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Abstract: There is a substantial amount of literature on family planning and contraceptive use in India. However, only a few documented studies can be found investigating contraceptive use in the period from the resumption of sexual intercourse after birth among women in the EAG States. This research paper, therefore, provides a detailed analysis of determinants associated with time to contraceptive use after resuming sexual intercourse among women in EAG states. National Family Health Survey (NFHS-4) data was used for the study. This study is based on data from the Women's Ouestionnaire which collects information on various aspects. A time-to-event approach was adopted in the analysis based on the Log-Rank Chi-square test and Cox Proportional Hazard regression. As a result, the median time to contraceptive use from resuming sexual intercourse following birth was estimated to be 3 months (range 0-24 months). The characteristics of women that were associated with time to contraceptive use after the resumption of sexual intercourse were residence, wealth status of the household, exposure to media, antenatal care, and postnatal care.

Keywords: Contraception, Postpartum, family planning, Determinants

Introduction

Maternal mortality remains the major public health challenge to the global population. Reports indicated that an estimated 303,000 maternal deaths occurred worldwide and among this, 99% of deaths were from developing countries.(World Health, 2015).Shorter birth intervals less than six months between births and subsequent pregnancy are associated with maternal morbidity and possibly also maternal mortality (Aleni, Mbalinda, and Muhindo, 2020; De Jonge et al., 2014; Winikoff, 1987). A study conducted among developing countries shows that the birth interval shorter than 18 months has the highest risk of mortality for infants and children under five years of age and risk decreases as the birth interval increases up to 36 months. (Rutstein, 2005; World Health, 2007).

World Health Organisation and other International organizations recommend waiting for at least two-three years between pregnancies to reduce infant and child mortality and also to ensure better maternal health (Appareddy, Pryor, and Bailey, 2017; World Health, 2007). Postpartum family planning (PPFP) or postpartum contraception, defined as the initiation of contraceptive methods within the first 12 months following delivery(Bakamjian, Cianci, and Malandrino, 2013), can help women in birth spacing and can provide maternal and child health benefits. A considerable proportion of women especially in developing countries engage in a sexual relationship during their post-partum period without using any contraceptive method

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(Marcolino and Galastro, 2001) and resulting in unwanted pregnancy and a shorter birth interval with an increased risk of infant and child mortality. Most communities worldwide practice abstinence following a birth, yet with varying and/or unpredictable duration. (Barber, 2007; Sule-Odu et al., 2008). A study conducted in Nairobi urban slums revealed that women initiated sexual relations before they resume their menstruation.(Ndugwa, Cleland, Madise, Fotso, and Zulu, 2011). And thus the use of contraception is delayed in many instances. A study conducted on postpartum of women in seventeen developing countries suggests that women in many countries start using contraceptive methods after the return of menstruation.(Borda, Winfrey, and McKaig, 2010). Even if a woman is amenorrhoeic she is at the risk of getting pregnant as ovulation starts before menstruation. This shows that women are at high risk of unwanted pregnancy compared to those women who use contraceptives before the start of menstruation. Considering breastfeeding as an alternative to the use of contraceptive use would not offer every woman protection from unwanted pregnancy as a mother who is fully or nearly fully breastfeeding and remain amenorrhoeic would have less than the 2% chance of pregnancy during the first six months after childbirth.(Kennedy, Rivera, and McNeilly, 1989). Thus it is quite debatable to consider breastfeeding as an alternative to contraceptive use during the postpartum period. The report from the fourth report of the National Family Health Survey (NFHS-4) India states the decreasing of any modern contraceptive method from 56.3% in NFHS-3 to 53.5% in NFHS-4. (Iips, 2017). This shows a low level of contraceptive use which has been attributed, among other factors, to poor awareness of contraceptive methods among women (Kumar et al., 2011), poor health infrastructure, and transportation facilities that hinder access to family planning services(Barber, 2007). The scenario is more worsen with the high level of unmet need of family planning with 12.9% in India according to the fourth report of the National Family Health Survey (Iips, 2017). Thus, the low level of contraceptive intake (any method) is the most important barrier in improving the maternal mortality situation in the future.

