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WOMEN'S EDUCATION STATUS AND ATTITUDE ABOUT SAFE MOTHERHOOD PRACTICES AMONG PREGNANT WOMEN IN CHAKRATA, UTTARAKHAND

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A B S T R A C T

In today's culture, education ranks as the fourth most essential need for humans, behind housing, food, and clothes. Before going to school, we only interact with our parents and other close relatives, and this early exposure not only helps us develop new ideas but also instills social skills like empathy and the ability to identify with others, which are critical components of maturity. One of the most fundamental and important issues is that understanding safe motherhood practices can help both improve maternal and child health as well as reduce the health risks associated with pregnancy. Aim: The purpose of our study was to evaluate the impact of a health education intervention on pregnant women in Chakrata, Uttarakhand, India's knowledge, and attitudes regarding various aspects of safe motherhood. The entire human race depends on pregnancy and childbirth to survive, but maternal death is a double tragedy that affects both the mother and child. Four pillars of safe motherhood were listed in the "Safe Motherhood Initiative," but even after the implementation of this and other initiatives, maternal, infant, and under-five mortality rates continued to be intolerable. Planning interventions to further enable pregnant women to access these services necessitates evaluating the level of awareness among pregnant women about safe motherhood practices.

Keywords:
Knowledge, Attitude, Safe motherhood, Pregnant, Antenatal.

1. INTRODUCTION

According to Swami Vivekananda, unless the situation of women is improved, it is virtually impossible to consider the good of the world. Women can empower themselves by pursuing an education. Women with education have more power than those without it. Education works to improve the status of women in the family and to lessen disparities between men and women. Pregnancy and childbirth are essential for existence of the entire human race but the complications involved in pregnancies often have a negative impact on mothers mentally, physically and emotionally. If a woman dies during childbirth the risk of death for children under five year doubles or even triples as seen in studies conducted in developing countries. Girls in particular are more affected. Thus, maternal death is a misfortune twofold.[1]

To prevent maternal mortality, morbidity and related adverse consequences the International Health Community including the World Bank, WHO, United Nations Population Fund and agencies in 45 other countries launched the "Safe Motherhood Initiative" in 1987 at a conference held in Kenya.[2] This initiative enlisted four pillars of safe motherhood which included antenatal care, clean and safe delivery, essential obstetric care and post natal care including family planning.[3] Since the launch of this initiative a fall in the maternal mortality rate was observed by nearly 44% over the past 25 years in 2015.[4] The infant mortality rate reduced from an estimated rate of 64.8 deaths per 1000 live births in 1990 to 30.5 deaths per 1000 live births in 2016.[5] There was also a decline in the number

[1] B.S. Garg, S. Chhabra, S. Zothanzami *Safe motherhood: social, economic, and medical determinants of maternal mortality Women and Health Learning Package* (second ed.), TUFH Women and Health Task Force (2006)pg.3
[2] World Bank Oxford University*World Developmental Report 1993- Investing in Health* Oxford University Press, New York (1993)
[3] World Health Organization*Mother-Baby Package: Implementing Safe Motherhood in Countries* WHO Press, Geneva (2011)
[4] World Health Organization *Trends in Maternal Mortality: 1990-2010—estimates Developed by WHO, UNICEF, UNFPA and the World Bank 2012* WHO Press, Geneva (2012), p. 3
[5] World Health Organization *Global health observatory (GHO) data*Available from:

of under-five deaths from 12.7 million in 1990 to 5.9 million in 2015. Similar significant declines were observed in the maternal, infant and under 5 mortality rates in India as well.[6] Globally 800 women still die every day of preventable causes related to pregnancy out of which 20% is contributed by India, currently estimated to be 212 per 1,00,000 live births.[7] Hence, in 2014 "Every Mother and Every Newborn" and in 2016, "The Global Strategy" were launched to implement the 2030 agenda of Sustainable Developmental Goal (SDG)-3 to ensure healthy lives and promote well-being for all at all ages.
At the beginning of the Sustainable Developmental Goals era in 2016, the burden of pregnancy related preventable mortality and morbidity was still very heavy. Therefore it becomes necessary to assess the basic level of awareness about safe motherhood practices among pregnant women so that necessary interventions can be planned to increase their knowledge and empower them to avail these services.

