HEALTH AND ECONOMY AMONG THE PEOPLE RESIDING NEAR LEATHER INDUSTRIES IN UNNAO DISTRICT- A STATISTICAL REVIEW

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ABSTRACT:

Leather sector plays a major role in providing major income to the country. But when we come across the economic status of the people working in leather industry we could notice that their income doesn't match their expenses. The major expense is on the medicines which they have to purchase for either them or their family. It's a known fact that due to leather industry the economic status of the country is at the top but the truth that the incidence of many deadly diseases has also increased due to the same tanning sectors in our country. Present research is a small contribution towards the exploration of economic status of the workers working in tanneries and their medical expenses. In the present study 13% of respondents worked in the treatment plant in the tannery industry and 14.6% respondents worked in the tannery but not in the treatment plant. Rest 72% respondents were the people who were either working some were out of the tannery and no were related to tannery or they were people who did not work at all. : in the present study 43.7% respondents had less than 5000 income, 24.9% respondents had income between 5000 to 10000 followed by .9% of respondents with income between 10000 to 15000 and .3% of respondents with income more than 15000. Majority of respondents prefer private health facility and more than 28% of them pay more than Rs.50 as consultation fee. Majority of them travel 2 km to 10 km distance to reach doctor and pay less than Rs.25 as travelling cost. Majority of them pay Rs.50 as medicine cost per day which Is almost Rs.1500 per month and it is to be noted that majority of the working respondents just earn less than Rs.5000. the researcher would like to mention that this statistics indicates that it is complete violation of rights of the worker working in leather industries.

INTRODUCTION:

The environmental impact of the leather industry is well known, with tanning being one of the most polluting industries in the world. Waste water from tanneries often contains high amounts of acids, salts and

heavy metals. These toxic chemicals also negatively impact the health of workers, as has been documented by Human Rights Watch and many others. The short film 'The Toxic Price of Leather' by Sean Gallagher, for instance, strikingly illustrates the harmful effects on people and environment of extreme pollution caused by tanneries of the city of Kanpur, the biggest producer and exporter of leather goods in India. Less known are the many other sustainability and human rights issues related to the leather and footwear production in India. Information on wages in the footwear sector comes from different sources over a number of years. However, the different sources consistently point to wide-spread non-payment of (at least) official minimum wages, other benefits such as Employee State Insurance (ESI) and Provident Fund (PF), let alone payment of a wage approaching a living wage. This was confirmed by the International Labour Organization (ILO) in 2014. The ILO concluded that wages in the leather and footwear sector are low and that there is a substantial gap between actual wages and living wages for these workers. Yet calculations of the share of the final selling price that goes to labour indicate that there is considerable room for improvement of wages. According to one recent source, the workers' wages make up only 2% of the final price of the shoe, while the brands keep a quarter of the price and one third goes to the retailers. For home workers the wage component would even make up only around 0.1% of the shoe-price. Thus, a very small portion of the final price of shoes is reaching those actually producing the shoes.

METHODOLOGY:

The assignment of data collection and processing was carried out from June 2015 to Aug 2015, Oct 2015 to Dec 2015. Field research was carried out in UNNAO, Indian state of Uttar Pradesh over a period of Six months. The mixed research strategy is adopted where both qualitative and quantitative techniques were considered and aimed at producing in-depth knowledge about the research. The research survey & Experimental parameters are as shown in the Table

RESEARCH SURVEY PARAMETERS

Research Methodology	Qualitative, Quantitative and Experimental techniques
Questionnaire Design	Structured questionnaire
Location	Unnao (Uttar Pradesh, India)
Total No. of Respondents	1000 – Respondents (Tannery Workers +Nearby people of tannery waste disposal sites.)
Tools Used	Statistical Package for Social Sciences(SPSS)20.0

DATA SOURCES

The present study considers both primary and secondary data. The primary data and secondary data selected for the study are:

Primary Data:

- Primary data is gathered personally from the respondents from the leather industry

- Data is collected from the residents of the locality near the leather industry.

- The analysis report of the Indian Institute of Toxicology on samples collected from ground water, tannery waste and urine samples.

