Effect of Literacy on health related awareness among rural women from backward communities: A Study in Phansidewa Block, West Bengal

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ABSTRACT:
The purpose of this study on married women from three communities (Scheduled Caste, Scheduled Tribe, and Muslim) in the Phansidewa Gram Panchayat in Darjeeling District, West Bengal, was to see how literacy affects specific health conditions. The health camps were found to be the primary source of health-care information for the majority of illiterate ST women. The majority of Muslim women, regardless of their literacy level, rely on health camps for information about health care. In both literate Muslim and illiterate ST women, information passed down via the family was the second most important source of health care information. According to Chi-square analyses of data, disease prevention, delivery location selection, and vaccine awareness were found to be independent of women literacy; however HIV/AIDS and family planning awareness were found to be reliant on women literacy. The literacy of women was also found to be a factor in determining the age of marriage and the implementation of family planning in this study.
KEYWORDS: Scheduled Caste Women, Scheduled Tribe Women, Muslim Women, Literacy, Health Care, Health Care Information

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I.   INTRODUCTION

During centuries of feudalism, the social structure evolved to the point where entire communities existed with handicaps and disabilities imposed by other economically and culturally powerful groups. The most vulnerable are Scheduled Castes, Scheduled Tribes, and other groups that can be considered the weaker segment of the population because they are socially, economically, and educationally backward. Backwardness is a difficult concept to define [1]. Backwardness is defined as a lack of appropriate opportunities for community and individual self-development, particularly in economics, health, housing, and education [2]. Low income, illiteracy, and a low standard of living as indicated by living conditions describe it. Scheduled Caste (SC) people can be found all over the country, with 80 percent of them living in rural areas. In Uttar Pradesh, Punjab, Himachal Pradesh, and West Bengal, they account for more than a fifth of the population [3]. The Indian Constitution has a number of clauses aimed at protecting SCs from discrimination and ensuring their socioeconomic development. The government established a number of educational programmes for SC youngsters. Pre-matric and post-matric scholarships, stipends, tuition and exam fee exemptions, midday meals, coaching schemes, residential and social welfare schools, hostels, and so on are some of them [4]. In 1996-97, the Scheme of Special Educational Development Programs for SC females with low literacy was implemented. Scheduled Tribes (STs) are segregated and secluded populations that are concentrated in the states of Orissa, Bihar, Madhya Pradesh, Andhra Pradesh, Maharashtra, Gujarat, and Rajasthan, accounting for almost 80% of India's total population. Because of their unique geographical and environmental limits, STs have more acute educational challenges than any other group in society. The government established a number of educational programmes for STs. They are preparing STs for post-matric scholarships, merit upgrades for ST students, and ST girls' hostels, among other things. "Strengthening Education among Scheduled Tribe Girls in Low Literacy Districts" is a specific scheme for girls' education [5]. Five religious communities have been designated as minorities under the terms of the National Commission for Minorities (NCM) Act, 1992: Muslims, Christians, Sikhs, Buddhists, and Parsis. Muslims, particularly Muslim women, are among the minorities who require special attention since, in comparison to other populations, they have remained socially, educationally, and economically inferior. The Indian government formed a High Level Committee (Chairman: Rajinder Sachar) to write a report on the Muslim community's social, economic, and educational standing. The Committee said in its report, "Social, Economic, and Educational Status of the Muslim Community of India," that Muslims have been left behind in

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India's growth and development process [6]. The government has adopted measures such as the Prime Minister's New 15-Point Program for Minorities, the Maulana Azad Education Foundation, and others to help them in their educational progress. When compared to non-scheduled castes and tribes, the educational development made by the lower parts has been insufficient. Even after 66 years of independence, they are far behind. Various research works have revealed that they have achieved just minor progress.

