



A STUDY ON HEALTH PROFILE OF BEEDI WORKERS IN WEST BENGAL, INDIA

Madhurima Mukherjee*

Arunasis Goswami**

Debasis Mazumdar***

Biswajit Pal*

Abstract: A study was conducted in purposively selected district Murshidabad of State West Bengal to study the health profile of beedi workers. All the six Gram Panchayets(G.P.) were selected from randomly selected one block of the district .Finally, 20 respondents from each G.P. were selected randomly to form the sample of the study (N=120). The data were collected with the help of pre-tested structured interview schedule by the researcher herself. Collected data were compiled and analyzed statistically.

The study revealed that most of the beedi workers were women and they were economically weak without having education. Most of them were suffered from health related disorders. Tuberculosis, lung cancer etc. were few of them. In major cases , it was due to over exposure to the harmful tobacco dust. Women were suffering from gynecological disorders also. Further, children were born with congenital disorders. Therefore, the effect of tobacco dust was tremendous on the health of the beedi workers.

Key words: Bidi worker, Tobacco, Disease, Health profile, Socio-economic.

*Department of Agriculture and Rural Development, West Bengal State University, Barasat, India

**Department of Vety. & A.H. Extension Education, West Bengal University of Animal and Fishery Sciences, K.B. Sarani, Kolkata

***Department of Agril. Statistics, Bidhan Chandra Krishi Viswavidyalya, West Bengal, India



INTRODUCTION

Beedi is a leaf-rolled cigarette made of coarse, uncured tobacco, tied with a string at one end. Beedis (bidis or biris) dominate the smoking market of India – for every cigarette ten beedis are smoked. Published literatures estimate that about 76% of the beedi making population is female. The All India Beedi, Cigar and Tobacco Workers Federation estimates women comprise about 90-95 % of the beedi manufacturing population. Beedi rollers handle tobacco flakes and inhale tobacco dust, as well as, the volatile components of tobacco in their work environment and are at risk of genotoxic hazards. Chronic exposure to tobacco dust causes nasal inhalation and cutaneous absorption of tobacco alkaloids, especially nicotine. Until now, tobacco control programs have been mostly involved with reducing the burden due to cigarette consumption. However, the people behind the scenes, the workers, who bear the brunt of all the problems, have been largely ignored. This study aims to focus on these ignored masses and bring to light the multitude of problems that they have to go through every day of their lives. This study was carried out with the broad objective of getting a clear picture of the health profile of beedi workers of West Bengal in relation to their personal and professional aspects.

METHODOLOGY

The present study was conducted in purposively selected Murshidabad district of West Bengal. One Block was selected randomly from the district. In this Block all the six Gram Panchayats were selected for the study. From each Gram Panchayat, 20 beedi workers were selected randomly so that each class of society can be evenly represented in the sample. Thus, a total of 120 respondents were selected. The sample size for the study was 120. A draft interview schedule for the purpose of data collection was developed by incorporating the tools and techniques of measurement of different variables. It was then modified and data were collected from the respondents directly through personal interview. The data were computed and analyzed by using different statistical methods..



RESULTS AND DISCUSSION:

Table:1- Frequency of socio- economic variables		
Variables	Category	Percent
GENDER	Male	20.00
	Female	80.00
AGE	Upto 20 years	13.30
	20-40 years	10.00
	40-60 years	30.00
	61 years and above	46.70
CATEGORY	Landless	20.00
	Marginal	33.30
	Small	16.70
	Medium/ Large	30.00
OCCUPATION	Agricultural labor	15.00
	Caste occupation	55.00
	Independent profession	16.70
	Cultivation	13.30
CASTE	General	65.00
	Scheduled Caste	21.70
	Scheduled Tribe	13.30
EDUCATION OF THE RESPONDENT	Illiterate	6.70
	Can read only	6.70
	Can read and write	23.30
	Primary	40.00
	Middle school	10.00
	High school	13.30
MARITAL STATUS	Unmarried	6.70
	Married	91.70
	Widow/widower	1.70
RELIGION	Hindu	67.50
	Muslim	32.50
FAMILY TYPE	Nuclear	39.20
	Joint	60.80
FAMILY SIZE	Upto 5 members	29.20
	More than 5 members	70.80

The table1 revealed that 80% of the beedi workers were female while only 20% were male. This result was closely similar to those found by Das (2004), Sudarshan and Kaur (1999),



Everett (1983), Tilly(1981). Omvedt (1988), however, found the reverse trend in demographics where women were less than men in his area of study. Regarding age demographics, there were 13.3 % of workers of age below 20 years, 10% in the range 20-40 years, 30% in the range 40-60 years and 46.7% workers were above 60 years old. In category, 20% of workers were landless, 33.3% were marginal, 16.7% were small farmers and 30% were medium-large farmers. As far as occupation was concerned, 15% of respondents were agricultural labors, 55% pursued caste occupation, 16.7% pursued independent profession and 13.3% were engaged in cultivation. This result was in contrast to the findings of Fernandes (2004), who showed that most of the beedi workers were unemployed. Among the respondents, 65% of respondents belonged to general caste, 21.7% were Scheduled Caste and 13.3% were Scheduled Tribes. Among the respondents, illiterate and people who can read only constituted 6.7% each. 23.3% people could read and write, 40% went to primary school, 10% went to middle school and 13.3% went to high school. In the sample, 6.7% of people were unmarried, 91.7% were married and 1.7% were widowed. In contrast to our results, Tilly (1981) showed that most of the respondents were unmarried. Among the respondents, 67.5% were Hindu and 32.5% were Muslim. Lesser number (39.2%) respondents belonged to nuclear families and 60.8% to joint families. Among the people interviewed, 29.2% families had up to 5 members and 70.8% had more than 5 members in their family.