Secondary Data:

- Secondary data is obtained from documentary sources like Books, Journals, Reports, Conference Proceedings, Official reports, Statistics from district offices, Web sources etc.

Sampling Design:

Convenience Sampling has been used as a sampling design for the selected study. The respondents and the samples were collected from around 123 places and some of the important places are mentioned below from where the samples were collected:

1. Akrampur Industrial Area.
2. Leather Technology Park Banthar.
3. Unnao Industrial Area Site 1.
4. Unnao Industrial Area Site 2.
5. Dahi Chauki Industrial Area.

## OBJECTIVES AND HYPOTHESIS:

The prime aim of the proposed study is to perform an investigational study to understand the economic status of the worker working in the tanneries and working other than tanneries. This study also focuses in the medical expenses of the respondents and their family members in all aspects. To accomplish this study following objectives and hypothesis are framed by the researcher.

1. The income of the workers working in the tannery is significantly low

2. The medical expenses of the respondents and their family members either working or not working in tanneries are significantly high.

Background characteristics of the respondents			
Category	**Indicator**	**Frequency**	**Percent**
Gender	Male	690	69.0
	Female	310	31.0
Age	Less than 20	63	6.3
	21 to 30	218	21.8
	31 to 40	331	33.1
	41 to 50	224	22.4
	51 to 60	114	11.4
	61 and above	50	5.0
Marital status	Married	900	90.0
	Un-married	100	10.0
Family members	Single Member	51	5.1
	2 to 4 members	302	30.2
	Five members	*-	20.0
	6 and above	447	44.7
Income	Less than 5000	437	43.7
	5000 to 10000	249	24.9
	10000 to 15000	9	.9
	More than 15000	3	.3
	DK	302	30.2
Number of children	None	113	11.3
	less than two	347	34.7
	three children	229	22.9
	More than four children	311	31.1
Working status	Working in Treatment plant	130	13.0
	Not working in treatment plant	146	14.6
	Others	724	72.4
Total		**1000**	**100**

Table No 1: Background Characteristics of the respond ants

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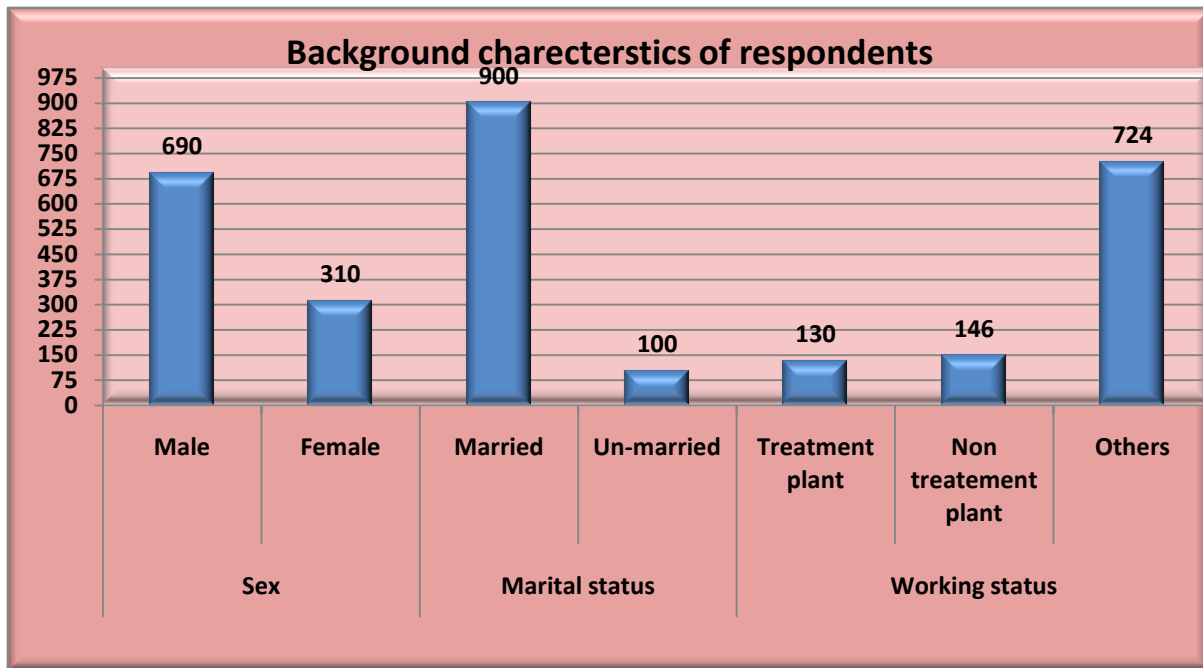
Graph No 1: Background Characteristics' of the respondents