Although low uptake of contraceptives is very common in all states in India as the Government of India (GOI) has named eight states based on poor performance in respect of other important demographic and socioeconomic indicators. These states are named Empowered Action Groups (EAG) which consists of Uttarakhand, Uttar Pradesh, Madhya Pradesh, Bihar, Odisha, Jharkhand, Chhattisgarh, and Rajasthan. The contribution of the EAG states to the Indian population is almost 45%.(India. Office of the Registrar, Singh, General, and Chandramouli, 2011). As almost half of the population is contributed by the EAG states therefore to improve the uptake of contraception extra focus should be given to these states. Thus, the low uptake of contraceptive use leads to maternal complications, which are usually characterized by short birth intervals. Therefore, there is no doubt in the fact that family planning needs to be promoted among women for better maternal and new-born health. However, the debatable issue is the timing for the initiation of contraceptive use following birth, for which there is very limited evidence.

The literature on postpartum contraception is quite wide and various studies have been conducted regarding this issue. (Abraha, Teferra and Gelagay, 2017; Coomson and Manu, 2019; Gejo, Anshebo, and Dinsa, 2019; Jalang'o, Thuita, Barasa, and Njoroge, 2017; Pasha et al., 2015; Singh, Verma, and Tanti, 2014). However, these studies lack an understanding of the determinates of time to contraceptive use after the resumption of sexual intercourse following a birth. Keeping in view the importance of timing of contraceptive use following childbirth this study inclined towards investing the factors associated with the timing of contraceptive use after resuming sexual intercourse following a birth.

The timing of contraceptive use following birth and pattern of postpartum contraceptive use was assessed through a series of postpartum behaviours of a woman which includes whether a woman is breastfeeding, postpartum amenorrhea, and abstinence as non-amenorrhea and non- abstinence women possess a high risk of getting pregnant if they do not use contraception in this period. Usually, these events do not follow a sequential pattern, for example, contraceptive use can start any time after the birth before resuming sexual intercourse where a mother starts using contraception immediately after birth whereas contraceptive use can be resumed after the resumption of sexual intercourse resulting in the risk of pregnancy. Like contraceptive use, breastfeeding also plays a very important role in birth spacing. A study conducted on Uttar Pradesh using NFHS-1 data reveals that breastfeeding is significantly associated with extending birth spacing.(R. Singh et al., 2012). While it is a debatable issue whether breastfeeding can be used as an alternative to contraceptive use.

The risk of postpartum pregnancy is influenced by sexual abstinence. In a condition where the duration of abstinence goes beyond postpartum amenorrhea, sexual abstinence provides contraceptive benefits. The factors identified in the study i.e. socioeconomic and demographic characteristic of a woman suggests impacting directly on the use of contraceptive. There is a wide range of literature in India and elsewhere in support of the impact of these factors. The issue to be concerned about is whether the literature is supported among contraceptive users in the period from a resumption of sexual intercourse after birth. Regarding socio-economic factors contraceptive use has been associated with the education level of women (Moursund and Kravdal, 2003; Prusty, 2014), wealth status (A. Singh, Singh, and Verma, 2016), residence (Pandey and Singh, 2015). Women with secondary or higher education are considered as having higher odds of using modern contraceptives use during the postpartum period (Dagnew, Asresie, Fekadu, and Gelaw, 2020). However, it may not be true for all countries because each country varies concerning the characteristics of its individuals and communities. Certainly, individual wealth plays a very significant role in promoting contraceptive use due to the cost associated with its uptake. In research conducted on factors associated with the long-acting and permanent contraceptive method use suggests that the use was higher among richer women as compared to poor women. (Fekadu, Omigbodun, Roberts, and Yalew, 2019).

Material and Methods

The study is based on the data from the fourth National Family Health Survey (NFHS-4) which was carried out from 2015 to 2016. It is a large-scale, multi-round survey and a nationally representative source of data on population, health, and nutrition for India and its states. NFHS-4 covered all 29 states and all six union territories for the first time which provides estimates of the most indicators of the district level for all 640 districts of India. This study is based on data from the Women's Questionnaire which collects information on various aspects. A national representative sample of 699,686 women was obtained from NFHS-4 among which 353480 sample of women was contributed by EAG states. The sample excludes (i) women who are not in marital union; (ii) women with no birth in the last three years preceding the survey; (iii) women who had not resumed sexual intercourse by the time of the survey. Thus our study is focused on the use of contraceptives among women who are married with birth in the past three years preceding the survey and who had resumed sexual intercourse.