Table-2:Health Profile of the Beedi workers		
Variables	Types	Percent
Suffer from disease	Tuberculosis	22.50
	Oral disease	36.70
	Ulcers'	24.20
	None	16.70
Suffer from respiratory disorders	Yes	52.50
	No	47.50
Pregnancy problems	5 % have such problem	42.50
	10 % have such problem	57.50
Callosities	Yes	56.70
	No	43.30
Numbness in finger	Yes	55.80
	No	44.20
Children born with congenital defect	5 % worker children have such problem	23.30



	10 % worker children have such problem	76.70
Fatigue in arms	Yes	59.20
	No	40.80
Repetitive throat aches	Yes	64.20
	No	35.80
Piles or pain in urinary tract	Yes	40.80
	No	59.20
Irregular menstruation in women	Yes	89.20
	No	10.80
Blood pressure	High	65.80
	Low	30.80
	Normal	3.30
Suffer from chronic headaches	Yes	72.50
	No	27.50
People died from lung related problems	Yes	92.50
	No	7.50
Suffer from tuberculosis	None	39.20
	Less than 5 people	6.70
	5-10 people	54.20
Suffer from lung cancer	None	42.50
	Less than 5 people	6.70
	5-10 people	6.70
	10-20 people	44.20
Frequent nausea since started making beedi	Yes	94.20
	No	5.80
Appetite same as 5 years back	Yes	40.00
	No	60.00
Regular coughs	Yes	76.70
	No	23.30

Table 2 revealed that most of the beedi workers or their family members suffered from diseases like tuberculosis (22.5%), oral diseases (36.7%), ulcers (24.2%). Only 16.7% of the respondents replied that they did not suffer from any disease. The findings were similar to those found by Yasmin (2010), Malaviya (2009), Aghi (2001), Sudarshan and Kaur (1999). They found similar trends in diseases occurring in beedi workers. A majority (52.5%) of the respondents replied that they suffer from respiratory disorders. The findings were similar to those found by Rehman (2009), Chattopadhyay (2006), Sarvanan(2002), Mahimkar and Bhisey (1995), Dharmalingam (1993), It can be seen that 42.5% respondents knew about 5% women who suffered from problems during pregnancy and the rest 57.5% replied that they



knew 10% of such women. Similar to our results, Rao (1992) also found a high incidence of pregnancy problems in women who make beedi. A majority (56.7%) of respondents had callosity on their hands and the rest 43.3% did not have callosity. The results were similar to those found by Kuruvilla et. al. (2002), who also observed similar trends. Majority of the respondents (55.8%) also said that they experienced frequent numbness in their fingers while the rest 44.2% did not. The results observed were similar to those found by Dharmalingam (1993) who observed a high occurrence of numbness in arms and fingers of beedi workers. There seems to be a high incidence of congenital defects among the children of beedi workers. 23.3% replied they knew about 5% cases of occurrence of congenital defects while the rest 76.7% responded that they knew 10% of such cases. Most respondents (59.2%) suffered from extreme fatigue in their arms and 40.8% had no such problem. Similar results were also obtained by Sarvanan (2002), Gopal (2000), Sudarshan and Kaur (1999) who found cases like aches and fatigue in arms, arthritis etc. A vast number of respondents (64.2%) experienced repetitive throat aches and 35.8% did not. Some of the respondents (40.8%) also suffered from piles or pain in the urinary tract and the remaining 59.2% did not have any problem. Such similar cases were also observed by Gopal (2000) in her investigations. An overwhelming majority (89.2%) of the respondents replied that the women beedi workers suffered from irregular menstruation and remaining 10.8% had normal menstruation. The blood pressure of the respondents was overwhelmingly abnormal, with 65.8% suffering from high blood pressure and 30.8% suffering from low blood pressure compared to only 3.3% having normal pressure. A vast majority (72.5%) suffered from chronic headaches and rest 27.5% did not get chronic headaches. Lung related problems were common among beedi workers and 92.5% of the respondents replied that they knew someone who had died from lung related problems and rest 7.5% did not. Tuberculosis seems to be prevalent among the beedi workers, because 54.2% people responded that they knew about 5-10 people who suffered from tuberculosis compared to the 6.7% who knew less than 5 people. Lung cancer seems to be quite widespread too, with 42.5% people knowing no people with lung cancer, 6.7% people knowing less than 5 and 5-10 people but 44.2% people knew 10-20 people with lung cancer. Bhisery and Govekar (1991) also found similar results where they mentioned that a number of beedi workers died due to cancer. An overwhelming majority (94.2%) of the respondents suffered from



nausea ever since they started making beedi and the rest 5.8% had no nausea. Similar results to this were obtained by Gopal (2000) who noticed several beedi workers suffering from nausea. Beedi making seems to take a toll on the appetite, as 40% of the respondents had not lost appetite in the past five years but rest 60% did. Most beedi workers (76.7%) suffered from regular coughs and 23.3% did not have such problems. This seems to be a common problem, with similar results obtained by Chattopadhyay et al. (2006), Gopal (2000), Hensman (1997).