Gender: out of total respondents 690 i.e. 69.0% respondents were males and 310 i.e. 31.0% were females.

Age: the survey covered respondents of age upto 61 and above. 6.3% respondents were less than 20 years of age followed by 21 to 30 years, 21.8%, 31 to 40 years, 33.1 %, 51 to 60 years, 11.4% and 61 and above were 5%.

Marital Status: 90% of the respondents were married and only 10% were unmarried.

Family Members: respondents who were single were 5.1% followed by multiple members in their family i.e. respondents 30.2 % respondents fall under the category in 2 to 4 members followed by 5 members in a family i.e. 20% and 6 members and above were 44.7 % that means almost half of the population.

Income: in the present study 43.7% respondents had less than 5000 income, 24.9% respondents had income between 5000 to 10000 followed by .9% of respondents with income between 10000 to 15000 and .3% of respondents with income more than 15000.

No. of Children: 11.3% respondent's families had no children, 34.7% respondent's families has less than 2 children followed by 22.9% families with 3 children and 31.1% with more than four children.

Working Status: in the present study 13% of respondents worked in the treatment plant in the tannery industry and 14.6% respondents worked in the tannery but not in the treatment plant. Rest 72% respondents were the

people who were either working some were out of the tannery and no were related to tannery or they were people who did not work at all.

Background characteristics by type of work									
		Number				**Percent**			
		Working in Treatment plant (N=130)	**Not working in treatment plant (N=146)**	**Others (N=274)**	**Total (N=1000)**	**Working in Treatment plant (N=130)**	**Not working in treatment plant (N=146)**	**Others (N=274)**	**Total (N=1000)**
Sex	Male	121	140	429	690	93.1	95.9	59.3	69
	Female	9	6	295	310	6.9	4.1	40.7	31
Age	Less than 20	12	6	45	63	9.2	4.1	6.2	6.3
	Age 21 to 30	47	35	136	218	36.2	24.0	18.8	21.8
	Age 31 to 40	37	64	230	331	28.5	43.8	31.8	33.1
	Age 41 to 50	22	28	174	224	16.9	19.2	24.0	22.4
	Age 51to 60	9	12	93	114	6.9	8.2	12.8	11.4
	Age 61 and above	3	1	46	50	2.3	0.7	6.4	5.0
Marital status	Married	104	136	660	900	80.0	93.2	91.2	90.0
	Un-married	26	10	64	100	20.0	6.8	8.8	10.0
Family members	Single Member	1	5	45	51	0.8	3.4	6.2	5.1
	2 to 4 members	31	53	218	302	23.8	36.3	30.1	30.2
	Five members	26	37	137	200	20.0	25.3	18.9	20.0
	6 and above members	72	51	324	447	55.4	34.9	44.8	44.7
no of children	None	13	14	86	113	46.2	58.9	43.8	46.3
	One	41	62	244	347	21.5	18.5	30.2	27.4
	two	26	34	169	229	23.8	13.0	17.5	17.7

