Adolescent pregnancies and health issues in Uttar Pradesh: Some policy implications

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Abstract

In the globalization era, adolescent pregnancies have become in important health issue. Teenage mothers have bigger disadvantage in terms of socio-economic factors. In Uttar Pradesh teenage mothers are found in the poorer households with less education. The logistic regression shows that odd ratio for the teenage mothers are more in rural area. The odd is higher for scheduled caste, tribe and other backward caste as compare to other caste households. The adolescent mothers of low standard of living index has higher odd ratio as compare to the adolescent mothers of higher standard of living index. Teenage mothers do not use the family planning methods and prenatal care. They do not deliver the baby in the health care facility and breastfeed their baby immediately after the delivery. The odd ratio is higher for no breastfeeding after child birth. In order to reduce the teenage pregnancy, government of Uttar Pradesh must generate more self employment opportunities to women and girls. The vocational training will improve the employment possibilities among adolescent girls. Government must provide the health care facilities to the poorer households. Such policies will reduce the adolescent pregnancies in the state.

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Introduction

Adolescent fertility is affecting on the nutrition, infant and child mortality. The large proportion of young women marriage and childbearing occur in adolescence before physical maturity is reached and are accompanied by malnutrition , obstetric risks and lack of decision making and mobility to acquire pregnancy , contraceptive and other reproductive health services an little autonomy over sexual and reproductive lives. Significant proportions experience risky pregnancies and forced sex is vulnerable to sexually transmitted infections usually from their husbands and experience and unmet need for contraception. Exercise of reproductive choice is limited and in many instances care seeking is constrained (Santhya K.G. and S.J. Jegeebhoy 2003). In the world's poorest countries, decisions related to marriage, schooling and economic participation occur as competing alternatives that carry significant opportunity costs. In poor households, marriage is often perceived to be an optimal choice for young girls although; it generally involves significant financial costs to be family that alternatives such as schooling do not require. By marrying their daughters off early families can shift significant portions of the expense of rearing educating and investing in their daughters to their sons in laws, families. Marrying off a young girl receives her family of a long term economic investment, the benefits of which they can not reap (Bajracharya A. and Sajeda A. 2010). A healthy mother has responsibility to feed the child and grow in a healthy environment. But lack of awareness about the self health may lead to various health related problem to mother and child. There is difference in the teenage marriage as far as other socio-economic characteristics are concerned. The education of mother and father is important for daughter's marriage. Sometime caste background forces a family to have early marriage of their daughter. Marriages of daughters are forcefully done in the same community and caste. Therefore there is social pressure on the parent to do the marriage of the daughter. Parent's literacy is affecting on daughter education and health. Educated parents understand the importance of the health and education for future carrier of a girl child. Highly educated girls also understand when the marriage should be done. Educated girls easily exploit the resources which are there in the community. The highly educated girls become an asset for the family in the long run. But poverty among the household does not permit the households to invest in the daughter's education and health. The resources with the poor family are scarce and they try to invest in the best efficient manner. Families do

not allow the marriage of a daughter if the returns from the investment are higher and vis-a-vis. The richer families always delay the daughter's marriage. Rich family invests resources in much efficient way rather than making immediate marriage of daughters. The teenage mothers have less education as compare to the older mothers. After marriage, the teenage mothers have to spend time for preparing meals, care of children and help in laws family members. They do not get time to attain classes and continuing education. The final outcome is that they stop education and drop out from the school and college. Therefore after marriage teenage mother have multiple responsibilities.

