes	149	24	57	68	χ^2=1.809 df=2 p=0.40[NS]
	No	51	05	18	28	
ENT problems	Yes	29	05	13	11	χ^2=1.378 df=2 p=0.50[NS]
	No	171	24	62	85	
Cardiovascular problems[#]	Yes	04	1	1	2	χ^2=0.896 df=2 p=0.63[NS]
	No	196	27	74	95	

NS=Non significant   *[#]Yate's correction is applied*

Table 6 depicts that there was statistically non-significant association of physical health problem (Oral health problems, Central nervous problems, Respiratory problems, ophthalmic problems, ENT problems and cardiovascular problems with psychological well-being.

Table 7: Association of physical health problems with psychological well-being.

N=200

Physical health problems		n	Psychological well-being			Chi square (χ^2)
			High	Moderate	Low	
Musculoskeletal problems	Yes	172	22	60	90	χ^2=9.507 df=2 p=0.00*
	No	28	07	15	06	
Gastrointestinal problems	Yes	127	21	50	56	χ^2=2.424 df=2 p=0.29[NS]
	No	73	08	25	40	
Urinary problems[#]	Yes	22	02	05	15	χ^2=4.035 df=2 p=0.13[NS]
	No	178	27	70	81	
Reproductive problems[#]	Yes	09	00	03	06	χ^2=2.094 df=2 p=0.35[NS]
	No	191	29	72	90	
Integumentary problems[#]	Yes	185	26	64	95	χ^2=0.540 df=2 p=0.04*
	No	15	03	06	06	
Occupational problems[#]	Yes	197	27	75	95	χ^2=6.995 df=2 p=0.03*
	No	03	02	00	01	

Significant (p<0.05)   *NS=Non significant*

[#]*Yate's correction is applied*

Table 7 depicts that there was statistically significant association of musculoskeletal problem, integumentary problems and occupational problems with psychological well-being. Whereas gastrointestinal problems, urinary problems, reproductive problems, were statistically non-significant with psychological well-being.

association of physical health problems and psychological well-being with selected socio-demographic variables.

there was statistically non-significant association of oral health problems with selected socio-demographic variables (age, gender, period of stay in slums and reason for choosing such work) at (p>0.05)

there was statistically significant association of musculoskeletal problems with reason for choosing such work at (p=0.02) whereas age, gender, period of stay in slums were non-significant with musculoskeletal problems at (p>0.05)

there was statistically significant association of gastrointestinal problems with period of stay in slums and reason for choosing such work at (p=0.03) and (p=0.00) whereas age, gender were non-significant with musculoskeletal problems at (p>0.05)

that there was statistically significant association of integumentary problems with selected socio-demographic variables (age, gender, and reason for choosing such work) at (p=0.3), (p=0.00), and (p=0.01). Whereas period of stay in slums were non-significant with integumentary problems at (p>0.05)

there was statistically significant association of psychological well-being with selected socio-demographic variables (marital status, family type, daily income, and period of stay in slums) at (p=0.0), (p=0.03), (p=0.00) and (p=0.00) respectively.

CONCLUSION

Present study concluded that all rag pickers had one or more physical health problems. Majority (92.5%) of rag pickers suffered with integumentary problems and (48%) rag pickers had low psychological well-being. It was found that there was significant association of musculoskeletal problems with psychological well-being and gastrointestinal problems with period of stay in slums.

LIMITATION OF THE STUDY

- The study was restricted to small sample size i.e.200 rag pickers, due to time and resources constrains.
- In some part of tool, interview schedule was used to gather information so researcher has to rely on respondent information.

ACKNOWLEDGEMENT

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