

Women's Employment in Industry and It's Impact on Adoption of Family Welfare Measures

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Abstract : A sample of 553 executive and non-executive women employees in a public sector electronic industry were randomly selected and adoption of family welfare measures were evaluated. Results revealed that women's employment brought about changes in demographic, marital and reproductive characteristics like delayed age at marriage, age at first child, reduced fertility and parity resulting in small to medium size families because of reduced infant birth rate. While majority of nonexecutive women favoured permanent method and executive women adopted the safe period, use of condom, and oral contraceptive indicating their sharp differences in adoption of family welfare measures due to their differences in education and age. Thus, employment of women contributes towards control of population growth and increased adoption of family welfare methods result in reduced maternal health complications which help in maintaining good health and nutrition of women themselves.

Introduction

The rapid industrialization has also resulted in a wide absorption of women in productive activities. In recent years, the growth of women's employment in the industry has been consistently high with increasing levels of education, particularly in urban areas. Their employment trend in secondary and tertiary sectors like electronics has shown a substantial growth (Papola, 1993).

In India, the public sector undertakings which account for over 70 per cent of the organized sector employment has accounted for about 12 percent women in its work force (Papola 1993). It is believed that employment of women in a public sector undertaking with assured medical facilities has implications on adoption of family welfare measures.

The national family welfare programme operates through the central and State government departments. In the organized public sector electronics industry i.e Bharat Electronics Limited (BEL) which has employed about 2335 women in its total employment of 10528 including

executive and non-executive cadres. It has also given wide range of medical facilities including family welfare activities for its employees. Health care services are being offered to its employees at BEL hospital and its Health centres in the factory premises as well as by a panel of recognised hospitals, nursing homes and clinics situated in different parts of the city. Employee women have easy accessibility to good medical care and infrastructure for health and family welfare measures. The use and promotion of contraceptive is one desired to measure curb population growth as a corollary to family welfare. In addition, the adoption of family welfare measures by women employees other than promoting small family norm, also help in improving the women's nutrition and health status.

There is very little information on the impact of women's employment on adoption of family welfare measures. Hence, the present study was undertaken with the following objectives to assess

1. Demographic, socio-economic and marital status of women working in the industry.
2. The obstetric and lactational performance among these women.
3. The adoption of family welfare measures.

Material and Methods

A total of 553 women employees comprising approximately of 24 per cent of total women (2335) employees strength inclusive of both executive - 93 (EX-1) and non-executive - 460 (NEX-11) of Bharat Electronics Ltd., (BEL) of a public sector unit, a Government of India enterprise set up under the ministry of defence were surveyed.

Women were drawn from all the 12 divisions of both component and equipment sections of the industry, working in both the I (7 to 3p.m.) and II shift (8.30 to 4.30 p.m.). The selection of women was based on probable random sampling method. In addition to demographic, socio-economic and marital status and family welfare measures adopted, details regarding reproductive and bio-life events occurred were also collected. The data collected were statistically analyzed.

Results and Discussion

The demographic and socio-economic characteristics of the study population are presented in table 1. Demographic and socio-economic characteristics of EX-I and NEX-II women indicated that the mean age of the study group was found to be 33 and 44 years respectively. Women in EX-I group were found to be nearly a decade younger to those who were in NEX-II group. Majority of families both in EX-I (62%) and NEX-II (71%) belonged to nuclear type. The mean family size was found to be 3.9 and 4 in EX-I and NEX-II respectively. However, in terms of no. of individuals and family size, 52 and 63 per cent accounted in EX-I and NEX-II respectively were found to belong to 'medium' size families. Higher percentage of EX-I (42%) were found to be having a 'small' size family as compared to NEX-II (28%).

Table 1. Demographic and socio-economic characteristics of women

Characteristics	EX-I (n=93)	NEX -II (n=460)	X ²
Age (years)	33.4 ^a ±9.7	44.7 ^b ±6.6	
Family Type			
Nuclear	58 (62)	325 (71)	4.59 NS
Joint	33 (36)	116 (25)	
Extended	2 (2)	19 (4)	
Mean family size			
Family Size	3.9	4.1	
Small (≤3)	39 (42)	130 (28)	6.89 NS
Medium (4-6)	48 (52)	290 (63)	
Large (7-9)	5 (5)	32 (7)	
Very Large (≥10)	1 (1)	8 (2)	
Education status (years of education)			
1-10	3 (3)	315 (68)	
11-12	—	68 (15)	
13-15	79 (85)	73 (16)	239.57**
>15	11 (12)	4 (1)	
Mean monthly income (Total Rs.)	17,405 ^a ± 6851	11,182 ^b ± 4612	

1. Any two means with different superscripts ab differ significantly ($P \leq 0.05$).

2. Figures in parenthesis indicate percentages.

3. **Significant at ($P \leq 0.05$).