In healthy women, pregnancy is a physiological process rather than a disease or pathological condition. It is a blessing and a joyful time, so no woman should perish during pregnancy or childbirth (Olise, 2007). However, pregnancy-related illnesses and other factors put a lot of women in developing nations at high risk for morbidity and mortality. The leading causes of maternal morbidity and mortality in developing countries among women aged 15 to 49 are complications related to pregnancy, childbirth, and other related issues (Mahler in Ravindran & Berer, 2000).

Maternal death refers to any death of a woman who is pregnant or who passes away within 42 days of the end of her pregnancy, regardless of her age or the location of her pregnancy. Any cause connected to or aggravated by the pregnancy or its care could be the cause of this death.

2. LITERATURE SURVAY

Linkages between education and women empowerment :

- *Education is one of the means of empowering women with the knowledge skills and self-confidence. It is necessary to create financial support for women to education through banking (S. Lawanya 2013)*
- *Education will bring reduction in inequalities and improve the status of women. (M. Suguna, December, 2011)*
- *Education leads to women empowerment on various fields like decision-making, earning and political participation. Essential development policies should be made that will promote gender equity and increases the welfare of women (Md. Tarique, 2013).*
- *Modern education and facilities have influenced much in women empowerment. Education is the key factor their empowerment and rural development (Dr. Amrita Jothi and Beena Dominic, April, 2012)*

http://www.who.int/gho/child_health/mortality/neonatal_infant_text/en/

[6] United Nations Children's Fund *Levels & Trends in Child Mortality Report* (2015), p. 3 NewYork
[7] WHO, UNICEF, UNFPA, World Bank Group, and *United Nations Population Division Maternal Mortality Estimation Inter-Agency Group. Maternal mortality* in 1990-2015. Pg;1-5.

- *Education is an input not only for economic development but it will also gives inner strength (Dr. Taxak, 2013)*

State action taken by Government for empowering women with special focus on education :

- *Education is a powerful instrument for empowering women in plans and programe. CEDEW suggests encouraging co-education (G. Sandhya Rani, 2010).*
- *The scheme of micro-financing through Self Help Group has the real economic power in tha hands of women (Dr. M. Prakash)*
- *The NGO's raise to fulfill the socio-economic status of women through acces to education, health facilities (M.K.Ghadoliya 2013)*
- *There must be recruitment of qualified teacher, good physical infrastructure and low cost schooling which are crucial for economic development and growth (Fayaz Ahmad Bhatt)*
- *The voluntary organization and Asha NGO's have to increase awareness among the rural women about the government policies (Chimna Ashappa, 2011)*

Bidyalakshmi, 2016, the formal system of education begins with elementary schooling. Half of a child's job is done if he or she has a proper or well rooted foundation. It's the start of a new school year. Even India's constitution recognises this right, with Article 45 ensuring free and compulsory education for children until they reach the age of fourteen. Every youngster is entitled to receive an education. Primary school enrollment has risen dramatically in Manipur over the last two decades, yet it still falls short of expectations. Many private and public primary schools exist today. Despite the fact that the Senapati district has a large number of government primary schools, they are not well developed or maintained. Compared to private schools, there are numerous flaws. That is why, despite the higher cost, parents prefer to send their children to private schools over public schools. Many impoverished children will not receive a proper education if government schools are not well-maintained and improved, as their parents cannot afford to send their children to a private school. There will be no development in society or state unless each youngster receives a proper education. As a result, the government must take initiatives to promote and improve basic education in Manipur's Senapati district."