Teenage mothers do not use health care facilities available in community. The health care services are located far away in the rural area and they are overburdened in urban area. Taking a trip for the ante and post natal check up is required money and time. It is usual that the members of the family do not allow the teenage mothers for antenatal checkups. In urban area, all the public health care facilities are overcrowded. If a pregnant mother wants to visit a health care facility, then she has to wake up early in the morning and do the household chores. A family member does not come easily with teenage girls up to health care facility. Adolescent mothers have to stand in a long queue and wait for physical check up. Pregnant women are not ready for prenatal care at crowed public health care centers in urban area and far located places in rural area. Adolescent girls do not apply the family planning methods after marriage. They do not know the advantage of extended family planning. The final outcome is that they become adolescent mothers. Most of the deliveries are institutional deliveries but they are not assisted by the health personals. The teenage mothers do not breastfeeding after childbirth. The teenage mothers physical strength get deplete for recovery and they do not yield the sufficient milk for the child. It is a severe physical pressure on the body of the teenage mother. Therefore such women do not breastfeed immediately to the child. The major objective of the research paper is to examine the incidence of the teenage mothers in rural and urban area of Uttar Pradesh. Secondly to study the background characteristics of teenage mothers and lastly examine the access to health care facilities etc. The first part of the paper related to the socio-economic characteristics of the adolescent mothers in urban and rural area. Second section deals with regression result and lastly it explains about the policy implication and conclusion.

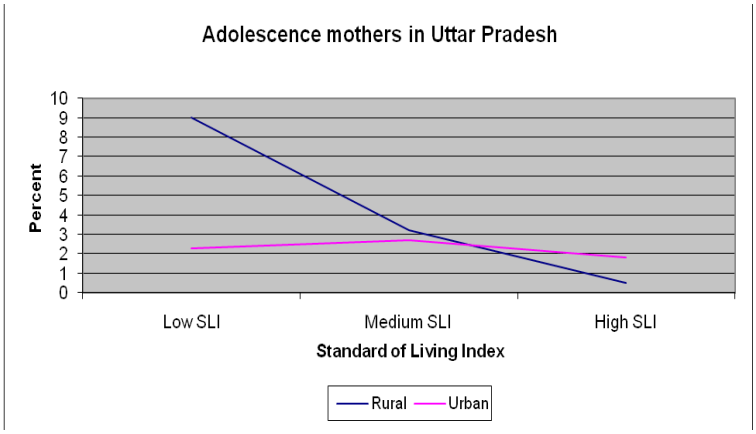
Data and Methodology

This study is based on the National Family Health Survey-3 data. The survey was undertaken in the 2005-06 in India. This survey collected data on adolescent reproductive health in all states. We classified all women's according to the age at marriage in Uttar Pradesh. Then we separated mothers who were adolescent and given birth to child before eighteen years. The women then classified according to various socio-economic backgrounds. We have used logistic regression to understand co-related factors with the teenage mothers. The data is analyzed in stata@10 software.

Socioeconomic characteristics of teenage mothers

The term adolescent is used synonymously with teenage. In this sense, adolescent pregnancy in a women aged 10-19 years. Statistics comparing the incidence between countries often give rates per 1000 adolescents aged 15-19 years (WHO 2004). The following graph shows that in rural area, the adolescent mothers are nine percent in the lower standard of index. In the rural area, adolescent mothers are less than one percent in higher standard of living index. In urban area, both in lower and higher standard of living index have less than three percent of the adolescent mothers.

Figure 1 Adolescent mother's in lower and higher standard of index



It is difficult to understand the adolescent mothers only in rural and urban area in Uttar Pradesh. Urbanization is higher and rising very fast in the state. But if we classify the adolescent mothers according to the different region in Uttar Pradesh then anyone can understand regions specific problems of the adolescent mothers.

Table 1 Adolescent mother's according to regions

Region	Percent	Adolescent mothers (Number)
Awadh	2.61	1678
Upper Doab	0.89	575
Middle Doab	0.80	517
Lower Doab	1.52	981
Purvanchal	2.78	1786
Rohilkhand	1.20	771
Bundelkhand	1.12	722
Total	10.92	7030

Source: Computed from survey data

Table shows that, adolescent mothers are 2.61 percent in the Awadh region of Uttar Pradesh. The district in Awadh region comprises as the Lucknow, Sitapur, Gonda, Unnao, Hardoi etc. The Purvanchal region has 2.78 percent of the incidence of the adolescent women. The districts comprises as the Gorakhpur, Deoria, Kushinagar, Ballia, Sonbhadra etc. In Purvanchal, the economic infrastructure is not well developed. The region is classified as the poorest region in Uttar Pradesh. The lowest adolescent mothers are found in the Middle Doad. The districts in middle comprises as Mathura, Hatras, Agra, Firozabad, Eta etc. They are developed districts and infrastructural facilities are higher in the districts. We have selected some characteristics from the survey data and presented in the following table. Such characteristics are based on socio-economic status of adolescent mothers.