The present study assessed time to contraceptive use, estimated in months, by the period from the resumption of sexual intercourse following birth to the time when a woman used any contraception. The duration of the period is recorded in a non-negative integer value between 0 and 24 where zero denotes women who initiated contraceptives either before or the same

time as they resumed sexual intercourse. The timing of contraceptive use was compiled from contraceptive calendar data which gives a month-by-month history of certain key events like Births, pregnancy, termination, and contraceptive use. The calendar collects a complete history of a women's reproduction and contraceptive use for a period of 5 to 7 years prior to the survey. The post-partum contraceptive use was assessed based on the two-year minimum period recommended by WHO before stopping contraceptives to become pregnant. Although some women were not using any contraceptive at the time of the study for such cases a variable was generated having a value zero (0) to represent these women. Otherwise, the women were represented by value one (1). The independent variable considered for the study were: (i) demographic characteristics of women, namely age and marital status, (ii) socioeconomic characteristics, namely education level, wealth status, religion, residence, and working status (iii) child characteristics, namely parity, living children,(iv)Other factors namely, place of delivery, skilled antenatal and postnatal care, partners education, media exposure, and fertility desire.

Result

Table 1 represents the distribution of women by their socioeconomic and demographic characteristics as well as other factors. A total of 14404 women were assessed in the study from all EAG states. Among EAG states Uttar Pradesh contributes the highest percentage of women (28%).For all EAG states most of the women lies in 25-29 age group. Results showed that the highest percentage of women with no education resides in Bihar whereas highest percentage of women (56%) who don't have any kind of access to media followed by Jharkhand (47%) and Uttar Pradesh (42%).Among all EAG states Odisha performed best in antenatal (96%) and post-natal care (86%).The women assessed in the study predominantly belong to rural areas for all EAG states. With regards to institutional delivery Odisha performs best with 86% of delivery are conducted in institution followed by Rajasthan (82%), Madhya Pradesh (81%), Chhattisgarh (69%), Uttar Pradesh and Bihar wilt almost same (67%), Uttarakhand (66%) and Jharkhand (65%).

A total number of 12724 out of 14404 women assessed in this study used any of the contraceptive methods by the date of interview. **Figure 1** shows the distribution of the timing of contraceptive use for women who used any contraceptive method. The figure shows that the women initiated contraceptive in three parts; (i) before the resumption of sexual intercourse, denoted by a negative number (n=2923); (ii)at the resumption of sexual intercourse, denoted by time zero(n=1564);(iii)after the resumption of sexual intercourse, represented by positive time (n=8237).

Table 2 represents a life table showing the timing of the contraceptive use after the resumption of sexual intercourse following the birth of the most recent child. The number of women using contraceptives before or during the resumption of sexual intercourse (n=4487) denotes a proportion of 31.1%. Subsequently, the proportion of women using contraceptive during the first (n=6026), second (n=7043) and third month (n=7802) after resuming sexual intercourse following a birth are 41.8%,48.89%,54.1% respectively. Thus this shows an upward trend in the proportion of women using contraceptive use from resuming sexual intercourse following a birth. The median time to contraceptive use from resuming sexual intercourse following birth was estimated to be 3 months (range 0-24 months).