According to the 2011 Literacy Rate Census, the female literacy rate is 65.46 percent, whereas the male literacy rate is over 80 percent [7]. Women who are literate are more self-assured and bold. The awareness they have gained as a result of the newly delivered knowledge enables them to act decisively and confidently. They become more engaged in social and private pursuits. Not only can education improve one's quality of life, but it also empowers a person to confront day-to-day obstacles by providing information and abilities in reading, writing, simple arithmetic and problem solving. In a complex country like India, a mother's place of residence, caste and religion, kid's sex, and birth order all play a role in the care and assistance she and her child receive. However, prenatal and postnatal cares are inextricably linked to a mother's education. [8] While other socioeconomic indicators remain constant, maternal education emerges as the single most powerful and favourable factor on better child health care. According to a study conducted in Northern India, a woman educated until middle school is six times more likely to seek ante-natal care, seven times more likely to seek tetanus toxoid vaccination for her child, five times more likely to take iron or folic acid tablets, eight times more likely to seek institutional help for delivery, and six times more likely to seek medical advice. The key to increasing a child's chances of survival is for the mother to be aware of and make good use of the various resources available to her. Investing in female education is unquestionably linked to the health of both the child and the mother, even in a diverse cultural situation. Low literacy and a lack of knowledge about health and nutrition are major contributors to the deteriorating health situation. According to the 2001 census, 52.21 percent of the Indian population is literate, with only 39.3 percent of females being literate. In terms of rural literacy, 44.7 percent of the population is literate, with 30.6 percent of women. Kerala has the greatest female literacy rate, whereas Rajasthan has the highest percentage of female illiteracy. It is a well-known truth that literacy and awareness levels are inextricably linked. The purpose of this study is to look into the impact of female literacy on particular health conditions among women from the SC, ST, and Muslim communities.

II. METHODOLOGY

The sample comprised 100 married rural women aged 15 to 60 years who had children. The study was conducted in villages, namely Daspara, Thakurpara, Dendakhasi, Chotohelagach, Borohelagach, Sudangach, Kamargach, and Chiharugach of Phansidewa block in Darjeeling district. The sample rural women in these villages belonged to Scheduled Caste, Scheduled Tribe and Muslim Community. This study used the stratified random sampling method that involved the division of a population into smaller groups known as strata. Distribution of the samples: SC women (25 respondents) from villages of Daspara, Thakurpara, and Dendakhasi; ST women (25 respondents) from villages, Chotohelagach, and Barohelagachh; Muslim women (50 respondents) from villages, Sudamgach, Kamargach, and Chiharugach. Primary data were collected through the field survey in the area and mainly by using interview schedule. The interview schedule was designed to collect data in the following areas: the socio-economic characteristics of the respondents and her family, education related variables, health-nutrition related variables. The hypotheses presented in this paper were refined and expanded into eight hypotheses in order to provide a clear framework for analyzing and interpretation of the data.

III. DISCUSSION

Among 100 married women sampled randomly, 50 were illiterate and 50 were literate [Table 1]. Among 50 illiterate women, 8 of them belonged to Scheduled Caste community, 18 from Scheduled Tribe and 24 from Muslim community. However, among 50 literate women, 17 were from Scheduled Caste community, 7 from Scheduled Tribe and 26 from Muslim community. Table1 shows that number of literate women is highest (68 percent) among Scheduled Caste and number of illiterate women is highest among scheduled tribe. However, the numbers of literate and illiterate women were equally distributed among Muslim community.

Table 1: Community-wise distribution of illiterate and literate women

Community	Illiterate	Literate	Total
Scheduled Caste	8	17	25
Scheduled Tribe	18	7	25
Muslim	24	26	50
Total	50	50	100

Source: Field Survey

Among 100 married women, only in one case her husband had deceased (vide Table 2). Table 2 represents the living status of illiterate and literate respondents. It shows that only 34 percent of the total numbers of respondents are of APL category. BPL predominates among illiterate respondents; APL and BPL is distributed equally among literate women. It shows that all respondents among scheduled tribe are of BPL category. Among SC illiterate women, APL and BPL category is equally distributed. About 65 percent of literate SC women are of APL category. APL and BPL is almost equally distributed among Muslim literate women but BPL was predominant among illiterate Muslim women.

