



A Study On Health Hazard And Its Effect In Leather Processing Units

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From raw hides to finished leather there exist three gross stages of leather processing. The first step, known as the pre-tanning stage, entails producing hides and skins using domestic livestock, such as sheep, goats, and cows. The conversion of raw hides into leather includes in the second stage. Most of the industry pollution occurs at this second stage. However, actual pollution loads depend upon the levels of environmental standard and the extent of compliance attached with it. The third stage, known as post tanning, is a labour-intensive, highly valuable, and less polluting step. This condition will affect the worker's health conditions. The aim of this study was to determine the occurrence and patterns of health problems of the tannery workers, and to find out the factors associated with those health problems. A standardized, structured face to face interviewer-administered close ended questionnaire was used for data collection. Around 52 of workers were affected with at least anyone health problems. Majority of the workers were suffering from skin problem (35%) and 55 % respondents used personal protective equipment (PPE). Only 17% of the having the proper environmental condition in their workplace.

Keywords: Leather processing, Industry pollution, Data collection, Personal protective equipment.

1.1 Introduction

Given its substantial overall output and country exports, the leather industry is important to the Indian economy. It is one of the largest manufacturing sectors, consistently generating significant export revenue for the nation with few downturns, and its employment strength has grown to 2.5 million ⁽¹⁾. But the expansion of the leather industry also increased worker occupational dangers in addition to jobs. According to studies, the tanning process used in the leather business makes it one of the most polluting industries in the world. Human Rights and others also documented the usage of dangerous chemicals, their effects on the environment, and the health of workers⁽²⁾

2.1 Materials and Methods

The study is an attempt to gather data on the health problem associated with their working environment. Simple random sampling is used for selecting the sample from the available workers. A questionnaire was administered as the tool for collecting data from the respondents. Primary data is gathered personally from

the respondents from the leather industry. The size of the sample collected is 60 randomly. The collected data were edited, coded and tabulated for presenting the same in the desired format.

3.1 Results and Discussion

Table no-3.1.1 Health problem associated with Tannery Workers

S.no	Health problem	Total respondent N=60			
		With problem		Without problem	
		N	%	N	%
	Skin Disease				
1	Allergy	15	25	45	75
2	Rashes	21	35	39	65
	Respiratory problem				
3	Nasal Allergy	05	08	55	92
4	Breathing Problem	11	18	49	82

Table-3.1.1 reveals that the health problem occurs among Tannery workers. In skin diseases twenty five percentage of the workers were found suffering from allergy and thirty five percentage of them reported as rashes has been their skin problem. In respiratory problem ,eight percentage of them were reported as suffered from nasal allergy and eighteen percentage of the workers were found suffering from breathing problem.

3.1.2 Satisfaction of the work environment among Tannery workers

Table no 3.1.2- Satisfaction of the work environment among Tannery workers

S.no	Working condition	Total respondent N=60			
		Satisfied		Not satisfied	
		N	%	N	%
1	Ventilation	28	47	32	53
2	Lighting	40	67	20	33
3	Toilet facility	19	32	41	68
4	Water facility	30	50	30	50
5	Sanitation	10	17	50	83

Table-3.1.2 reveals that the satisfaction of the work environment among Tannery workers. Majority of them sixty seven percentage of the workers were satisfied with the lighting facility and thirty three percentage of them were not satisfied with lighting facility. Regarding to water facility fifty percentage of them were satisfied and remaining percentage of them were not satisfied with water facility. Regarding to ventilation forty seven percentage of the workers were satisfied and fifty three percentage of them were not satisfied

with ventilation. Regarding to toilet facility thirty two percentage of the workers were satisfied and sixty eight percentage of them were not satisfied with toilet facility. Regarding sanitation seventeen percentage of the workers were satisfied and eighty three percentage of them were not satisfied with sanitation in the working environment conditions.

3.1.3 Personal Protective Measures Used by Workers

Table no-3.1.3 Personal Protective Measures Used by Workers

S.no	Personal Protective Measures	Total respondent N=60			
		Used		Not Used	
		N	%	N	%
1	Gloves	35	58	25	42
2	Boots	10	17	50	83
3	Safety mask	28	47	32	53

From the above table reveals that the personal protective equipment used by the tannery workers. Thirty five percentage of them were reported as gloves used and seventeen percentage of the workers were used boots and safety mask was used by workers only forty percentage during the working condition.

4.1 Conclusion

From this study occupational health hazard in leather tannery processing units were studied. The health problem associated with tannery workers, satisfaction of the work environment among tannery workers and personal protective measures used by workers were identified.

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