Characteristics	Bil	nar	Chhatt	isgarh	Jhark	chand	Mad Prac	lhya lesh	Odi	sha	Rajas	sthan	Ut Prac	tar lesh	Uttar	akhand	Total n of wo	umber man
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Age																		
15-19	1	0.1	2	0.2	2	0.2	1	0.0	14	0.7	1	0.1	0	0.0	0	0.0	21	0.2
20-24	82	7.5	120	10.6	134	14.6	319	12.9	307	16.1	292	13.5	340	8.4	54	7.8	1648	11.4
25-29	394	36.2	521	46.1	386	42.2	1112	45.1	743	39.0	931	43.0	1503	37.2	322	46.7	5912	41.0
30-34	383	35.2	318	28.1	261	28.5	709	28.8	534	28.0	612	28.3	1277	31.6	216	31.3	4310	29.9
>35	229	21.0	170	15.0	132	14.4	324	13.1	309	16.2	328	15.2	923	22.8	98	14.2	2513	17.5
Education																		
No education	590	54.2	271	24.0	346	37.8	898	36.4	556	29.2	902	41.7	1665	41.2	120	17.4	5348	37.1
Primary	130	11.9	225	19.9	119	13.0	531	21.5	261	13.7	353	16.3	530	13.1	88	12.8	2237	15.5
Secondary	308	28.3	508	44.9	371	40.6	847	34.4	963	50.5	666	30.8	1315	32.5	334	48.4	5312	36.9
Higher	61	5.6	127	11.2	79	8.6	189	7.7	127	6.7	243	11.2	533	13.2	148	21.5	1507	10.5
Residence																		
Rural	913	83.8	766	67.7	660	72.1	1780	72.2	1536	80.6	1532	70.8	2820	69.8	471	68.3	10478	72.7
Urban	176	16.2	365	32.3	255	27.9	685	27.8	371	19.5	632	29.2	1223	30.3	219	31.7	3926	27.3
Wealth Status																		
Poor	778	71.4	592	52.3	574	62.7	1307	53.0	1157	60.7	839	38.8	1877	46.4	163	23.6	7287	50.6
Middle	152	14.0	187	16.5	149	16.3	404	16.4	374	19.6	416	19.2	692	17.1	172	24.9	2546	17.7
Rich	159	14.6	352	31.1	192	21.0	754	30.6	376	19.7	909	42.0	1474	36.5	355	51.5	4571	31.7
Parity																		
0-2	284	26.1	630	55.7	434	47.4	1263	51.2	1315	69.0	1123	51.9	1617	40.0	419	60.7	7085	49.2
>3	805	73.9	501	44.3	481	52.6	1202	48.8	592	31.0	1041	48.1	2426	60.0	271	39.3	7319	50.8
Fertility desire																		
No	1032	94.8	947	83.7	792	86.6	2183	88.6	1313	68.9	1817	84.0	3349	82.8	559	81.0	11992	83.3
Yes	51	4.7	169	14.9	118	12.9	246	10.0	523	27.4	312	14.4	630	15.6	113	16.4	2162	15.0
Undecided	6	0.6	15	1.3	5	0.6	36	1.5	71	3.7	35	1.6	64	1.6	18	2.6	250	1.7
Exposure to																		
media																		
No	608	55.8	304	26.9	432	47.2	873	35.4	613	32.1	767	35.4	1706	42.2	143	20.7	5446	37.8
Yes	481	44.2	827	73.1	483	52.8	1592	64.6	1294	67.9	1397	64.6	2337	57.8	547	79.3	8958	62.2
Institutional																		
delivery																		
No	355	32.6	351	31.0	317	34.6	473	19.2	268	14.1	387	17.9	1304	32.3	232	33.6	3687	25.6
Yes	734	67.4	780	69.0	598	65.4	1992	80.8	1639	86.0	1777	82.1	2739	67.8	458	66.4	10717	74.4
Antenatal care																		
No	434	39.9	47	4.2	159	17.4	493	20.0	72	3.8	265	12.3	807	20.0	157	22.8	2434	16.9
Yes	655	60.2	1084	95.8	756	82.6	1972	80.0	1835	96.2	1899	87.8	3236	80.0	533	77.3	11970	83.1
Post-natal care																		
No	484	44.4	269	23.8	371	40.6	895	36.3	270	14.2	703	32.5	1281	31.7	272	39.4	4545	31.6
Yes	605	55.6	862	76.2	544	59.5	1570	63.7	1637	85.8	1461	67.5	2762	68.3	418	60.6	9859	68.5
Total	1089	8.0	1131	8.0	915	6.0	2465	17.0	1907	13.0	2164	15.0	4043	28.0	690	5.0	14404	100.0