4. NS- Non significant

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Educational status of EX-I women was better and higher than those of non-executive women. Also, estimated mean monthly income from different sources was found to be significantly higher in executive women.

An appraisal of marital status, reproductive history and adoption of family welfare methods of executive and non-executive women (Table 2) employees revealed that 78 to 85 per cent were found to be married. Distribution of age at menarche, first pregnancy was found to be in the acceptable range generally indicated for women

in India. The mean no. of pregnancies was found to be significantly higher in NEX-II. Total pregnancy wastage (abortion, still birth etc.) was found to be low in both the groups. The study revealed that these women had adopted number of family welfare measures. While 12 (EX-I) and 37 per cent (NEX-II) of women were found to be in favour of tubectomy, a permanent method of family welfare. Among the temporary methods of family welfare a majority of young executive women were relatively found to have adopted safe period, the use of condom and oral contraceptive (pill) followed by IUD.

Table 2. Marital status and reproductive history of women

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1.	Characteristics	EX-I	NEX-II	X ²
	Marital status			
	Married	72 (78)	391 (85)	22.27**
	Unmarried	18 (19)	26 (6)	
	Widow / Divorcee	3 (3)	43 (9)	
2.	Reproductive history			
	Mean age at menarche (years)	13.6 ^a ±1.2	14.4 ^b ±2.6	
	Mean age at marriage (years)	25.2 ^a ±4.0	24.8 ^a ±3.7	
	Mean age at pregnancy (years)	26.2 ^a ±3.6	26.2 ^a ±3.7	
	Mean no. of pregnancies	1.6 ^a ±0.8	2.59 ^a ±1.1	
	Mean no. of still births/abortion	0.18 ^a ±0.2	0.59 ^b ±0.9	
	Mean no. of children	1.42 ^a ±0.6	2.0 ^b ±0.8	
3.	Adoption of family welfare measures @			
	No of women adopted tubectomy	9 (12)	159 (37)	
	No of men adopted vasectomy	3 (4)	16 (4)	
	No of women adopted laparoscopy	2 (3)	22 (5)	
	No of women adopted oral contraceptive	16 (21)	67 (15)	
	No adopted condoms	24 (32)	66 (15)	
	No adopted IUD	11 (15)	34 (8)	
	No adopted safe period	25 (35)	10 (3)	

Figures in parenthesis indicate percentages.

@ Multiple response category

Any two means carrying different superscripts a b differ significantly ($p \leq 0.05$)

** Significant at ($p \leq 0.01$)

Distribution of women following family welfare measures by age at marriage and by the year of formal education is shown in table 3 and

4 respectively. The data indicated that couples adopting both permanent and temporary measure of family welfare peaked during 21 to 28 years of

Table 3. Distribution of women following family welfare measures by the age at marriage

		Permanent			Temporary@		
Age at marriage (Yrs)	n	Tubectomy	Vasectomy	Laparoscopy	Contraceptive	Condom	IUD
EX-1							
< 20	1	0	0	0	0	0	0
21-24	34	7 (9.3)	3 (4.)	1 (1.3)	8 (10.6)	14 (18.6)	8 (10.6)
25-28	33	2 (2.6)	0	1 (1.3)	8 (10.6)	10 (13.3)	3 (4.0)
> 29	7	1 (1.3)	0	0	0	0	0
Total	75	10 (13.2)	3 (4.0)	2 (2.6)	16 (21.2)	24 (32.0)	1.1 (14.6)
NEX-H							
≤20	40	2 (0.4)	0	1 (0.2)	4 (0.9)	2 (0.4)	0
21-24	176	75 (17.3)	6 (1.4)	11 (2.5)	36 (8.3)	31 (7.1)	16 (3.6)
25-28	176	75 (17.3)	9 (2.0)	10 (2.3)	26 (6.0)	31 (7.1)	17 (3.9)
≥ 29	42	7 (1.6)	1 (0.2)	0	1 (0.2)	2 (0.4)	1 (0.2)
Total	434	159 (36.4)	16 (3.6)	22 (5.0)	67 (15.4)	66 (15)	34 (7.7)

@ Multiple response category

Figures in parenthesis indicate percentages.

