



HEALTH STATUS OF WOMEN EMPLOYED IN SERICULTURE ACTIVITY

¹Shobha B., ²Sheela. K., ³Narayanaswamy, T.K. and ³Surendra, H.S.

¹V.H.D Central Institute of Home Science, Seshadri Road, Bangalore – 560 001, India.

²Dean, College of Home Science, Central Agricultural University, Tura Meghalaya

³University of Agricultural sciences, GKVK, Bangalore-65

ABSTRACT

Sericulture enterprise holds a good deal of employment opportunities for women, because of its small initial investment, short gestation period, labour intensiveness and income-generating in both off-farm and on-farm activities. In this enterprise wastage is seldom and there is cent percent utilization and recycling of all that goes into or comes out of the production system, be it rearing or reeling stage. Sericulture workers are confronted with one or the other health risks. With the spread of sericulture activities, the number of workers prone to hazards is also on the rise. The multiform activities result in poor health and low nutritional status of women. The farm women need to be made aware of the labour saving devices and improved technologies, so that the work load of the farm women could be minimized at the same time reduce health problems. Hence the present study was undertaken with the main objective of gaining insight into the health status of women employed in sericulture in two districts. Bangalore Rural and Kolar in Karnataka State were selected for this study comprising 250 households, out of them 166 household belonged to Experimental Group i.e., those who practiced labour saving devices and technologies for sericultural activities (Group -I) and the remaining 84 households were the Control Group who did not practice labour saving devices and technologies in sericulture enterprise (Group -II). Analysis of the data revealed that women practicing improved devices and technologies had a substantial increase in the income and were less prone to health hazards.

Key Words: Sericulture, rearing, household, improve device.

INTRODUCTION

Sericulture enterprise holds a good deal of employment opportunities for women, because of its small initial investment, short gestation period, labour intensiveness and income-generating in both off-farm and on-farm activities. In this enterprise wastage is seldom and there is cent percent utilization and recycling of all that goes into or comes out of the production system, be it rearing or reeling stage. Involving Women in income generating activities to alleviate poverty of households, may have to focus on the health and nutrition of women and children. Women's work time and heavy work load and poor managerial skills are seen as crucial factors affecting their own health and nutrition (Acharya, 1995).

Silk is known for its elegance, splendour and grandeur. But many processes in different sector of silk manufacture may cover a few health hazards. The sericulture industry revolves around both on field and off field activities such as mulberry cultivation and silk worm rearing. At every stage, sericulture workers are confronted with one or the other health risks with the spread of sericulture activities, the number of workers prone to hazards is also on the increase. The farm women need to be made aware of the labour saving devices and improved technologies, so that the work load of the farm women could be minimized at the same time reduce health problems.

MATERIAL AND METHODS

A study was carried out in 250 households of Bangalore Rural and Kolar districts of Karnataka State. Two taluks in Bangalore district comprising of Devanahalli and Hoskote, Two taluks in Kolar district comprising of Chikkaballapura and Siddalaghatta was selected. The study was carried out in 16 villages. All the four taluks is fairly well developed with hospitals, transportation, primary health centers, schools and banks. Most of the villages are provided with basic facilities such as electricity and water supply through installation of borewells. The taluks have gone into both traditional and commercial cropping. The household selected for the study were based on purposive random sampling method. Out of 250 households 166 households belonged to the experimental group i.e., those who practiced current trends for sericulture activities (Group-I) and the remaining 84 households were the control group who practiced traditional sericulture enterprise (Group-II).

Development of Tools and Data Collection

Background information on age, type of family, family size, education and income of the respondents were gathered. Environmental sanitation included toilet facility and mode of disposal of waste were recorded. Structural schedule was prepared comprising of a set of 15 newer technologies was assessed with fully; partially and never options, which is applicable for Group-I respondents.

Health status of women in sericulture activity

Information was also sought and recorded on health hazards. Estimation of haemoglobin levels were measured by cyanomethaemoglobin method. The morbidity record was maintained using Yes or No options against complaints.

RESULTS AND DISCUSSION

Socio-economic status is presented in Table-1. Majority of the families in Group-I (41.6%) and Group-II (48.8%) women age was found to be 21-30 years and 31-40 years respectively. Majority of the families in Group-I (71.7%) and in Group-II (60.7%) belonged to the nuclear type of family. The average family size was found to be 5-6 members in group-I (41.6%) and group-II (36.9 %).

TABLE-1 Socio Economic Status of Respondents

Characteristic	Category	Respondents				χ^2 Value
		Group-I (166)		Group-II (84)		
		N	%	N	%	
Age (Years)	21-30	69	41.6	28	33.3	3.04NS
	31-40	62	37.3	41	48.8	
	41-50	35	21.1	15	17.9	
Type of Family	Nuclear	119	71.7	51	60.7	3.09NS
	Joint	47	28.3	33	39.3	
Family Size	≤ 4 members	59	35.5	29	34.5	1.05NS
	5-6 members	69	41.6	31	36.9	
	≥ 7 members	38	22.9	24	28.6	
Educational level	Illiterate	41	24.7	27	32.1	3.15NS
	Primary / Middle	70	42.2	36	42.9	
	High School	55	31.1	21	25.0	
TOTAL		166	100	84	100	

NS: Non-Significant

The level of education obtained by the respondents in both the groups revealed that majority of the women in both the groups (41.6% in Group-I and 42.9% in Group-II) were educated upto the primary and middle school level. However, the Statistical analysis (x^2 test) was found to be

non-significant for age, type of family, family size and education between the two groups (Table 1). Naik & Nagabhushan (1997) and Verma Shashi (1992) recorded similar kind of results.