	More than three	50	36	225	311	8.5	9.6	8.4	8.6
Habits	Tobacco	75	91	340	506	57.7	62.3	47.0	50.6
	Regular alcohol	2	3	12	17	1.5	2.1	1.7	1.7
	Sometimes alcohol	24	10	43	77	18.5	6.8	5.9	7.7
	Smoking	27	59	126	212	20.8	40.4	17.4	21.2
Diet	Yes	89	122	640	851	68.5	83.6	88.4	85.1
Working period	Less than one year	3	40	NA	43	2.3	27.4	NA	15.6
	1-5 years	50	62	NA	112	38.5	42.5	NA	40.6
	6-10 years	39	26	NA	65	30.0	17.8	NA	23.6
	11-15 years	24	8	NA	32	18.5	5.5	NA	11.6
	16 and above	14	10	NA	24	10.8	6.8	NA	8.7
child dead	None	60	86	317	463	46.2	58.9	43.8	46.3
	One	28	27	219	274	21.5	18.5	30.2	27.4
	two	31	19	127	177	23.8	13.0	17.5	17.7
	More than three	11	14	61	86	8.5	9.6	8.4	8.6

Table No 2: Cross Tabulation of Background Characteristics on the Basis of Type of Work of the Respondents

Interpretation: Table NO 2 shows the cross tabulation of Background characteristics of the Respondents such as gender, Age, Marital Status, No of Family members, No of children in the Family, Habits, Diet and if they are working in the tannery the working period. In this table it is clearly tabulated and differentiated about the total working population and non workers in the tannery with respect to their background details. The No. of children dead in the family of the working respondents and non working respondents in the tanneries is also mentioned in detail. It can be interpreted for the children dead from the families of respondents working into the tannery is more than 50%. Which might be because no safety measures were provided to the respondents working in treatment plant which in turn may have affected the children at their home. Here others column belongs to the respondents who do some work but they not work in the tannery but they are the residents of the locality where the tannery is situated. Therefore the effect on them sue to water, atmosphere and soil is also considered.

	Residents (N=1000)	Percent	Non residents (N=200)	Percent	Total (N=1200)	Percent	Pearson's R	Chi-square (p-value)
Statistical significance of children experienced health problem by type of residence								
Cough	140	14.0	7	3.5	147	12.3	0.119	0.000
Aches	533	53.3	21	10.5	554	46.2	-0.320	**0.000**
Respiratory	22	2.2	16	8.0	38	3.2	0.123	0.000
Irritation	46	4.6	21	10.5	67	5.6	0.096	0.001
Itching	48	4.8	11	5.5	59	4.9	0.012	0.676
less growth	9	0.9	2	1.0	11	0.9	0.004	0.892
swelling	23	2.3	6	3.0	29	2.4	0.017	0.556
Ulcer	8	0.8	2	1.0	10	0.8	0.008	**
Cancer	5	0.5	5	2.5	10	0.8	-0.082	0.005
Diarrhea	69	6.9	7	3.5	76	6.3	0.052	0.072
Death	2	0.2	6	3.0	8	0.7	-0.128	**
Fever	494	49.4	15	7.5	509	42.4	0.316	0.000
giddiness	8	0.8	3	1.5	11	0.9	-0.027	**
vomiting	30	3.0	8	4.0	38	3.2	-0.021	0.461
Piles	7	0.7	1	0.5	8	0.7	0.009	**
skin disease	131	13.1	12	6.0	143	11.9	0.082	**0.005**
TB	8	0.8	15	7.5	23	1.9	-0.182	0.000
teeth problem	3	0.3	2	1.0	5	0.4	-0.040	**
Nails	2	0.2	2	1.0	4	0.3	-0.052	**
Weakness	26	2.6	8	4.0	34	2.8	-0.031	0.276

Chi-square test was used to test significance for odds ratio. Control group from residents in the same area is taken as reference category. (p<0.05)

** Cells have expected count less than 5.

Table No 3: Statistical Significance of Children with health issues in both residents and non residents (Controlled Population)

A Chi-Square dependency test was carried out and the results show that the calculated values are less than the table values at 5% Level of Significance. Table No 3 shows the statistical outcome of the diseases in children both residing near tannery and the children not residing near tannery. This table shows that diseases like cough, aches such as stomach ache, body ache, pain in hand and legs and head ache, Respiratory problems such as breathlessness, irritation in the body and body parts, itching in the body and body parts, cancer, fever, skin diseases are highly significant. Therefore it can concluded that children suffering with such diseases is not normal compared to the children residing away from the tannery.

