
Study on Working Women Physical Health Problems in Chemical Industries

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ABSTRACT

Health is Wealth for all. India is one of the few countries in the world where women and men have nearly the same life expectancy at birth. The fact that the typical female advantage in life expectancy is not seen in India suggests there are systematic problems with women's health. Indian women have high mortality rates, particularly during childhood and in their reproductive years. The health of Indian women is intrinsically linked to their status in society. Research on women's status has found that the contributions that the Indian women make to families often are overlooked and instead they are viewed as economic burdens. Poor health has repercussions not only for women but also their families. Women in poor health are more likely to give birth to low weight infants. They also are less likely to be able to provide food and adequate care for their children. Finally, a woman's health affects the household economic well-being, as a woman in poor health will be less productive in the labour force. To date, most chemicals industries and work environments have not been studied for their potential to have damaging effects on the women workers. Because of the lack of information, many workers may not be aware that such problems can be related to occupational exposures. In this background, the researcher made an attempt to know whether the sample of chemical industrial women workers had physical health problems at the time of work in chemical industries in Cuddalore,

Keywords: Chemicals, Industries, Women, Physical Health Problems and Working Environment.

Introduction

Women workers In India constitute one third of the total workforce. Majority of these women are engaged in the unorganized sectors such as agriculture, construction, domestic services, foundry, textiles, etc. The overwhelming majority of domestic workers are women and girls. Millions of women across the country take to unorganized work in view of limited options available to them in order to provide a living for themselves and their families. In last few decades there has been a tremendous growth in the demand for unorganized workers, which has led to the trafficking and other forms of exploitation of millions of Women and children, which tremendously affects their health as good health is a prerequisite to human productivity and development process. Charak, the ancient renowned Ayurvedic physician is known to have said, Health is vital for ethical, artistic, material and spiritual development of man. Buddha has said that of all the gains, the gains of health are the highest and the best. The progress of any nation depends on an efficient health care management system. Health has been proclaimed and declared a universal goal and public responsibility. Governments all over the world are responsible for preserving and protecting the human race from all possible hazards of health. Efforts in this direction vary from country to country, depending on their stage of development and on the magnitude of the problems from diseases provided purposeful focal point around which international cooperation has developed over the years (Park, 1994).

Importance of Health

Improvement in the health status of the people has been one of the major thrust areas for the social development programs of the country. Over the last five decades, India has built up vast health infrastructure and manpower at primary, secondary and tertiary care in Government, voluntary and private sectors. The population has become aware of the benefits of health related technologies for prevention, early diagnosis and effective treatment as well as rehabilitation for a wide variety of illnesses (Jandhyal, 2011). Technological advancement and improvement in access to health care technologies, which were relatively inexpensive and easy to implement, had resulted in steep decline in mortality between 1950 and 2010. The extent of access and utilization of health care varied substantially between States, districts and different segments of society (Shariff, 1999).

Health Status of Women in India

Health status in India can be understood with its historical perspective, health concerns and health infrastructure in pre- independence and post-independence phases and the analysis of effectiveness of health care systems for the different expected beneficiaries of the society. This section has been organized keeping these aspects in view.

The human society initially acquired knowledge through its experiences and even during the ancient civilizations India had planned cities like Mohanjodaro and Harappa with sanitation facilities and good health concerns. Though the recorded history is fragmented and does not convey a complete scenario of the ancient health systems, it seems that the, Ayurveda and Siddha systems of medicines were adopted after Rayans entered India, as early as around 1400 BC. The documented evidences suggest that in post-Vedic period when Buddhism and Jainism emerged, some institutionalization and rationalization of health system were established. With improvement of Muslim rulers in India the Unani system was established. The Britishers had a more modern system of medicine, which they brought with them to India. But due to their colonial approach and expenditure involved in this important system, it could not reach the large Indian population.

In some recent five year plans the health concerns have been focused on women and child health with various objectives, plans and programs have been included in these plans. The women are a more vulnerable group within the areas and within the various regions in the same political state of the country.