Table 1: Distribution b	women's characteristics in the EAG	States, NFHS-4 (2015-16)
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Figure 1: Distribution by time to contraception based on a resumption of sexual intercourse in the EAG States, NFHS-4 (2015-16)



Time(months)	Total women	Contraception use	Censored	Survival	Standard error
0	14404	4487	304	1	0
1	9613	1539	403	0.6852	0.00389
2	7671	1017	182	0.5731	0.00417
3	6472	759	123	0.4962	0.00425
4	5590	663	105	0.4375	0.00425
5	4822	485	92	0.3851	0.0042
6	4245	438	70	0.346	0.00413
7	3737	367	50	0.31	0.00404
8	3320	323	60	0.2793	0.00395
9	2937	320	30	0.2519	0.00384
10	2587	289	45	0.2243	0.00372
11	2253	297	50	0.1991	0.00359
12	1906	257	38	0.1725	0.00342
13	1611	183	20	0.149	0.00325
14	1408	168	12	0.132	0.00312
15	1228	124	12	0.1162	0.00297
16	1092	143	8	0.1044	0.00285
17	941	141	12	0.0907	0.0027
18	788	129	8	0.077	0.00253
19	651	106	7	0.0643	0.00234
20	538	99	5	0.0538	0.00217
21	434	105	6	0.0438	0.00199
22	323	95	12	0.0332	0.00176
23	216	97	14	0.0232	0.0015
24	105	93	12	0.0124	0.00113

Table 2. Life table of the timing of contraceptive use after the resumption of sexual intercourse following the birth of a most recent child in the EAG States, NFHS-4 (2015-16)

Notes: Zero (0) denotes those women who had initiated contraceptive use before or at the time of resumption of sexual intercourse

Table 3: Differentials in time to contraceptive use in the EAG States, NFHS-4 (2015-16)

Log-rank Chi-Square test					
Independent variable	Chi-square	p-value			
Age	25.0273	<.0001			
Education	36.7107	<.0001			
Residence	43.5658	<.0001			
Wealth Status	81.4107	<.0001			
Parity	0.6557	0.4181			
Fertility desire	0.9655	0.6171			
Exposure to media	58.5101	<.0001			
Institutional delivery	7.5405	0.006			
Antenatal care	38.406	<.0001			
Post-natal care	35.9599	<.0001			

Table 3 shows differentials in contraceptive use which were assessed using the logrank chi-square test. The null hypothesis for a log-rank test is that the independent variable (e.g. age, education) did not change the survival curve of the dependent variable (time to contraceptive use) and the alternative hypothesis states that the independent variable (e.g. age, education) changes the survival curve of the dependent variable (time to contraceptive use). As it is cleared from the table that parity, fertility desire, and Institutional delivery have a pvalue greater than 0.05 so we accept the null hypothesis and conclude that these three

characteristics don't have a significant association with the timing of the contraceptive use hence, they will be dropped from further analysis.

Cox regression analysis of time to contraceptive use by characteristics of women

Table 4 represents the result of unadjusted and adjusted hazards for the odds of contraceptive use by selected socio and demographic characteristics, as well as enabling factors. The unadjusted hazard ratios denote analysis on each of the independent variables separately by the timing of contraceptive use. The results provide insights into the changes when only a single independent variable was taken into the model and when all the variables are controlled for.

Characteristics	Hazard Ratio				
Characteristics	Unadjusted(P-value)	Adjusted(P-value)			
Age					
15-19	Ref*	Ref*			
20-24	1.307(0.3197)	1.24(0.4249)			
25-29	1.398(0.2104)	1.33(0.2861)			
30-34	1.478(0.1443)	1.42(0.1939)			
>35	1.516(0.1205)	1.51(0.1282)			
Education					
No education	Ref*	Ref*			
Primary	1.041(0.1812)	1.01(0.6568)			
Secondary	1.052(0.0304)	0.98(0.4264)			
Higher	1.222(<.0001)	1.04(0.3852)			
Residence					
Urban	Ref*	Ref*			
Rural	0.869(<.0001)	0.96(0.1609)			
Wealth Status					
Poor	Ref*	Ref*			
Middle	1.059(0.0392)	1.02(0.3603)			
Rich	1.212(<.0001)	1.11(0.0003)**			
Exposure to media					
No	Ref*	Ref*			
Yes	1.158(<.0001)	1.09(0.0005)**			
Antenatal care					
No	Ref*	Ref*			
Yes	1.162(<.0001)	1.09(0.0012)**			
Post-natal care					
No	Ref*	Ref*			
Yes	1.127(<.0001)	1.08(0.0012)**			
	1.127(<.0001)	1.00(0.0012)			