Table 2 standard of living index and caste background (Percent)

Caste	Rural			Urban		
	LSI	MSI	HSI	LSI	MSI	HSI
Scheduled caste	19.5	3.9	0.4	5.3	4.8	4.0
Scheduled tribe	0.9	0.2	0.0	0.2	0.2	0.1
Other backward caste	35.0	13.7	3.7	11.2	18.1	17.6
Other	10.1	7.8	3.9	3.0	8.9	25.3

Source: Same as table one

Above table shows that 19.5 percent adolescent mothers in rural area among the scheduled caste are of low living standard of index. In high standard index, adolescent mothers are only 0.4 percent. In urban area, again the scheduled caste households with lower standard of living index have 5.3 percent of adolescent mothers. In the higher standard of living index, they are only 4 percent. The scheduled tribe population in the Uttar Pradesh is very low as compare to total population. In the urban area, lower and middle standard of living index, the adolescent mothers are 0.2 percent respectively. In rural area, the incidence of adolescent mothers in the lower standard of living index is 0.9 percent. The other backward caste is most dominant caste in Uttar Pradesh as compare to other caste. In urban area, 18.1 percent of adolescent mothers of middle standard of living index are from other backward caste. It is surprising that, in the higher standard of living index, the adolescent mothers are 17.6 percent in OBC caste. In rural area, the adolescent mothers in lower standard of living index are reported as 35 percent. In the high standard of living index, the adolescent mothers are 3.7 percent in OBC caste. It means in the rural area as the standard of living index increases, the incidence of adolescent mothers declines in the state. In the other caste, the adolescent mothers of high standard of living index are 25.3 percent in urban area. In the lower standard of living index, it is only 3 percent. In rural area, the adolescent mothers in the lower standard of living index are 10.1 percent in the other caste. In high standard of index, the adolescent mothers are 3.9 percent in other caste in rural area. In OBC and other caste, we have seen that there is inverse relationship between adolescent mothers and standard of living index.

Table 3 Standard of living index and educational background of adolescent mothers (Percent)

Mothers Education	Rural			Urban		
	LSI	MSI	HIS	LSI	MSI	HSI
0-10	10.9	9.7	4.1	3.5	12.0	19.5
11-12	0.5	1.2	1.1	0.1	1.3	7.5
12-15	0.2	0.5	0.5	0.0	0.6	7.5

Source: Same as table one

Table shows that the teenage mother's studied up to ten standards in lower standard of living index in the urban area are 10.9 percent. They are only 4.1 percent in the higher standard of living index. In the urban area, the adolescent mothers who are studied up to ten standards in lower standard of living are 3.5 percent. Among high standard of living index are 19.5 percent. It means in urban area, as the standard of living index increases the incidence of teenage mothers increases with below secondary school education. In rural area, the adolescent mothers with below high school education in lower standard of living index are 0.5 percent. In high standard of living index, they are 1.1 percent only. In urban area, adolescent mothers with high school education in the high standard of living index are 7.5 percent. As far as graduate adolescent mothers in rural area in lower standard of living index are 0.2 percent. In the high standard of living index, it is 0.5 percent. In urban area, the adolescent mothers in the high standard of living index are 7.5 percent with graduation.

Table 4 standard of living index and husband's educational background (Percent)

Husband's Education	Rural			Urban		
	LSI	MSI	HSI	LSI	MSI	HSI
0-10	32.4	14.2	3.1	8.5	18.2	17.5
11-12	4.7	4.0	2.0	0.9	3.0	8.8
12-15	1.8	2.4	1.6	0.4	1.6	10.6

Source: Same as table one

Above table shows than in rural area husband up to ten standard educations in the lower standard of living index has 32.4 percent as adolescent wife. In high standard of living index has 18.2 percent of the ten studied husband has teenage wife. As far as high school education in the low standard of living index is concerned then adolescent wife to husbands are 4.7 percent. In the high standard of living index, they are 2 percent only. In urban area, adolescent wife of husbands with high school education in high standard of living index are 8.8 percent. Husbands with

graduation in rural area have 1.8 percent adolescent wife in lower standard of living index. In the middle standard of living index, they are 2.4 percent. In the urban area, adolescent mothers with graduate husband in higher standard of living index are 0.4 percent.