Occupational safety and health issues faced by working women

Occupational safety and health concerns for women are very much associated with their dual reproductive and economic role. Traditionally women and men have assumed different responsibilities in the home sphere. With more women entering the labour force, they may carry out paid work and continue with their unpaid work of caring for the family and doing household chores. Adding these two together, many women work longer hours than men. Specific hazards and risks women face are associated with the working conditions of the economic sectors in which they are active. In agriculture the share of women is globally 35.4 per cent of the workforce, in Sub-Saharan Africa and South Asia the agricultural sector makes up more than 60 percent of all female employment.¹³ Women in agriculture, whether in subsistence farming, self-employed, working as unpaid family members or as wage earners have a high incidence of injuries and diseases. Exposure to pesticides and mixing or applying harmful other agro-chemicals constitutes one of the principal occupational risks, with poisoning leading to illness or death. Other hazards are inherent in animal handling, and contact with dangerous plants and biological agents which give rise to allergies, respiratory disorders, infections and parasitic diseases. Noise-induced hearing loss, musculoskeletal disorders, such as repetitive stress injuries and back pain, as well as stress and psychological disorders are also frequent.

Objectives of the study

- To analysis the working women physical health related problem
- To study the physical health and environment status in the chemical industries

Data Sources and Methodology

The present study constitutes area of the study, sample design, source of data collection, period of the study and statistical tool used.

i. Tools used for Data Collection

It was felt appropriate to make use of survey method for this research with data collection from selected women workers of chemical industries. For the purpose of data collection, an interview schedule was prepared in line with the objectives and conceptual framework. Most of the items in the interview schedule were structured and close ended questions.

ii. Data Collection Process

The researcher, on the basis of interview schedule, interviewed the selected women respondents personally. Working place of the sample women workers were visited at least twice to check the information provided. The interview started with general questions to put the women respondents at ease. They have no time for this type of interaction. Of course, they believe that they have no benefit from this and also they suspect some danger in it. But after a series of interactions, they become ready to open up their minds. Initially, they were hesitant but generally they opened up and gave all the relevant information.

iii. Sampling

In the study area, the sample of chemical industries working women's are mainly in the categories of regular, casual and contract workers who remain unprotected because of noncompliance of the provisions of the existing laws. This is a growing segment in the organized sector and this forms the universe of the present study. The study of unorganized women workers with special reference to chemical industries in Cuddalore is an empirical one. The study is based on survey research technique. The information on female workers in the informal sector has been gathered from extensive survey of field investigation. As working women in informal sector of Cuddalore city constitute a heterogeneous group, stratified disproportionate sampling has been undertaken while collecting the sample workers. The researcher was only interested in achieving a sample size of 419 workers who would take part in research.

HEALTH DETAILS- Physical Health

Working women physical health related information is important for comparing with study variable. Because, the customers differ in height, weight, general appearance, eyes conditions, tongue, hair growth, nails, no of times food taken per day and frequency of missing food are taken for measuring physical health status in the chemical industries.

Table 1- Physical Health status of the respondents

Physical Health	Classification	Frequency	Percent
Height	Normal	202	48.2
	Not Normal	147	35.1
	Up normal	70	16.7
Weight	Normal weight	196	46.8
	Not normal	153	36.5
	Over weight	70	16.7
General appearance	Good	205	48.9
	Fair	144	34.4
	Poor	70	16.7
Eyes status	Normal	150	35.8
	Slight discoloration	156	37.2
	Sever discoloration	113	27.0
Tongue status	Normal	248	59.2
	Pale but coated	101	24.1
	Red and raw	70	16.7
Hair Growth	Good	186	44.4
	Bad	233	55.6
Nails status	Normal	290	69.2
	Not Normal	129	30.8
No of times food taken per day	1 Times	69	16.5
	2 Times	84	20.0
	3 Times	139	33.2
	4 Times	127	30.8
Frequency of Missing Food	Regularly	69	16.5
	Sometimes	59	14.1
	2 to 3 Days per week	84	20.0

	Never	207	49.4
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Source: Primary data computed

The working women physical health status is displayed in the table 1. In the case of height, 48.2 percent of respondents are in normal height followed by 35.1 percent of respondents are not having normal height and 16.7 percent of respondents are in up normal heights. It is explains that the majority of respondents are in normal height.