Statistical significance of respondent's family members experienced health problems by residential status							
Indicators	**Residents (N=1000)**	**Percent**	**Non residents (N=200)**	**Percent**	**Total (N=1200)**	**Percent**	**Pearson's R**	**Chi-square (p-value)**
Sugar	190	19.0	17	8.5	207	17.3	0.104	**0.000**
TB	190	19.0	8	4.0	198	16.5	0.151	**0.000**
Cancer	92	9.2	3	1.5	95	7.9	0.106	**
Kidney stone	52	5.2	6	3.0	58	4.8	0.038	0.185
Body aches	269	26.9	22	11.0	291	24.3	-0.138	**0.000**
Handicapped	11	1.1	0	0.0	11	0.9	0.043	0.136
Ulcers	61	6.1	24	12.0	85	7.1	0.059	**0.003**
Respiratory	38	3.8	22	11.0	60	5.0	0.123	**0.000**
Cough	71	7.1	13	6.5	84	7.0	-0.009	0.761
Irritation	98	9.8	34	17.0	132	11.0	0.086	**0.003**
Diarrhea	42	4.2	4	2.0	46	3.8	0.043	**
Fever	222	22.2	22	11.0	244	20.3	0.104	**0.000**
Giddiness	2	0.2	2	1.0	4	0.3	-0.052	**
Leprosy	3	0.3	0	0.0	3	0.3	0.022	**
Liver failure	3	0.3	0	0.0	3	0.3	0.022	**
Skin diseases	120	12.0	10	5.0	130	10.8	0.084	**0.004**
Vomiting	65	6.5	5	2.5	70	5.8	0.064	**0.028**
Weakness	13	1.3	6	3.0	19	1.6	-0.051	0.079
Swelling	115	11.5	5	2.5	120	10.0	-0.112	**0.000**
Joint pain	9	0.9	22	11.0	31	2.6	-0.237	**0.000**
Teeth problem	7	0.7	3	1.5	10	0.8	0.036	**
Piles	3	0.3	3	1.5	6	0.5	-0.063	**
Cyst	34	3.4	7	3.5	41	3.4	0.002	0.943
Itching	26	2.6	13	6.5	39	3.3	0.082	**0.005**
Chi-square test was used to test significance for odds ratio. Control group from residents in the same area is taken as reference category. ($p<0.05$) ** Cells have expected count less than 5.							

Table No 4: Statistical significance of respondent's family members experienced health problems on the basis of residential status

A Chi-Square dependency test was carried out and the results show that the calculated values are less than the table values at 5% Level of Significance. Table No 4 shows the statistical outcome of the diseases in

family members of respondents both residing near tannery and tnot residing near tannery. Here in the present research work it is shown that diseases such as sugar, TB, body aches, Ulcers, Respiratory problem, irritation in the body and other body parts, fever, skin diseases, vomiting, swelling in the body, eyes etc, oint pain and itching in the body and other parts is highly significant.

Statistical significance of respondents experienced health problem by type of work								
	Working in Industry (N=276)	**Percent**	**Others (N=724)**	**Percent**	**Total (N=1000)**	**Percent**	**Pearson's R**	**Chi-square (p-value)**
Diorrreha	3	1.1	10	1.4	13	1.3	0.772	**
Fever	227	82.2	595	82.2	822	82.2	1.000	0.981
Giddiness	2	0.7	9	1.2	11	1.1	0.536	**
Handicapped	1	0.4	5	0.7	6	0.6	0.685	**
Head Ache	28	89.9	46	93.6	74	92.6	0.044	0.041
Irritation	85	30.8	259	35.8	344	34.4	0.157	0.139
Itching	138	50.0	413	57.0	551	55.1	0.047	0.045
Joint Pain	5	1.8	11	1.5	16	1.6	0.779	**
Kidney Disorders	1	0.4	5	0.7	6	0.6	0.685	**
Respiratory Complaint Cough	47	83.0	120	83.4	167	83.3	0.924	0.863
Skin Diseases	194	70.3	529	73.1	723	72.3	0.385	0.380
Swelling	30	10.9	76	10.5	106	10.6	0.909	0.864
Tb	3	1.1	0	0.0	3	0.3	0.021	**
Teeth Problem	2	0.7	1	0.1	3	0.3	0.186	**
Throat Infection	0	0.0	11	1.5	11	1.1	0.041	**
Ulcers	3	1.1	7	1.0	10	1.0	1.000	**
Vomiting	53	19.2	214	29.6	267	26.7	0.001	**0.001**
Chi-square test was used to test significance for odds ratio. Control group from Working in Industry is taken as reference category. (p<0.05)								
** Cells have expected count less than 5.								