Mehra, 2012, Because education is on the concurrent list, both the state and the federal government have a role to play. Several projects and programmes have been created in various states of the country to fulfil the objective of Education for All (EFA). The District Primary Education Program (DPEP) was launched in 1994-95, and the SarvaShikshaAbhiyan (SSA) was launched in 2000-01. On its part, the federal government has been developing programmes and distributing funding to states. However, it is up to the states to implement the plan. Under these programmes, Kerala, Punjab, and Himachal Pradesh have made significant strides in improving school infrastructure. However, these centrally funded programmes have failed to aid Bihar, Uttar Pradesh, and the eight states of North East India. Where educationally backward regions like Bihar and Uttar Pradesh lack the financial means to implement the programmes, the SSA was only adopted in the North East area in 2002-03. As a result, allocations should be made free of corruption, timely, and require good administration to address their education gap. Because of the shortage of facilities and drinking water, many families choose not to take their children to school. In this sense, immediate action is necessary. These are children's fundamental rights in schools, and they must be protected."

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3. STUDY AREA

In Dehradun, Uttarakhand, the Chakrata block is the subject of the study. In it, there are 759 households, with an average of 7 people living there. 4,293 people, or 84% of the population, identify as "literate." A total of 67,258 people live in the subdistrict Chakrata, including 34,938 men and 32,320 women. The-sub-district-has-a total area of 542.59 square kilometers.

Fig 1: Map of Chakrata (Source: https://www.researchgate.net/figure/Study-villages-in-Chakrata-and-Bhikiyasain-tehsil-A-Map-of-inherent-vulnerability_fig1_338237444)

4. METHODOLOGY

Pre-test post-test control group of quasi experimental design was adopted for the study. It was considered appropriate for this study because the researcher sought to test the impact of health talk, demonstration, role play and the likes, on women of reproductive age knowledge of safe motherhood in Chakrata. A 40-item self-designed questionnaire was the instrument for data collection. Demographic data were analyzed with simple percentage and frequency distribution tables, while research questions were addressed with mean and standard deviation, and ANCOVA was used to test the hypotheses at 0.05 level of significance.

5. RESEARCH QUESTION

1) Does the knowledge of safe childbirth among women of reproductive age change as a result of health talks, demonstrations, and role plays?
2) Does knowledge of safe motherhood among women of reproductive age differ depending on age group as a result of health talks, demonstrations, and role plays?
3) Does the educational status of women of reproductive age affect their knowledge of safe motherhood when it comes to health talks, demonstrations, and role plays?
4) Does parity-based safe motherhood knowledge among women of reproductive age change as a result of health talks, demonstrations, and role plays?

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6. HYPOTHESIS

H1 The knowledge of safe motherhood that women of reproductive age have is not significantly impacted by health talks, demonstrations, and role plays.
H2 The knowledge of safe motherhood among women of reproductive age is not significantly impacted by health talks, demonstrations, role plays, etc. based on age group.
H3 The knowledge of safe motherhood among women of reproductive age is not significantly impacted by health talks, demonstrations, role plays, etc. based on educational status.
H4 Health talks, demonstrations, and role plays have little impact on reproductive-age women's knowledge of parity-based safe motherhood.

7. RESULT AND FINDINGS

This section shows each research question and each hypothesis in the null form, with the variablesidentified as well as the results of the statistical analysis carried out to answer the research questions and test the hypotheses. The hypotheses were tested at 05 level of significance.

Research Question One

Table 1: Mean/Mean Gain Scores on Knowledge of Safe Motherhood among Women of Reproductive Age Based on Group (Pre-Test and Post-Test).

Group	N	Mean	Pre-test SD	Post-test Mean	SD	Mean Gain	SD
Intervention group		200	51.5850	20.22643	83.6000	10.28928	**14.0050 6.18516**
Control group		**200**	**71.3550**	**11.62604**	**81.5400**	**10.21126**	**12.9000 7.28115**

The result of findings in Table 1 shows that the pre-test knowledge mean score of the respondents in the intervention group was 51.59, with SD of 20.23, while that of their control counterparts was 71.36 with SD of 11.63.The post-test mean score of the intervention group was 83.60 nnd SD of 10.29, while that of control group was
81.54 With SD of 10.211. The mean gain score of women in the intervention group was 14.00and SD of 6.19, while that of their control counterparts was 12.90 and SD of 7.28. Hence, women who were taught using the health education methods listed above had higher mean gain score post health education than the control group who did not undergo any health education.