CONCLUSION:

The present study clearly described that most of the beedi workers were women who were economically weak and many of them had no education or lack of education. The beedi workers suffered from a number of health related disorders. Tuberculosis, lung cancer etc diseases were very common among the workers. They contracted these diseases due to over exposure to the harmful tobacco dust. They also suffered frequently from callosities in hands(56.7%), fatigue in the arms(59.2%) and numbness in the fingers(55.8%). Throat aches(64.2%), respiratory disorders(52.5%), and piles or pain in urinary tracts(40.8%) were common problems faced by a vast majority of the beedi workers.

Apart from this, they also suffered from a lot of diseases due to second hand exposure to smoke. Females also suffered from irregular menstruation and other pregnancy related problems. Quite a high number of children were born with congenital disorders. Thus, this survey also revealed the fact that the health problems faced by the beedi workers were tremendous.

REFERENCES:

1. Aghi MB. (2001) Exploiting women and children - India's bidi industry. Lifeline - Volume 6, pp. 8-10
2. Bhisey RA, Govekar RB. (1991) Biological monitoring of bidi rollers with respect to genotoxic hazards of occupational tobacco exposure. *Mutat Res*; 261(2):139-47.
3. Chattopadhyay, Kundu, Mahata, Alam (2006) A study to assess the respiratory impairments among the male beedi workers in the unorganized sector. *Indian Journal of Occupational and Environmental Medicine* -- Volume 10 - Issue 2
4. Das, Sandip (2004), Beedi workers in Chhattisgarh continue to be exploited. Infochange India.



5. Dharmalingam, A. (1993) Female Beedi Workers in a South Indian Village. *Economic and Political Weekly*, Vol. 28, No. 27/28, pp. 1461-1463+1465-1468
6. Everett, Jana (1983), The upsurge of women's activism in India, *Frontiers: A Journal of Women Studies*, Vol. 7, No. 2, pp. 18-26
7. Fernandes, Ronald Anil. (2004) Beedi works now roll in poverty. *Deccan Herald(Mag.)*. p.1
8. Gopal M. (2000) Health of women workers in the beedi industry. *Medico Friends Circle Bulletin*.
9. Hensman, Rohini (1997) Organizational Strategies of Working Women in India. *Asian Women*, vol 5, pp. 91-109
10. Kuruvila, Maria, Mukhi, Sanjay V, Kumar, Pramod, Rao, Gatha S, Sridhar, KS, Kotian, MS (2002) Occupational Dermatoses in Beedi Rollers. *Indian J Dermatol Venereol Leprol* ;68:10-2.
11. Mahimkar, M B, Bhisey, R A (1995) Occupational exposure to bidi tobacco increases chromosomal aberrations in bidi processors. *Mutation Research* 334, 139-144
12. Malaviya, A. (2010) Beedi Workers of Biharsharif: The Living Dead? (*Infochange*. *Infochange Magazine*).
13. Omvedt, Gail (1988), Proletarianisation and Other Forms of Exploitation, *Economic and Political Weekly*, Vol. 23, No. 23, pp. 1164-1166
14. Rahman, Md. Mosiur (2009) Health Hazards And Quality Of Life Of The Workers In Tobacco Industries: Study From Three Selected Tobacco Industries At Gangachara Thana In Rangpur District Of Bangladesh. *The Internet Journal of Epidemiology*. 2009 Volume 6 Number 2.
15. Rao N. (1992) Occupational health Issues of women in bidi industry. *Mainstream*, pp. 27-28.
16. Sarvanan, V. (2002) Women's Employment and Reduction of Child Labour: Beedi Workers in Rural Tamil Nadu. *Economic and Political Weekly*, Vol. 37, No. 52, pp. 5205-5214.
17. Sudarshan R and Kaur R. (1999) The tobacco industry and women's employment: old concerns and new Imperatives. *Indian J Labour Econ*, 42, 1999, 675-685.



18. Tilly, Louise A. (1981), Paths of Proletarianization: Organization of Production, Sexual Division of Labor, and Women's Collective Action, *Signs*, Vol. 7, No. 2, Development and the Sexual Division of Labor, pp. 400-417.
19. Yasmin, S., Afroz, B., Hyat, B. and D'souza, D. (2010) Occupational Health Hazards in Women Beedi Workers in Bihar, Indi. *Bull Environ Contam Toxicol*, volume 85, pp. 87–91.