

Extended Abstract:

Occurrence and determining factor of pregnancy termination (Spontaneous abortion and still birth) in India

By

Priya Sharma and Navaid Ali Khan

Introduction:

Pregnancy which is not result in live birth either due to induced abortion or stillbirth and spontaneous abortion called wastage of pregnancy. As defined by WHO all such pregnancies that are terminated or do not result to live births are termed as 'pregnancy or foetal wastages'. Abortion is one of the common means of termination, which refers to the termination of pregnancy before its full term. This activity can define as a termination of pregnancy; it can be either spontaneous or induced. Spontaneous abortion is known as miscarriage, Spontaneous abortion is pregnancy resulting in miscarriages without the application of any deliberate methods to terminate it during the early weeks after conception. While induced abortion on the other hand is often done using several dangerous procedures under sub standard clinical and unsanitary conditions. In addition, induced abortion simply means deliberate and planned termination of a pregnancy. There are various means of terminating a pregnancy; some may not be legally accepted in India. In India, women may terminate a pregnancy due to many reasons, which affect women health condition. Stillbirth is the birth of baby that has no sign of life at the time of birth. Stillbirth is a common tragedy occurring in about one in hundred delivery. Yet after a stillbirth everyone tends to behave as if it had not happened. There can be several impacts of stillbirth on mother's mental, emotional and physical health. Pregnancy which is not result in live birth either due to spontaneous abortion or still birth is an important indicator of access to and quality of antenatal, maternal and delivery care.

Need for the study:

Loss of life prior to the life birth and within one year of birth is a problem widely prevalent in all developing countries. High rate of pregnancy wastage affects parent's attitudes towards small family size. It is therefore important to understand the scale of pregnancy wastages to arrive at programmes to prevent or reduce them. Sex determination of the fetus first became possible in India with the advent of amniocentesis in the 1970s. This technology, introduced to detect genetic abnormalities, began to be used as a way of determining the sex of a fetus. As early as 1976, however, the government banned the use of these tests for purposes of sex determination of the fetus. This law and subsequent related laws did not ban tests such as ultrasound and amniocentesis that can be used to determine the sex of the fetus as a byproduct of the test, but they made it illegal to reveal the sex of the fetus to the client. The ban on sex-determination tests in government facilities

did not extend to the private medical sector. Currently the most commonly used technology for this purpose is ultrasound. Ultrasound typically costs between 500 and 1,000 rupees, about half the price of amniocentesis. Ultrasound is considered by many couples to be a good investment in order to save many times that sum in future dowry payments if the fetus is a female.

Some studies conclude that son preference is an important factor influencing the practice of abortion and that son preferring women who do not want daughter tend to terminate their pregnancies through induced abortion. In a strong son preferring society, woman may seek to become pregnant until she achieves her desired number of sons. When she has enough sons, she may use induced abortion to stop having more children. In recent decades, contraception and induced abortion have also been widely used as a means for women to achieve their desired number of children and for birth timing. There is a need to study such important issue as it has serious socio-economic, psychological and demographic implications and impact on maternal and child health.

Objectives of the study:

The specific objectives of this study are as follows:

- To understand the occurrence of or prevalence of pregnancy termination of married women.
- To examine the differential in pregnancy termination by background characteristics, across the regions of India.
- To examine the factors which are associated with pregnancy termination or foetal wastage across the regions of India.
- Effect of women health of pregnancy termination.

Sources of Data:

The data for the present analysis has been extracted from three rounds of Demographic and Health Survey (DHS) of India, which is also called National Family Health Survey (NFHS). In order to meet the first objective we made use of NFHS-2, 3 and 4. To meet the second, third and fourth objectives NFHS 4 data has been used for the study.

Methodology:

Bi- variate, tri-variate and logistic regression techniques have been used for analyzing the patterns of foetal wastages, where Bi-variate shows the relationship between two variables (dependent and independent). Cross tabulation or bivariate analysis have performed to study the differentials by the selected background characteristics.

Logistic regression use to observe the effect of independent variables on dependent variables since data is also providing information of spontaneous abortion and still birth (foetal wastages) has been considered as dependent variables. The predictors in the study are age, education, caste, religion, working status, place of residence. Mather BMI, anemia level, ANC care and region of India.