Research Question Two

Table 2: Gain Scores on the Influence of Age on the Impact of Health Education Intervention on Knowledge of Safe Motherhood among Women of Reproductive Age

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	Knowledge			
Group	**Age**	**N**	**Mean**	**SD**
Intervention group	15-24 yrs	41	29.6098	**22.89201**
	25-34 yrs	87	29.5632	**21.46479**
	35-44 yrs	67	**36.2537**	**23.63827**
	45 yrs and above	5	37.6000	**20.10721**
Control group	15-24 yrs	51	9.4118	**7.72833**
	25-34 yrs	87	10.0345	**7.39964**
	35-44 yrs	53	10.9245	**8.57736**
	45 yrs and above	**9**	**11.6667**	**7.14143**

Findings in Table 2 reveals that the intervention group had the highest mean gain in knowledge among womenin the age bracket of35-44 years (M=36.2537, SD=23.63827). That of the control group occurred among women in the age bracket of 45 years and above (M=l 1.6667, SD=7.14143).

Research Question Three

Table 3: Gain Scores on the Influence of Educational Status on the Impact of Health Education Intervention on Knowledgeof Safe Motherhood among Women of Reproductive

	Age:		Knowledge	
Group	**Edu. status**	**N**	**Mean**	**SD**
Intervention group	No formal edu.	3	18.0000	**25.35744**
	Primary edu	42	22.4048	**18.21291**
	Sec. edu.	86	34.2093	**25.14107**
	Tertiary edu.	69	**35.7391**	**19.83361**
	No formal edu.	23	10.6087	**6.90019**
	Primary edu.	54	**11.5926**	**9.04187**
Control group	Sec. edu.	96	9.9375	**7.39675**
	Tertiary edu.	**27**	**7.8889**	**6.71584**

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Table 3 shows that the intervention group had the highest mean gain in knowledge among womenwho had tertiary education (M=3 5.7391, SD^ 19.83361). That of the control group occurred among women who had primary education (M= 11.5926, SD=9.04187).

Research Question Four

Table 4: Gain Scores on Influence of Parity on Impact of Health Education Intervention onKnowledge of Safe Motherhood among Women of Reproductive Age

			Knowledge	
Group	**Parity**	N	**Mean**	**SD**
Intervention group	First	17	31.7059	20.56625
	Sec.	49	33.8776	23.32616
	Third	82	35.6341	22.41225
	fourth	34	28.0294	23.36338
	fifth and above	18	18.2778	16.14932
Control group	first	33	9.7576	8.35924
	Sec.	39	10.0000	7.57767
	Third	92	10.2283	7.55217
	fourth	21	8.4762	7.32543
	fifth and above	15	**13.7333**	**8.74616**

The result of findings in Table 4 shows that the intervention group had the highest mean gain in knowledge among women who had tfre third pregnancy (M=35.6341, SD=22.41225). That of the control group occurredamong women who had the fifth and above pregnancies (M= 13.73 3 3, SD=8.74616).

Hypothesis One

Table 5: Summary of ANCOVA on Difference in Knowledge of Safe Motherhood among Women of Reproductive Age

Source of variation	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.445[a]	2	.222	18.875	.00
Intercept	12.700	1	12.700	1077.677	0.000
Pre-test	0.043	1	.043	3.643	0.057
Intervention	.244	1	.244	20.736	0
Error	4.679	397	.012		
Total	1340.222	400			
Corrected Total	5.123	399			

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.00

a. R Squared = .087 (Adjusted R Squared = .082)

Hypothesis Two

Table 6

Summary of ANCOVAon Difference in Knowledge of Safe Motherhood among Women of a. R Squared = .090(Adjusted R Squared = .078)

Reproductive Age based on Age Group

Source of variation	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.46 l[a]	5	.092	7.793	.000
Intercept	12.493	1	12.493	1055.710	.000
Pre-test	.039	1	.039	3.323	.069
Intervention	.237	1	.237	20.065	.000
Age	.016	3	.005	.456	.713
Error	4.662	394	.012		
Total	1340.222	400			
Corrected Total	5.123	399			

The result of the analysis as presented in Table 6 shows that there was no significant difference on impact of health talk, demonstration, role play, etc, on women of reproductive age knowledge of safe motherhood based on age group as calculated ANCOVA (F3,394=456, p=.713, p>.05) was insignificant. The null hypothesis two was accepted. Health talk, demonstration, role play, etc, does not significantly impact women of reproductive age knowledge of safe motherhood based on age group.