Table NO 5: Statistical significance of respondents experienced health problem on the basis and type of work

A Chi-Square dependency test was carried out and the results show that the calculated values are less than the table values at 5% Level of Significance. Table No 5 shows the statistical outcome of the diseases experienced by the respondents working in the tannery. Here it is shown that diseases like Itching in the body and other body parts, irritation in the body, head ache, skin diseases, and vomiting are highly significant.

Statistical significance of respondents experienced health problems by residential status							
	Residents (N=1000)	**Percent**	**Non residents (N=200)**	**Percent**	**Total (N=1200)**	**Percent**	**Pearson's R**	**Chi-square (p-value)**
Diorrreha	13	1.3	9	4.5	22	1.8	-0.089	**0.002**
Fever	822	82.2	22	11.0	844	70.3	0.581	**0.000**
Giddiness	11	1.1	5	2.5	16	1.3	-0.045	0.115
Handicapped	6	0.6	1	0.5	7	0.6	0.005	0.865
Head Ache	74	7.4	29	14.5	103	8.6	-0.094	**0.001**
Irritation	344	34.4	12	6.0	356	29.7	-0.232	**0.000**
Itching	550	55.0	23	11.5	573	47.8	-0.325	**0.000**
Joint Pain	16	1.6	9	4.5	25	2.1	-0.076	**0.009**
Kidney Disorders	6	0.6	4	2.0	10	0.8	-0.057	0.047
Respiratory Complaint Cough	167	16.7	16	8.0	183	15.3	0.090	**0.002**
Skin Diseases	723	72.3	23	11.5	746	62.2	0.467	**0.000**
Swelling	106	10.6	22	11.0	128	10.7	0.005	0.867
Tb	3	0.3	4	2.0	7	0.6	-0.083	**
Teeth Problem	3	0.3	2	1.0	5	0.4	-0.040	**
Throat Infection	11	1.1	6	3.0	17	1.4	-0.060	0.038
Ulcers	10	1.0	5	2.5	15	1.3	-0.050	0.081
Vomiting	267	26.7	22	11.0	289	24.1	-0.137	**0.000**
Chi-square test was used to test significance for odds ratio. Control group from residents in the same area is taken as reference category. (p<0.05) ** Cells have expected count less than 5.							

Table No 6: Statistical significance of respondents experienced health problems on the basis of residential status

A Chi-Square dependency test was carried out and the results show that the calculated values are less than the table values at 5% Level of Significance. This table broadly shows us the highly significance diseases which when compare to the controlled population are significant. Diseases such as fever, itching, irritation, head ache,

diarrhea, ulcers, throat infection or throat problems, joint pain, skin diseases, Tb, Respiratory complaints are highly significant.