Discussion and Conclusion:

The level of foetal wastage decline between NFHS-3 and NFHS-4, among women across categories of background characteristics. Higher the spontaneous abortion and still birth have found among the lower socio economic groups in all over the regions of India. The high occurrence of foetal wastages by age group observed decline in primary and elder age groups compared to younger age groups. By place of residence, faster decline is observed in urban areas compare to the rural areas. The impact of education has been found in the study. The level of foetal wastages down as the level of education increases and highest drop in foetal wastages has been found among the women who are in higher education. In NFHS-3 prevalence of foetal wastage were high among non-working women but in NFHS-4 it is high among working women. Young age of woman, Poor wealth quintiles are at high risk of pregnancy termination. Bio-demographic characterise such as age of woman is strongly associated with pregnancy termination, low in young age group as the age increases the foetal wastages also increases till age group 30-34, then decreasing with increasing age but quite high compare to the younger age group such as 15-19 and 20-24. Pregnancy termination have been also found high in First and 4 above birth order. Birth interval is very crucial in pregnancy termination and less than 2 years of birth spacing the lead to the pregnancy termination. Mather anaemia level and body mass index especially under weigh women at high risk of foetal wastage. Women having less than 3 ANC visit and incomplete vaccination such as tenuous are at high risk to pregnancy termination or foetal wastage

NFHS-4 data shows that the prevalence of foetal wastages increases with age, low in young age group as the age increases the percentage of foetal wastages also increases till age group 30-34, then decreasing with increasing age but quite high compare to the younger age group such as 15-19 and 20-24. Foetal wastages has been found that foetal wastages high in urban areas not in rural areas, which may be due to traditional practices, social value and strong son preference. The regression analysis results show no effect of working status of women on foetal wastages, but effect of education, caste and religion on foetal wastages has seen in the study. Foetal wastages among Hindu and Muslim more or less same and among other religions such as Christian, Sikh and others having comparatively less foetal wastages as compare to Hindu. Wealth quintile, a factor considered in the study, shows not much effect across the different wealth quintiles. There is regional disparity in foetal wastages. It has been seen that compare to North region, foetal wastage is high in Central, East and in Northeast regions. There are several physical and psychological and emotion impact of woman health of pregnancy termination. Women education is vital in the incident of pregnancy termination, the highest prevalence of foetal wastages among the non-literate women and lowest among

highly educated women. Foetal wastages or termination of pregnancy, as described above, should be seen as serious problems as the situation is very diverse. Policy need to insure regional variation and factors associated with pregnancy termination.

Table: 1

Odds Ratio showing Foetal wastages by the background characteristics:

	Exp (B)					
	North	Central	East	Northeast	West	South
Age 5-year groups						
15-29®						
30-44	2.187***	2.604***	2.302***	3.587***	2.403***	2.269***
45 and above	1.665***	1.851***	2.081***	3.508***	2.142***	1.984***
Place of residence						
Urban ®						
Rural	.777***	0.958	1.007	.830***	1.035	1.148**
Highest educational level						
No education®						
Primary	0.929	0.97	1.026	1.279***	1.114	1.839***
Secondary	.766***	.752***	.804***	1.158**	1.091	1.552***
Higher	.697***	.714***	.594***	1.005	1.05	1.320**
Caste						
Scheduled caste®						
Scheduled Tribe	1.185	.526***	.724**	0.854	0.926	.701**
Other Backward class	1.149**	1.01	1.191**	.841**	1.116	1.075
General	1.042	1.111*	1.006	1.054	1.123	.796**
Religion						
Hindu®						
Muslim	0.906	0.975	1.143**	1.135	.826**	.874*
Christian	0.929	0.84	1.545**	.486***	0.839	1.214**
Sikh	0.922	0.93	0.845	0	1.268	0
Others	1.452	.679**	1.185	.448***	0.875	0.73
Working Status						
Working®						
Not-working	1.098*	.847***	0.945	1.195***	0.956	1.093*
Wealth Index						
Poorest®						
Poorer	0.898	1.095	1.123*	0.88	1.047	1.041
Middle	0.97	1.253**	1.101	1.005	0.996	1.071
Richer	1.161	1.250**	1.112	.804***	1.461**	1.218*
Richest	1.221	1.407***	1.093	.598***	1.683**	1.270**

Note: Significance level *p<0.001, **P<0.05, *p<0.1, ® reference category**