Table 4. Distribution of women following family welfare measures by their educational level (years of education)

	Permanent			Temporary@		
Educational level (years)	Tubectomy	Visectomy	Laparoscopy	Oral contraceptive	Condom	IUD
EX-I						
1 -11	1 (1.3)	0	0	0	0	1 (1.3)
11-12	0	0	0	0	0	0
13-15	8 (10.6)	3 (4.0)	2 (2.6)	14 (18.6)	21 (28.0)	8 (10.0)
>15	1 (1.3)	0	0	2 (2.6)	3 (4.0)	2 (2.6)
Total	10 (13.2)	3 (4)	2 (2.6)	16 (21.2)	24 (32)	11 (14.5)
NEX-II						
1-10	114 (26.2)	12 (2.8)	16 (3.6)	45 (10.3)	43 (9.9)	20 (4.6)
11-12	28 (6.4)	1 (0.2)	3 (0.6)	10 (2.3)	6 (1.3)	6 (1.3)
13-15	16 (3.6)	2 (0.4)	3 (0.6)	12 (2.8)	17 (3.9)	8 (1.8)
>15	1 (0.2)	1 (0.2)	0	0	0	0
Total	159 (36.4)	16 (3.6)	22 (5.0)	67 (15.4)	66 (15.1)	34 (7.7)

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age at marriage. The distribution of women's acceptability of family welfare measures with education revealed to be highest at their highest level of formal education in both the women groups.

The growth of electronic industry has provided an excellent impetus for the employment of women at 22 per cent (Vittal 1995) because of the suitability of nature of work as compared to other organized sector employment, where the women's employment is only at 12 per cent (Papola 1993 and Kalhan 1977). Increasing levels of women's education provided more opportunities for women's employment and increasing total house hold income (Barbara 1988).

Majority of women in the study had medium size family, which could be attributed to their nuclear type of family because of increasing urbanization has broken down the joint family system (Vidharani 1988). In addition, child bearing and rearing exerted a pressure on the employed women. They perceive difficulty in performing the mothers' role to take care of their children adequately and it also interfered with their professional role, since employed women are bound to adhere to scheduled productive industry work in the organized sector. The existence of large and very large families is almost negligible in the house-holds of the study group.

Further, family welfare measures and maternal care remain the major concern of the present day reproductive health care system in the country (Panidhar and Geeta 1996) including the public sector government organizations where large number of women are employed. In the present study, health care services provided by the factory paid major emphasis towards the adoption of family welfare measures to the couples including maintenance of small family norm and provision of well organized and maintained

'creche' facility at the factory premises to ease the women's burden of child care during working hours.

The major impact of employment of women is decline in fertility, which contribute to pattern of child bearing in two ways. 1) It operates via - increases in the age at marriage sufficient to increase in the age at 1st pregnancy, so reducing the length of exposure to child bearing risk and 2) it is associated with increased contraceptive use among married women who desire small family size (low parity) (Dyson 1992).

The observed preference for tubectomy over the temporary methods in NEX-II and the reverse pattern in EX-I women could perhaps be due to their wide difference in age and education. Further, the clear preference of women with less number of years of formal education for sterilisation and of the more educated executives to various modern methods of spacing indicates a varying preferences in these women, in practicing a natural method involving their (EX- I) husbands who too are perhaps equally or better educated than them and understand the benefits of small families (Panidhar and Geeta 1996).

Thus, it could be concluded that women's employment and participation in economic activity is likely to contribute significantly towards reduced birth rates controlling the growth of population (Goldstein 1972). It is expected that the women's employment lead to certain changes in demographic features, marital and reproductive characteristics like delayed age at marriage, age at 1st child, reduced fertility and lowered parity due to inadequate time available for reproductive processes like pregnancy and lactation. Hence, Women's employment, in addition to contributing towards control of population growth because of adoption of various methods of family welfare would indirectly promote better health and nutrition for women themselves.

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