Table 5 Standard of living index and prenatal care among adolescent mothers (Percent)

Prenatal care	Rural			Urban		
	LSI	MSI	HIS	LSI	MSI	HIS
No ANC	30.4	13.7	5.0	9.2	17.6	31.0
Two ANC	11.4	5.9	2.1	4.2	8.9	13.9
All ANC	24.1	6.3	1.0	6.5	6.0	2.7

Source: Same as table one

Above table shows that prenatal care among the adolescent mothers in the lower standard of living index in rural area are 30.4 percent. In the high standard of index 5 percent adolescent mothers in rural area have not received ANC. In urban area, nearly 9.2 percent of the adolescent mothers of lower standard index have not received antenatal check up in urban area. In high standard of living index, the adolescent mothers without ANC are 31 percent in urban area.

The adolescent mothers received only two ANC's in lower standard of living index in rural area are 11.4 percent. In high standard of living index, the adolescent mothers with two ANC's in rural area are 2.1 percent. In urban area, the adolescent mothers without 2 ANC's are 4.2 percent in lower standard of living index. In high standard of living index, adolescent mothers without education are 13.9 percent. In rural area, adolescent mothers with all ANC's in the lower standard of index are 24.1 percent. In the middle standard of living index, they are 6.3 percent. In urban area, all ANC's are received by the adolescent mothers in lower standard of living index are 6.5 percent. In the high standard of living index, they are only 2.7 percent.

Table 6 Standard of living index and use of family planning methods (Percent)

FPM	Rural			Urban		
	LSI	MSI	HIS	LSI	MSI	HIS
No method	8.5	3.2	0.8	2.5	3.9	3.8
Sometimes	18.5	9.7	4.2	5.6	12.8	26.5
Regular use	38.9	13.0	3.1	11.9	15.8	17.3

Source: Same as table one

Table shows that in rural area adolescent mothers in lower standard of living index with use of family planning methods are 8.5 percent. In high standard of living index, it is 0.8 percent. In rural area, the adolescent mothers with sometimes using family planning methods in lower standard of living index are 18.5 percent. In the high standard of living index, they are 4.2 percent. As far as adolescent mothers in urban area is concerned then 5.6 percent of adolescent mothers in lower standard of index are using the family planning methods. In the higher standard of living index, they are 26.5 percent. The adolescent mothers in the rural area of lower standard of living index are 38.9 percent using family planning methods regularly. In the high standard of living index, they are 3.1 percent. In the urban area, adolescent mothers using regular family planning methods in lower standard of living index are 11.9 percent. In high standard of living index, they are 17.3 percent.

Table 7 Place of delivery and standard of living index (Percent)

Place of delivery	Rural			Urban		
	LSI	MSI	HIS	LSI	MSI	HSI
Home	30.4	13.7	5.0	9.2	17.6	31.0
Public	1.9	1.2	0.5	0.7	1.8	3.2
Private	2.0	1.5	0.9	0.7	2.3	6.9
Other	31.7	9.4	1.8	9.4	10.8	6.5

Source: Same as table one

Above table shows that 30.4 percent of the rural adolescent mothers of the lower standard of ling index have delivered their baby at home. In the high standard of living index, they are only 5 percent. In the urban area, the situation is different. Around 31 percent adolescent mothers in the high standard of living index have delivered their baby at home. In the lower standard of living index, they are only 9.2 percent. In the rural area, 1.9 percent of adolescent mothers of lower standard of living index delivered their baby in the public health care facility. In the higher standard of living index, they are only 0.5 percent. In rural area, adolescent mother of higher standard of living index delivered their baby in public health care facility is 3.2 percent. In the private health care facility, 2 percent of the adolescent mothers have delivered their baby from the lower standard of living index in the rural area. In the high standard of living index, they are only 0.9 percent. In urban area, 6.9 percent of the adolescent mothers of the high standard of living index have delivered their baby in the private health care facility. The

adolescent mothers delivering their baby in the other health care facilities in lower standard of living index are 31.7 percent. In the middle standard of living index, they are 9.4 percent. In the urban area, 10.8 percent of the adolescent mothers of the middle standard of living index are delivering the baby in the other health care facilities.