TABLE- 2 Response on Environmental sanitation

Facilities	Type	Respondents			
		Group – I (166)		Group – II (84)	
		N	%	N	%
Toilet facility	Open / Public	71	42.8	38	45.2
	Own Septic Tank	95	57.2	46	54.8
Disposal of Waste	Gobar Gas	41	24.7	15	17.9
	Own Compost Pit	125	75.3	69	82.1

Regarding environmental sanitation more response of Group-I (57.2%) and Group-II (54.8%) families possessed their own septic tanks in their dwellings, while less than 50 percent of them either used public toilet or went out into the open fields. Hence, it is interesting to note that inspite of living in a rural background majority of the families focus importance to hygiene and sanitation by

possessing own sanitary facilities. With regard to disposal of waste it was observed that 75.3% of Group-I and 82.1% of Group-II families possessed their own composite pit. Further, 24.7% of Group-I and 17.9% of Group-II disposed the waste to the gobar gas. The recycled waste from the compost pit was utilized effectively for mulberry gardening (Table 2).

TABLE-3. Health hazards experienced in sericulture activities

Health Hazards [@]	Respondents				'Z' Test
	Group-I (166)		Group-II (84)		
	N	%	N	%	
Effect on eye	82	49.4	42	50.0	0.89NS
Effect on menstrual cycle	43	25.9	24	28.6	0.45NS
Effect of back pain	93	56.0	66	78.6	3.50**
Effect of Joint pain	80	48.2	43	51.2	0.45NS
Frequent Head ache	60	36.1	45	53.6	2.65**
Irritability / Allergy / Skin Problem	24	14.5	15	17.6	0.70NS
Excess of Heat	130	78.3	54	64.3	2.38*
No Problems	11	6.7	8	9.5	0.82 NS

NS: Non-Significant ** Significant at 1% level,* Significant at 5% Level, @: Multiple Responses

The various health hazards experienced by women during participation in sericulture activities is shown in Table-3. Study revealed that in Group-I (78.3%) and Group-II (64.3%) women stated excess of heat as a hazard. Majority of the women in both Group-I and Group-II (56.0% and 78.6%) suffered from back pain. This was

followed by frequent headache among Group-II Women (53.6%) and effect on eye in Group-I (49.4%). Statistical significant difference noticed in effect of back pain, headache and excess of heat. Narayana and Rani (1999) also worked on similar lines and recorded similar kind of results.

TABLE-4. Haemoglobin level of women

Hb (%) Classification	Respondents				χ^2 Value
	Group – I		Group – II		
	N	%	N	%	
Deficient (<10.0)	34	97.1	15	100.0	0.44NS
Low (10-11.9)	1	2.9	0	0.0	
Total	35	100.0	15	100.0	

NS: Non – Significant

A comparison of the mean haemoglobin value and range in women is presented in Table-6. Most of the Group-I (97%) and Group-II (cent percent) of women were deficient in haemoglobin level (< 10.0 g/dl). Three

percent of Group-I women had low haemoglobin level (10-11.9 g/dl). Hence it is very clearly observed that both Group-I and Group-II respondents were found to have significantly lower range of haemoglobin. This could be related to lower iron intake among the women.

TABLE-5 Morbidity record of woman

Complaints	Respondents				'Z' Value
	Group – I (n=35)		Group – II (n=15)		
	N	%	N	%	
A. Gastro Intestinal					
Diarrhoea	3	8.6	2	13.3	0.43NS
Vomiting	2	5.7	2	13.3	0.84NS
Dysentery	2	5.7	1	6.7	0.14NS
B. Respiratory illness					
Cough	15	42.9	7	46.7	0.26NS
Cold	16	45.7	8	53.3	0.45NS
C. Skin Infections					
Scabies	4	11.4	3	20.0	0.84NS
Skin itching	3	8.6	5	33.3	2.12*
Boil & Sores	1	2.9	2	13.3	1.36NS
D. Others					
Head ache	21	60.0	12	80.0	0.62NS
Back Pain	2	5.7	5	33.3	2.52*
Fever	7	20.0	4	26.7	0.55NS
Sore eyes	1	2.9	3	20.0	2.03*
Leg Pain	2	5.7	4	26.7	2.09*

NS: Non – Significant, * Significant at 5% Level

Morbidity is occurrence of diseases, infection or symptoms that deteriorates health. Morbidity could be in terms of common ailments like head ache, cough, cold or in terms of infectious diseases such as diarrhoea, respiratory infections, allergies and eye infections. The morbidity record of the respondents is enumerated (Table-5). More than 40 percent of Group-I and Group-II women, experienced respiratory infections like cough and cold. As most of them were anaemic, there was easy susceptibility to infections. Skin infections such as scabies were experienced by Group-I and Group-II women, the percentage being 11.4 and 20.0 %. Skin itching was experienced by 8.6 and 33.3 % of Group-I and Group-II women. Majority (60% and 80%) of Group-I and Group-II women were suffering from head ache and followed by fever i.e., 20.0 and 26.7% of Group-I and Group-II

women. There exists a significant difference between Group-I and Group-II with respect to skinitching, backpain, sore eyes and leg pain aspects ($p < 0.05$). These results are comparable to the findings of Kaila (1999) and Parvathy (2000).

SUMMARY AND CONCLUSION

Result of the study indicate that improved method of Silk worm rearing leading to increased income and less labour intensive. The study reveals the imperative need to build health consciousness among women workers in this enterprise. As most of them were anaemic, there was early susceptibility to infections. Women need to be made aware of labour saving devices and improved technologies to minimize health hazards like back pain, leg pain and head ache.

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