For weight, 46.8 percent of respondents are in normal weight followed by 36.5 percent of respondents are having weight less and 16.7 percent of respondents are in up normal weight. It is shows that the most of respondents are in normal weights.

With regard to the general appearance, 48.9 percent respondents are having good physical appearance followed by 34.4 percent respondents are having fairly general appearance and 16.7 percent respondents are having poor general appearance. It is found that majority of respondents are in good physical appearance.

In the case of eyes conditions, 37.2 percent of respondents are in slight discoloration followed by 35.8 percent of respondents are in normal positions and 27.0 percent of respondents are facing sever discoloration issues. It is noted that the majority of respondents are facing eyes problems.

For tongue conditions, 59.2 percent of respondents are having normal tongue followed by 24.1 percent of respondents are having pale but coated tongueand 16.7 percent of respondents are having red and raw tongue. It is shows that the most of respondents are having good and health tongue.

With regard to the hair growth, 55.6 percent respondents are not having good hair growth and 44.4 percent respondents are having good hair growth. It is found that majority of respondents are not having good hair growth.

In the case of nails conditions, 69.2 percent of respondents are having good conditions then the 30.8 percent of respondents are having issues in their nails. It is noted that the majority of respondents are having good condition nails.

For food taken process per day, 33.2 percent of respondents are regularly taken food three times per day followed by 30.8 percent of respondents are regularly taken food four times per day, 20.0 percent of respondents are regularly taken food two times per day and 16.5 percent of respondents are regularly taken food one times per day. It is shows that the 16.5 percent of peoples are taken food one times per day.

With regard to frequency of missing food, 49.4 percent respondents are having regular food on time followed by 20.0 percent respondents are missing the regular food two or three

days per week, 16.5 percent of respondents are regularly missing the foods and 14.4 percent of respondents are missing foods occasionally. It is found that majority of respondents are having foods on time.

Table 2- Physical Health status of the respondents-Consumption of food.

Food Items	Daily	2-3Days/Week	Weekly once	Occasionally	Never
Non-veg	42 (10)	114 (27.2)	128 (30.5)	109 (26)	26 (6.2)
Vegetables	114 (27.2)	128 (30.5)	109 (26)	42 (10)	26 (6.2)
Milkproducts	144 (34.4)	114 (27.2)	70 (16.5)	65 (15.5)	26 (6.2)
Fruits	30 (7.2)	102 (24.3)	109 (26.0)	156 (37.2)	22 (5.3)

Source: Primary data computed

The working women consumption of food status is displayed in the table 2. In the case of non-vegetarian food consumption status, 30.5 percent of respondents are consuming no vegetarian food at weekly once followed by 27.2 percent of respondents are consuming no vegetarian food at two or three days per week, 26.0percent of respondents are consuming no vegetarian food at occasionally, 10.0 percent of respondents are consuming no vegetarian food on daily and 6.2 percent of respondents are never consuming no vegetarian food. It is explains that the majority of respondents are consuming no vegetarian food at weekly once.

For vegetables consumption status, 30.5 percent of respondents are consuming vegetables at two or three days per week followed by 27.2 percent of respondents are consuming vegetables on daily, 26.0percent of respondents are consuming vegetables at once in a week, 10.0 percent of respondents are consuming vegetables on occasionally and 6.2 percent of respondents are never consuming vegetables and never added vegetables in their food. It is shows that the most of respondents are consuming vegetables at two or three days per week.