Table 8 Standard of living index and delivery conducted of adolescent mothers

(Percent)

Delivery conducted	Rural			Urban		
	LSI	MSI	HIS	LSI	MSI	HIS
Dai	34.4	16.5	6.3	10.6	21.6	41.1
Relative	2.8	1.4	0.4	1.7	2.9	2.7
Skilled health professional	28.8	8.0	1.4	7.6	7.9	3.8

Source: Same as table one

Delivery conducted by the health care professionals are playing crucial role in terms of health of mother and child. Total 34.4 percent of the deliveries of adolescent mothers of the rural area of lower standard of living index are conducted by the Dai. In the high standard of living index, they are 6.3 percent. In urban area, the adolescent mothers of the lower standard of living index delivered the baby by Dai are 10.6 percent. In the higher standard of living index, they are 41.1 percent. The adolescent mothers in the lower standard of living index delivered the baby under the skilled health professional are 28.8 percent. In the high standard of living index, they are 1.4 percent. In urban area, nearly 7.6 percent of the women of the lower standard living index have delivered the baby with skilled health professionals. In urban area of higher standard of ling index, it is 3.8 percent.

Table 9 Standard of living and breastfeeding by adolescent mothers (Percent)

Breastfeeding	Rural			Urban		
	LSI	MSI	HSI	LSI	MSI	HIS
No breastfeed	32.1	14.1	5.0	9.6	18.1	2.2
After 2 days	28.1	9.3	2.3	8.2	10.3	4.1
After 5 days	5.7	2.5	0.8	2.2	10.5	5.7

Source: Same as table one

Above table shows that 32.1 percent of rural adolescent mothers from lower standard of living index have not breastfeed their baby after delivery. In the high standard of living index, it

is 5 percent only. In urban area, 18.1 percent of the adolescent mothers of the middle standard of living index have not breastfeed their baby after delivery. In rural area, 5.7 percent of the adolescent mothers of the lower standard of living index have breastfeed their baby after five days. In the high standard of living index, it is 0.8 percent only. In the urban area, 10.5 percent of the adolescent mothers of the middle standard of living index have breastfeed their child after five days. In the high standard of living index, it is 5.7 percent only.

Regression Result

In order to examine the socio-economic co-relation with the teenage mothers, we have used the logistic regression (Greene William 2003). The logistic regression gives the odd for the adolescent mothers in reference to older mothers. It is explained as follows

$$f(z)= e_z/e_z+1$$

$$=1/1+e_z$$

$$z = \beta_0+ \beta_1x_1+ \beta_2x_2+ \beta_3x_3+\ldots\ldots\ldots+ \beta_kx_k,$$

where

z = dependent variable

$\beta_{0=}$ intercept

$\beta1,\beta2,\beta3$ are "regression co-efficient" of x1,x2,x3 respectively. The variables x1,x2,x3 are considered as the independent variables.

We have separated all newly mothers from the NFHS-3data. The dependent variable is used as the mothers who had delivery before the age of eighteen. The dependent variable is regressed it on the socio-economic independent variables. The results are presented in the following table.