Table 2: Distribution of respondents according to their socio-economic characteristics (N=100)

Characteristics	Scheduled Caste Women		Scheduled Tribe Women		Muslim Women		Total
	Illiterate	Literate	Illiterate	Literate	Illiterate	Literate	
Marital Status							
Married	8	17	17	7	24	26	99
Widow	0	0	1	0	0	0	1
Total	8	17	18	7	24	26	100
Category							
APL	4	11	0	0	5	14	34
BPL	4	6	18	7	19	12	66
Total	8	17	18	7	24	26	100
Type of Family							
Unitary	1	9	6	2	5	10	33
Joint or Extended	7	8	12	5	19	16	67
Total	8	17	18	7	24	26	100
Housing details							
Own	7	15	17	4	24	26	93
Rented	1	2	1	3	0	0	7
Total	8	17	18	7	24	26	100
Occupation of the Family							
Agriculture	1	4			2	0	7
Agricultural Labour	2	4	11	3	13	10	43
Wage Labour	2	3	6	3	3	4	21
Mason		3		1	1	8	13
Driver		1			0	1	2
Service (Government)		1			0	1	2
Service (Private Concern)					0	1	1
Rickshaw Puller					4	0	4
Petty traders	3	1	1	0	1	1	7
Total	8	17	18	7	24	26	100

Source: Field Survey

Family structure is categorized in two categories, unitary, joint or extended. The unitary families are composed of the parents and unmarried children. Joint or extended category includes those cases where extension of the elementary families has taken place by marriage either horizontally or vertically, where a married son lives with his parents. In the extended families, there are three different categories of composition which are parents with married sons, unmarried children & grand children, parents with married sons, & grand children and parents with married sons, & unmarried children. Table 2 shows that joint or extended families predominate among the surveyed households. However, unitary family structure prevailed more among those families who have literate women. Table 2 shows that out of 100 families 93 of them possess house of their own. This is distributed almost equally among the families irrespective of literacy. All Muslim families possessed houses of their own. However 12 percent of SC and 16 percent of ST families lived in rented house. On analysis of the data on occupational structure of the families of the respondents, it was revealed that the primary occupation is agricultural labour (43 families) and 60 percent of those families have illiterate married women. There were no representatives in some occupations like driving, service (government and private) from

the family having illiterate married women. Occupation like masonry requires certain degree of skill where we find most of the masons (92 percent) come from those families who have literate women. The representation in the occupations which requires least technical skill and only physical labour are predominant among those families having illiterate married women. Table 2 indicates that agricultural labour is the primary occupation of ST and Muslim families having married illiterate women. Masonry is the main occupation among Muslim (62 percent) families who have literate married women. Service (government and private) is prevalent among SC and Muslim families who have literate women.

IV.   FINDINGS

In developing countries, achieving higher female literacy rates is one of the keys to reduce fertility levels. Women who can read and write tend to become more knowledgeable about family planning. Whether in urban and rural areas, a literate population speeds the diffusion of information about family planning, education, and health care.

Women with literacy skills and education have interest outside their family and play social roles beyond child bearing. The present study shows the effect of literacy of rural women on several health awareness issues like prevention of disease, awareness about HIV/AIDS, immunization, proper age at marriage, family planning, execution of family planning, and social issues including discrimination. Six hypotheses were set up: Hypothesis One (H1): There is no significant relationship between Awareness about disease prevention and literacy of rural women; Hypothesis Two (H2): There is no significant relationship between Awareness about HIV/AIDS and literacy of rural women; Hypothesis Three (H3): There is no significant relationship between awareness about immunization and literacy of rural women; Hypothesis Four (H4): There is no significant relationship between selection of the age of at marriage and literacy of rural women; Hypothesis Five (H5): There is no significant relationship between awareness about family planning and literacy of rural women; and Hypothesis Six (H6): There is no significant relationship between execution of family planning and literacy of rural women.

Awareness regarding prevention of disease

"The level of educational attainment is increasingly being recognized as an important social determinant of health" [8] The National Rural Health Mission was initiated with an aim to bring about dramatic improvement in the health system and the health status of the people, especially those who live in the rural areas of the country [9]. Chi-square analysis on the data presented in the Table 3 was used to test the Hypothesis One (H1).

Table 3: Awareness about disease prevention

Awareness about disease prevention	Illiterate	Literate	Total
Yes	33	41	74
No	17	9	26

Source: Field Survey

The chi-square statistic is 3.32. The Table value of χ^2 is 3.84 for 1 degree of freedom at 5% level of significance. Since the observed χ^2 value is less than the table value, it is insignificant; and we accept the null hypothesis at 5% level of significance, that is there is no significant relationship between Awareness about disease prevention and literacy of rural women.