Health seeking behavior			
Category	**Indicators**	**Frequency**	**Percent**
Type of health facility	Govt.health facility	157	15.7
	private health facility	843	84.3
	Total	**1000**	**100.0**
Consultation fees	Less than 10 Rs.	239	23.9
	Less than 50 Rs.	195	19.5
	more than 50 Rs	229	22.9
	Not given	337	33.7
	Total	**1000**	**100.0**
Mean Cost		71.30	
Minimum cost		1	
Maximum cost		2000	
Distance of health facility	Less than 10 KM	604	60.4
	10 to 20 KM	46	4.6
	More than 20 KM	46	4.6
	Not applicable	304	30.4
	Total	**1000**	**100.0**
Travel cost	Less than 25 Rs.	529	52.9
	25 to 50 Rs.	109	10.9
	50 to 75 Rs.	12	1.2
	More than 75 Rs.	46	4.6
	Not applicable	304	30.4
	Total	**1000**	**100.0**
Mean Cost		36.01	
Minimum cost		2	
Maximum cost		3040	
Medicine cost	Less than 25 Rs.	106	10.6
	25 to 50 Rs.	467	46.7
	50 to 75 Rs.	119	11.9
	75 to 100 Rs	109	10.9
	More than 100 Rs.	174	17.4
	DK	25	2.5

	Total	975	97.5
	Mean Cost	86.72	
Minimum cost		1	
Maximum cost		3200	

Table No 7: Health Seeking behavior of Respondents
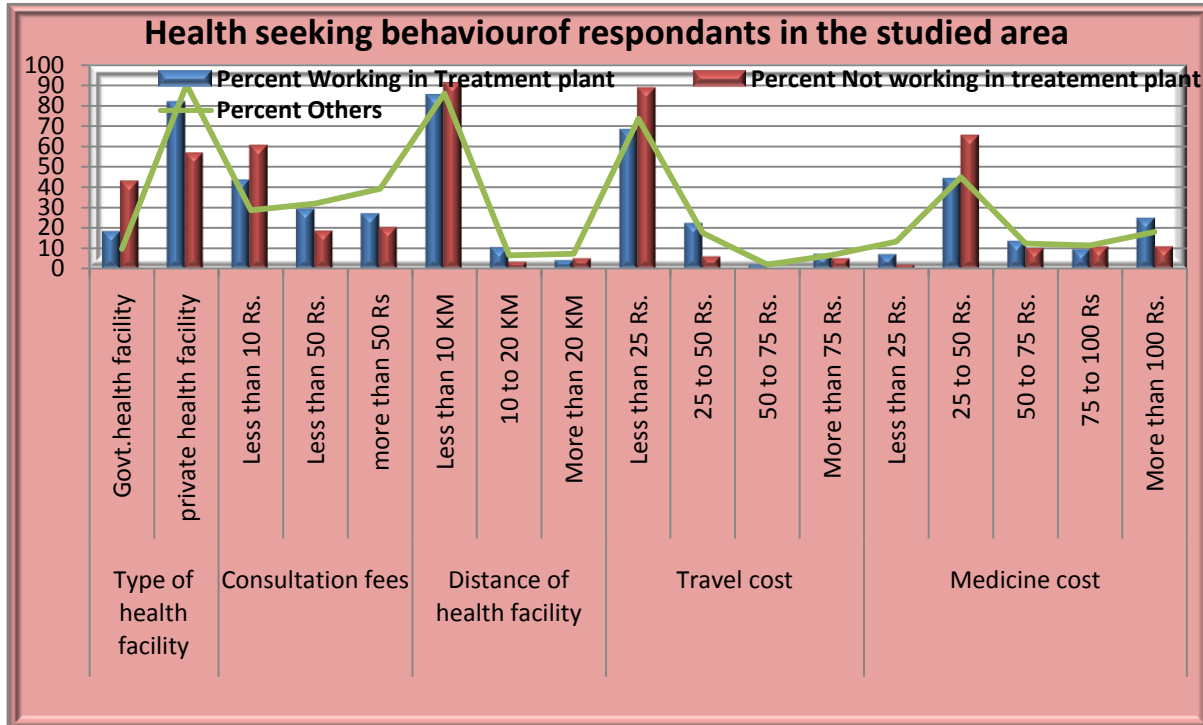
Graph No 2: Health Seeking Behavior of Respondents