Table10 Socio-economic variables related to teenage mothers

Variables	Co-efficient	Std. errors	T test
Region			
Rural	1.46*	0.53	10.41
Urban	-	-	-
Religion			
Hindu	2.44**	0.84	2.61
Muslim	2.71**	0.93	2.91
Other	-	-	-
Caste			
Scheduled caste	1.78*	0.28	3.59
Scheduled tribe	1.90*	0.38	3.25
Other Backward Caste	1.38**	0.22	2.03
Others	-	-	
SLI			
Low standard of living	1.29*	0.041	8.07
High standard of living Index	0.44*	0.02	-15.39
Medium standard of living index	-	-	-
Mothers Education			
Up to secondary school	1.96*	0.06	21.54
Higher secondary school	2.05*	0.15	9.50
Graduate	1.17	0.14	1.31
Illiterate	-	-	-
Husbands' Education			
Up to secondary school	1.23*	0.04	7.06
Higher secondary school	0.80*	0.04	-4.21
Graduate	0.73*	0.05	-4.67
Illiterate	-	-	-
ANC			
Antenatal check up	0.90**	0.034	-2.73
No Ante natal	-	-	-
Family Planning			
Family planning method	1.24*	0.024	11.00
No Family Planning	-	-	-
Place of delivery			
Institutional delivery	1.25*	0.05	6.23
No institutional delivery	-	-	-
Delivery conducted			
Health person	0.80*	0.030	-5.92
No health person	-	-	-
Post partum treatment			

Treatment for pregnancy complication	0.99	0.03	-0.39
Breastfeeding			
Immediate	0.58*	0.022	-13.80
Not breastfeed	-	-	-
Likelihood ratio chi square $^2(21)$ =2441.13 , prob> chi square =0.000 Log likelihood = -20959.546 Pseudo R^2 = 0.0550			

- * Significant at 1 percent ** significant at 5 percent

In table it is shown that the adolescent mothers are positively correlated to the rural area. The result is statistically significant. In rural area most of the families are poor. Due to the lack of reliable income and education families prefer to do the daughters marriage early. In urban area per capita income is higher and other employment opportunities are more. People easily find employment and invest in daughter's education and health. Educational opportunities for adolescent girls are also higher in urban area. They easily delay their marriage or delay the child birth through contraceptive methods. But in rural area, employment opportunities are low. Markets are located far away. In short, rural households do early marriages of daughter therefore adolescent mothers are positively co-related. As far as religion is concerned then the Hindu and Muslim have the equal probability of the teenage mothers. In this category, teenage mothers are compared with other religion.

As far as the scheduled caste and scheduled tribe and other backward caste have the equal chance of teenage mothers. The odds are 1.78, 1.90 and 1.38 respectively. As compare to all caste, other castes are less likely to have the teenage mothers. The maternal healthcare seeking among married adolescent tribal girls is limited. A substantial proportion of girls did not receive any antenatal services nearly all deliveries at home and only a small proportion received a post partum check up (Rani S. et.al 2007). The lower socio backgrounds have the higher teenage mothers. The odd is 1.29 as compare to the medium standard of living index. It is clearer that when we add the standard of living index with teenage mother's fertility, then the chances of adolescent mothers in lower standard of living index increases. The lower standard of living index is correlated to the teenage mothers. Usually the poor households do the early marriages of their daughter due to the paucity of economic resources. Therefore pregnancy occurs at early age in life. Most of the times , the young married adolescent often does not have an independent income to pay for health services and even in an emergency , such as a prolonged or dangerous labor must await a senior female or parents permission to receive life saving care (Bruce J.2003)

The women's education plays an important role for the marriage. In the table, it has observed that the teenage mothers are positively co-related to secondary and high school studied women. The odd ratio is higher as compare to the graduate teenage mothers. In other studies, the teenage motherhood has a strong negative effect on the high school completion rate which is almost twice (Gustafson S. and Seble W. 2007). The graduate teenage mothers have less odd ratio as compared to the secondary studied teenage mothers. Those girls have less education, they usually becomes mothers at early age. Poor parents do their daughters marriage early to reduce future investment. At this point husband's education play an important role. If husbands are secondary school studied then the adolescent fertility is higher. A less educated husband does not understand the actual use of contraceptive methods. At the younger age when marriage gets over, the younger couples do not use the contraceptive methods. They do not understand the benefits of delaying the birth and spacing in child birth. Therefore adolescent fertility is positively related to education of mother and husband.