Awareness about HIV/AIDS

Table 4 shows that overwhelming majority of illiterate women is unaware of HIV/AIDS; while the situation is just the reverse in case of literate women. Chi-square analysis on the data presented in the Table 4 was used to test the Hypothesis Two (H2).
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Table 4: Awareness about HIV/AID

Awareness about HIV/AIDS	Illiterate	Literate	Total
Yes	16	31	47
No	34	19	53

Source: Field Survey

The Chi-square (χ^2) value is 9.03; Table value of χ^2 is 6.63 for 1 degree of freedom at 1% level of significance. Since the observed χ^2 value is greater than the table value, it is highly significant; So, the null hypothesis, H2, is rejected and the alternative hypothesis is accepted. Hence, the data support that awareness

about HIV/AIDS among rural women is dependent on literacy of women. Similar observation is found in a study
".... a high positive correlation between literacy and HIV/AIDS awareness among women… means that the level of literacy determines the level of HIV/AIDS awareness among women" [10].
A study conducted on "Sources of AIDS awareness among women in India" found that 29.7% of ever-married women surveyed in rural India were aware of AIDS [11]. It was also shown in that particular study that friends or relative emerged as the most effective source of awareness in Rural India. [12]. Another effective source was shown to be television (27%). In a study "it is proved… that television is most popular and efficient medium among slum dweller to create awareness about HIV/AIDS." [13].

Awareness about immunization
Table 5 shows that excluding 10 families that do not have children, the remaining families except one family have undergone immunization schedule irrespective of the literacy status of the mothers.

Table 5: Awareness about immunization

Immunised children	Illiterate	Literate	Total
Yes	44	45	89
No	1	0	1
Do not have children	5	5	10
Total	50	50	100

Source: Field Survey

Chi-square analysis on the data presented in the Table 5 was used to test the Hypothesis Three (H3). The Chi-square ($\chi2$) value = 3.84; Table value is 3.84 for 1 degree of freedom at 5% level of significance. Since the observed $\chi2$ value is equal to the table value. Decision was inconclusive. Health care programmes undertaken by different governmental and non-governmental agencies have enabled awareness amongst women (irrespective of literacy) about various types of health care and utilization of medical aid both for prevention and cure of diseases. This is significantly reflected amongst married women of Phasidewa block of Siliguri sub-division.

Awareness about the proper age of marriage
Table 6 reveals that women married at 18 years of age were most frequent amongst the surveyed women. Women married at 16 years of age were allowed highest in terms of numbers. Women married at an age above 20 years were least in terms of numbers among the surveyed individuals. Chi-square analysis on the data presented in the Table 6 was used to test the Hypothesis Four (H4).
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Table 6: Awareness about proper age of marriage

Age at marriage	Illiterate	Literate	Total
Less than 18 years	37	25	62
18 years and above	13	25	38
TOTAL	50	50	100

Source: Field Survey

Chi-square ($\chi2$) value = 6.11; Tabulated value is 3.84 for 1 degree of freedom at 5% level of significance. Since the observed $\chi2$ value is greater than the table value, it is significant; and the data support that deciding the age of marriage is dependent on literacy of women.

Awareness about family planning
Data suggests that majority of the illiterate women surveyed are unaware of family planning (Table 7); while awareness about family planning is predominant amongst literate women.

Table 7: Awareness about family planning

Awareness about family planning	Illiterate	Literate	Total
Yes	16	36	52
No	34	14	48
Total	50	50	100

Source: Field Survey

Chi-square analysis on the data presented in the Table 7 was used to test the Hypothesis Five (H5). The Chi-square ($\chi2$) value = 16.02; Tabulated value is 6.63 for 1 degree of freedom at 1% level of significance. Since the observed $\chi2$ value is greater than the table value, it is highly significant. Hence, the data support the awareness about family planning among rural women is dependent on literacy of women. A report has shown "Education for girls can increase their age at marriage, confidence and their perception of their ability to make decisions about marriage and childbearing" [14].

Awareness on execution of family planning
Chi-square analysis on the data presented in the Table 8 was used to test the Hypothesis Six (H6).

Table 8: Awareness on execution of family planning

Execution of Family Planning (Number of Children	Illiterate	Literate	Total
Less than 3	18	31	49
3 and above 3	32	19	51
Total	50	50	100

Source: Field Survey

The Chi-square ($\chi2$) value = 6.76; Tabulated value is 3.84 for 1 degree of freedom at 5% level of significance. Since the observed $\chi2$ value is greater than the table value, it is significant. So, the null hypothesis, H6, is rejected and the alternative hypothesis is accepted. It is therefore concluded that execution of Family Planning among rural women is dependent on literacy of women. A recent study from India demonstrated that improvements in female literacy have a direct effect on fertility where researchers found a significant relationship between female literacy and fertility levels. In districts where a high proportion of women could read and write, the average number of children per women was considerably lower than in districts where literacy level is low.