With regard to the consuming of milk product, 34.4 percent of respondents are consuming milk products on daily followed by 27.2 percent of respondents are consuming milk products at two or three days per week, 16.5percent of respondents are consuming milk products at once in a week, 15.5 percent of respondents are consuming milk products on occasionally and 6.2

percent of respondents are never consuming milk related products. It is found that majority of respondents are consuming milk products on daily.

In the case of consuming of fruits, 37.2 percent of respondents are consuming fruits items on occasionally followed by 26.0 percent of respondents are consuming fruits items at once in a week, 24.3 percent of respondents are consuming fruits two or three days per week, 7.2 percent of respondents are consuming fruits on daily and 5.3 percent of respondents are never consuming fruits. It is noted that majority of respondents are consuming fruits at once in a week.

Recommendation and Conclusion

If is recommended future directions in physical health research, especially focused on reproductive chemicals and physical stress. By bridging interdisciplinary gaps, the scientific community can work together to improve health and reduce adverse outcomes. Occupational exposures can harm a developing child even after it is born. Babies and children are particularly vulnerable to the effects of workplace hazards, which may be brought into the home on clothing, shoes, skin and hair. Risk assessment is an evolving process, based not only on toxicology, but also on a broad background of knowledge in fields ranging from chemistry to physiology and molecular biology and from environmental transport processes to applied statistics. Risk assessment procedures must be continually updated to reflect advances in these basic sciences. Physical health and safety specialists must work with the scientific community at large to incorporate advances in the basic sciences into their extrapolations.

Because most chemicals in working environments have not been adequately studied for their possible effects on human health and reproduction, it is difficult to know exactly which ones will have negative effects on a worker's health. Therefore, both workers and employers should work together to eliminate hazardous exposures altogether or at least to reduce them to the levels permitted by national or internationally recognized standards. Employers should provide workers with adequate education about any potential hazards in the workplace. Much more work needs to be done to ensure the complete protection of all workers' reproductive health. Governments have the responsibility to take some actions toward protecting workers' reproductive health. Action required starts with making a national priority of promoting and supporting research on occupational causes of reproductive toxicity. Other public health actions include hazard surveillance and primary prevention activities such as reductions in the use of toxic materials, informed substitution, ventilation as well as protective equipment.

Reference:

1. Women and Occupational Health - Issues and policy paper prepared for the Global Commission on Women's Health, Editor: Penny KANE Project Director: Prof. Lorraine Dennerstein. 11 March 2008.
2. Jabalpur. Park K.(1994), Preventive and Social Medicine, Banarasi Das Publishers.
3. Occupational Health Problems of Women Migrant Workers in Thogamalai, Karur District, Tamil Nadu, India Srinivasan S. and Ilango P. Department of Social Work, Kahjamalai Campus, Bharathidasan University, Tamil Nadu, India.
4. Vanithamani, (2013). "The awareness, enrolment, willingness to participate in the health insurance schemes among the women industrial workers." Shanlax International Journal of Economics 1.3 ,21-31. 1.
5. Naagarajan, R.(2010) "Social Security Of Informal Sector Workers in Cuddalore District, Tamil Nadu." Indian Journal of Labour Economics 53.2.
6. Aarab N, Minier C, Lemaire S, Unruh E, Hansen PD, Larsen BK, Andersen OK, Narbonne JF(2004). Biochemical and histological responses in mussel (*Mytilus edulis*) exposed to North Sea oil and a mixture of North Sea oil and alkylphenols. *Mar Environ Res*;58:437e41.
7. McElgunn B(1998). Reproductive and developmental hazards in the workplace. *Clin Excell Nurse Pract*, 2:140e5.
8. World Health Organization (WHO)(2013). Health topics: infertility. Geneva(Switzerland): Department of Reproductive Health and Research, WHO; 2013.
9. Bellinger DC(2005). Teratogen update: lead and pregnancy. *Birth Defects Res A Clin Mol Teratol* 2005;73:409e20.
10. Johnson EM(1986). The scientific basis for multigeneration safety evaluations. *Int J Toxicol*;5:197e201.