Hypothesis Three

Health talk, demonstration, role play, etc, does not significantly impact women of reproductive age knowledge of safemotherhood based on educational status.

Table 7: Summary of ANCOVA on Difference in Knowledge of Safe Motherhood among Women ofReproductive Age based on Educational Status

Source of variation	**Type III Sum of Squares**	**df**	**Mean Square**	F	sig.
Corrected Model	,515[a]	5	.103	8.814	.000
Intercept	12.434	1	12.434	1063.143	.000
Pre-test	.044	1	.044	3.744	.054
Intervention	.180	1	.180	15.372	.000
Educational Status	.071	3	.024	2.011	.112
Error	4.608	394	.012		
Total	1340.222	400			
Corrected Total	5.123	399			

R Squared = .101 (Adjusted R Squared = .089

I

The result of the analysis as presented in Table 7 reveals that there was no significant difference on impact of Health talk, demonstration, role play, etc, on women of reproductive age knowledgeof safe motherhood based on educational status as calculated ANCOVA (F3, 394=2.011, p=. 112,p>.05) was iosignificant. The null hypothesis was accepted. Health talk, demonstration, role play, etc, does not significantly impact women of reproductive age knowledge of safe motherhood basedon educational status.

Hypothesis Four

Table 8: Summary of ANCOVA on Difference in Knowledge of Safe Motherhood among Women of Reproductive Age based on Parity

Source of Type III Sumvariation of Squares		df	Mean Square	F	Sig.
Corrected Model	.494[a]	6	.082 6.986		.000
Intercept	12.411	1	12.41 1 1053.578		.000
Pre-test	.044	1	.044	3.735	.054
Intervention	.251	1	.251	21.343	.000
Parity	.049	4	.012	1.038	.387
Error	4.630	393	.012		
Total	1340.222	400			
Corrected Total	5.123	399			

a. R Squared = .096 (Adjusted R Squared = .083)

The result of the analysis as presented in Table 8 shows that there was no significant difference on impact of health talk, demonstration and role play on women of reproductive age knowledge of safe motherhood based on parity as calculated ANCOVA(F4, 393= 1.038, p=.387, p>.05) was insignificant. The null hypothesis was accepted. Health talk, demonstration and role play do not significantly impact women of reproductive age knowledge of safe motherhood based on parity.

8 CONCLUSION AND FINDINGS

The study's overall mean SM pre-test scores indicated that both intervention and control group participants knew about safe parenthood. The mean knowledge pre-test score for the control group was 1.66, compared to 1.51 for their counterparts in the intervention group. The researcher did not find this result to be unexpected. This is because nurses, midwives, and community health officers effectively and consistently teach safe motherhood components of antenatal care, family planning, and PMTCT to women of reproductive age from the sampled model primary health centers on every clinic day. This research confirms that pregnant mothers had greater understanding of many aspects of safe parenthood than did Igbokwe and Adama (2011).

The influence of health talks, demonstrations, and role plays on women of reproductive age's understanding about safe motherhood in Chakrata is not significantly impacted by age, parity, or educational status. This is due to the fact that health education aims to improve an individual's health through appropriate teaching and learning experiences in order to increase knowledge of related health issues and motivate the acquisition of skills needed to behave in ways that promote health, regardless of age, parity, or educational status. It consists mostly of deliberate chances for learning through communication that are intended to increase health literacy, as well as to increase knowledge and instill life skills that are beneficial to the health of both individuals and communities (World Health Organization, 1998). When people are educated to take personal measures to address specific and pressing behavioral or health issues that are important to them, such as family planning where people wish to space out pregnancies using birth control techniques, its effectiveness is boosted (Green & Rreuter, 1991). (Green, 1980 in WHO, 2012).

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