V.   CONCLUSION
Literate women appeared to be more aware of disease prevention strategies than illiterate women. The majority of literate, SC, and ST women are aware of illness prevention techniques. Surprisingly, hypothesis testing employing Chi-square ($\chi2$) analysis revealed that rural women's awareness of illness prevention is unaffected by their literacy level. According to primary data research, the vast majority of illiterate women are unaware of HIV/AIDS, but the situation is exactly the opposite for literate women. Using Chi-square ($\chi2$) analysis, the hypothesis based on the gross observation was statistically tested. It was revealed that women's literacy levels influence their awareness of HIV/AIDS in rural areas. Women who were married at the age of 18 were the most common among those surveyed. In terms of numbers, women married at the age of 16 constituted the majority of the respondents. Women over the age of 20 who were married had the smallest number of respondents among those surveyed. Using Chi-square ($\chi2$) analysis, the hypothesis based on the gross observation was statistically tested. 'The present study revealed that deciding proper age of marriage among rural women from three communities (SC, ST, and Muslim) in Phasidewa Gram Panchayat is dependent on women's literacy.According to the data, the majority of illiterate women surveyed are unaware of family planning, whereas literate women are more knowledgeable of this topic. The hypothesis stated that women's literacy affects their awareness of family planning in rural areas. The implementation of family planning among rural women from three communities (SC, ST, and Muslim) of Phasidewa Gram Panchayat is reliant on women's literacy, according to hypothesis testing.

REFERENCES:
[1].   Ghanshyam Shah, (1991), Social Backwardness and Politics of Reservations, Economic and Political Weekly, Vol. 26, No. 11/12.
[2].   Mahmood Hasan Khan, (2001), Rural Poverty in Developing Countries Implications for Public Policy, International Monetary Fund
[3].   Planning Commission, (2005), Report of the task group on development of scheduled castes and scheduled tribes on selected agenda items of the National Common Minimum Programme, Government of India
[4].   K. Sujatha, (2008), Education Among Scheduled Tribes CED code- B.N21. G1, Scheme of Strengthening Education among Scheduled Tribe (ST) Girls in Low Literacy Districts, Education Government of India Ministry of Tribal Affairs
[5].   Alam, M.S. (2016), Affirmativa actions for minorities in India: Constrains and possibilities. Social and Education History 5(3), 246- 272

[6]. Dr. Navinchandra R. Shah, (2013), Literacy Rate in India, International Journal of Research in all Subjects in Multi Languages Vol. 1, Issue:7, ISSN: 2321 -2853

[7]. Promoting Effective Perinatal Care, (2002), Essential Antenatal, Perinatal and Postpartum Care, Training modules, WHO Regional Office for Europe

[8]. Janki Shankar et al., (2013), Education as a Social Determinant of Health: Issues Facing Indigenous and Visible Minority Students in Postsecondary Education in Western Canada, International Journal Environmental Research and Public Health, 10(9): 3908–3929.

[9]. Hazra, Anupam, (2012), "The Challenge of Keeping Rural India Healthy", Kurakshetra, vol. 60, No. 10

[10]. Ada Mary Juliana et. al., (2013), Literacy and HIV/AIDS awareness, prevention and management among women in Cross River State, Journal of AIDS and HIV Research, Vol. 5(10), pp. 387-390, http://www.academicjournals.org/JAHR

[11]. S. Pallikadavath et.al., (2006), Sources of AIDS awareness among women in India, AIDS Care, January; 18(1): 44/48, Taylor & Francis

[12]. Williams E. Nwagwu, (2008), Effectiveness of sources of HIV/AIDS awareness in a rural community in Imo State, Nigeria, https://doi.org/10.1111/j.1471-1842.2007.00729.x

[13]. Neeraj Khattri, (2015), Impact of Television on HIV/AIDS Awareness in Delhi Slums, International Journal of Communication and Health, No. 5

[14]. Helpdesk Report: The impact of girls' education on early marriage, (2011), Human Development Resource Centre, DFID