15.7 % of respondents seek Govt health facility and 84.3% depend on Private Health Facility; 23.9% respondents pay less than Rs. 10 as consultation fees followed by 19.5% respondents who pay less than Rs.50; 22.9% pay more than Rs.50 and 33.7% have not mentioned the amount they pay for consultation to the doctor. Therefore the mean cost here is Rs.71.30 . 60.4% of respondents travel less than 10kms to consult a doctor. 4.5% travel more than 20 kms and 4.5% travel 10 to 20km. travel cost of 52.9% respondents is less than Rs 25; travel cost of 10.9% respondents is Rs. 25 to 50 ; 1.2 % pay Rs. 50 to 75; 4.5% pay more than Rs.75. therefore mea cost is Rs. 35.01. cost of the medicine respondents bare varies from less than Rs.25 to more than Rs.100/ day. More than 17% respondents pay more than Rs.100 per day for the medicine either for themselves or their family members.

Health seeking behavior by type of work									
Category		**Number**				**Percent**			
		Working in Treatment plant	**Not working in treatment plant**	**Others**	**Total**	**Working in Treatment plant**	**Not working in treatment plant**	**Others**	**Total**
Type of health facility	Govt.health facility	24	63	70	157	18.5	43.2	9.7	15.7
	private health facility	106	83	653	842	81.5	56.8	90.3	84.3
Consultation fees	Less than 10 Rs.	37	68	134	239	43.5	60.7	28.8	36.0
	Less than 50 Rs.	25	21	149	195	29.4	18.8	32.0	29.4
	more than 50 Rs	23	23	183	229	27.1	20.5	39.3	34.5
Distance of health facility	Less than 10 KM	80	104	420	604	85.1	91.2	86.1	86.8
	10 to 20 KM	10	4	32	46	10.6	3.5	6.6	6.6
	More than 20 KM	4	6	36	46	4.3	5.3	7.4	6.6
Travel cost	Less than 25 Rs.	64	101	364	529	68.1	88.6	73.7	75.4
	25 to 50 Rs.	21	7	87	115	22.3	6.1	17.6	16.4
	50 to 75 Rs.	2	0	10	12	2.1	0.0	2.0	1.7
	More than 75 Rs.	7	6	33	46	7.4	5.3	6.7	6.6
Medicine cost	Less than 25 Rs.	9	3	94	106	7.3	2.1	13.3	10.9
	25 to 50 Rs.	55	95	317	467	44.4	65.5	44.9	47.9
	50 to 75 Rs.	17	15	87	119	13.7	10.3	12.3	12.2
	75 to 100 Rs	12	16	81	109	9.7	11.0	11.5	11.2
	More than 100 Rs.	31	16	127	174	25.0	11.0	18.0	17.8

Table No 8: Cross Tabulation of Health seeking behavior of the Respondents on the basis of their type of work

Table No 8 shows the health seeking behavior of the respondents both working in the tannery and not working in the tannery. This table broadly explains about the type of facility the respondents opt for either government or private, the travel cost, the consultation fees, medicine cost etc in detail.

CONCLUSION:

Past and present tannery workers described and displayed a range of health conditions including prematurely aged, discolored, itchy, peeling, acid-burned, and rash-covered skin; fingers corroded to stumps; aches, dizziness, and nausea; and disfigured or amputated limbs. Although Human Rights Watch is not aware of any epidemiological studies on cancer among tannery workers, some anecdotal evidence suggests that cancer rates are indeed elevated among workers dealing with chemicals. Many common health problems that tannery workers face such as skin and respiratory diseases result from repeated exposure to a hazardous cocktail of chemicals when measuring and mixing them, adding them to hides in drums, or manipulating hides saturated in them. Some chemicals can be injurious to health in the short term, such as sulfuric acid and sodium sulfide that can burn tissue, eye membrane, skin, and the respiratory tract. Others, such as formaldehyde, azocolorants, and pentachlorophenol, are confirmed or potential human carcinogens, the health effects of which may only manifest years after exposure. Many researchers have researched on the health hazards and environmental hazards by toxic effluents of the leather industries. But negligible amount of research is being carried out on their income, economic status and medical expenses. It is well known fact that the incidence of the diseases by the tanneries on the residents near the tanneries and the worker working in the industry is significantly high. Therefore the researcher has tried highlight that the income of the respondents is significantly low compared to the medical expenses.

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