Antenatal care is negatively co-related to the teenage mothers. The odd is higher for the no antenatal care as compare to the antenatal care. It means teenage mothers do not get the permission and time from the in laws home or money for prenatal care. It is also their lack of understanding about the antenatal care. Antenatal care comprises as physical check ups, medicines that is iron and folic acid tablets, guidance for diet and care. It is done minimum three times for pregnant women. But adolescent mothers do not take seriously or family members do not allow them for prenatal check ups. Some teenage mothers are using the family planning methods but it may be for the spacing among the two children. Once they have child then they use the family planning methods which do not affect much. Most of the teenage mothers are delivering baby at public, private or other type of health care facility. The percentage of home deliveries is lower as compare to the institutional deliveries. Therefore home deliveries are not statistically significant in the logistic regression as compare to institutional deliveries. Non institutional deliveries are not conducted by the health professionals. It is negatively co-related and statically significant. Most of the times, the deliveries are conducted by the nurse or other midwife. If the case is complicated then only it is taken to the hospital and to the doctor. At other times health professional's advice is taken in to consideration. Teenage mother's breastfeeding is negatively co-related to the child. Breastfeeding is related to the physiological capacity of the mother. Among teenage mothers most of the body resources get used for the recovery after

delivery. Therefore they cannot breastfeed immediately after pregnancy. But the mother with higher age group easily breastfeed child after delivery.

Policy Implication and Conclusion:

Research in many countries has confirmed that teenage mothers and their families are often at a disadvantage compared with those whose children are born in their twenties or thirties (Berthoud R. and Karen R. 2001). Teen mothers are twice as likely as older women to die of pregnancy related causes and conditions such as malnutrition and teen mothers children at higher risk of illness and death. Nutritional deficiencies such as anemia are widespread in both young men and women. They increase the risk that girls and young women face during pregnancy and childbirth (Rosen J.E. 2004). In the Uttar Pradesh, the teenage mothers are scattered across the religion, caste and region. There are various socio-economic, demographic factors are related to the teenage mothers. But the major cause of the teenage pregnancy is poverty. Poverty forces parents to do the marriages at early age of daughters. Therefore adolescent fertility takes place in the state. It has long term implication on health of the mother and child. Therefore state government should take action against parents who are doing the early marriage of their daughters. Government should form pressure groups of teachers, political leaders, researchers and social workers etc. to tackle the adolescent marriage in society. Government must continue the educational program for the girl child. While study, they must be given the vocational training and knowledge where adolescent girls will get employment. Newly couples should be given the family planning advice by midwife and nurses. Prenatal care should be made compulsory in the state. It will improve the health of mothers and children. State government should invest more money in roads, hospitals, telecommunication education etc. Such policies will improve the mother child health in the long run in the state. There is urgent need to curb the adolescent fertility in the state because state has highest population growth.

Bibliography

Bajracharya, A. and Sajeda A. (2010) "Poverty, marriage timing and transitions to adulthood in Nepal: A longitudinal analysis using the Nepal living standards survey" Working paper 19, Population council, New York 10017, USA.

Berthoud, R. and Karen Robson (2001) "The outcomes of teenage, motherhood in Europe" Innocenti working paper no. 86, Institute for social and economic research , University of Essex, U.K.

Bruce, J. (2003) "Married adolescent girls: Human rights, health and developmental needs of a neglected majority" Economic and Political Weekly, October 11, 2003, PP 4378-4380.

Greene, William H. (2003): "Econometric Analysis" fifth edition, Pearson Education Private, Ltd, Indian branch, Delhi, India.

Gustafson, S. and Seble W. (2007) "Teenage motherhood and long run outcomes in South Africa" Tinbergen Institute Discussion Paper, University of Amsterdam, Department of economics, Amsterdam, The Netherlands.

Rani, S. Saswata Ghosh, Mona Sharan(2007) "Maternal health care seeking among tribal adolescent girls in Jharkhand" Economic and Political Weekly, December 1, 2007 pp 56-61.

Rosen, James E. (2004) "Adolescent health and development: A resource guide for World Bank operations staff and government counterparts" Health, nutrition and population, discussion paper, The World Bank, Washington D.C. 20433.

Santhya, K.G and S.J.Jegeebhoy (2003) Sexual and reproductive health needs of married adolescent girls" Economic and Political Weekly, October 11, 2003 pp4370-4377.

WHO (2004) "Adolescent pregnancy: Issues in adolescent health and development, WHO library catalogue in publication data, Issues in adolescent health and development, Geneva 27, Switzerland.