 Table 4: Regression analysis of time to contraceptive use after the resumption of sexual intercourse in the EAG States, NFHS-4 (2015-16)

Note: Ref* represents reference category; ** Significant value (p<0.05)

Summary of the Result

After adjusting for all the variables adopted in the study, the characteristics of women that were associated with time to contraceptive use after the resumption of sexual intercourse were residence, wealth status of the household, exposure to media, antenatal care, and postnatal care (p < 0.05). The odd of contraceptive use were about 11% (HR=1.11) higher for the women in the rich household wealth status as compared to women with poor household wealth status. This implies that women with rich household status have a shorter time duration to adopt

contraception compared to those women with poor household wealth status. Regarding exposure to media, the odds of contraceptive use among women having exposure to media was about 9%(HR=1.09) higher as compared to women having no exposure to media. This implies that women with exposure to media had a shorter time duration to adopt contraception as compared to women with no exposure to media. Women who received antenatal care had 9%(HR=1.09) higher odds of contraceptive use as compared to women who did not receive antenatal care and the odds of contraceptive use was 8%(HR=1.08) higher among women who had received postnatal care compared to women who did not receive post-natal care. This implies that women who received post-natal and antenatal care had a shorter time duration to contraceptive use as compared to women who did not receive post-natal care. No significant impact on odds of contraceptive use was seen in the results by the rest of the factors, namely age, education, residence (p>0.05).

Discussion

This study analyzed data from NFHS-4 using contraceptive calendar data which gives a month-by-month history of certain key events like Births, pregnancy, termination, and contraceptive use to investigate the timing of contraceptive use after the resumption of sexual intercourse following a birth. The finding shows a low level of contraceptive use before or during the resumption of sexual intercourse. The results reveal a delay in the initiation of contraceptive use after resuming sexual intercourse following birth which results in a high risk of unwanted or unplanned pregnancy among women in EAG states.

The significant predictors of the time to contraceptive use after the resumption of sexual intercourse following birth are identified as household wealth status, exposure to media, antenatal and postnatal care. Regarding household wealth, the study reveals a shorter time duration to use contraception among women with rich household wealth status compared to poor household wealth status. The finding supports the study that shows a higher level of postpartum contraceptive use among women with rich household wealth status. (Dagnew et al., 2020). Inequality in individuals' wealth status can influence their socio-economic status including access to health care. Further, the studies reveal that several other costs associated with health services could affect the use of contraceptives even fees on the contraception are non-existent. It is also evidenced from our study the only 1% of women belonging to poor wealth status have higher education status. This finding may have a lot of socioeconomic and health implications on the life of a woman belonging to poor wealth status. Our findings also reveal that the women who had received antenatal and postnatal care had a shorter time duration to contraceptive use which is supported by the recent study conducted on family planning advice and contraceptive use that shows the use of maternal health services (antenatal care, postnatal care, institutional delivery) encourages the subsequent use of contraceptive.(Yadav and Dhillon, 2015). Thus strengthening the maternal health care services before and after delivery will certainly make a positive impact towards earlier usage of contraceptives after resuming sexual intercourse following recent birts.

Conclusion

In conclusion, our findings suggest that there is a need to pay more attention to family planning programs for postpartum contraception. However the findings in the study should be interpreted in light of the following limitations, based mainly on the fact that the study used cross-sectional data:(i)The calendar data provides occurrence of an event in a particular month. However, the event may occur at any date in a month. For example, if a woman has resumed

sexual intercourse in January and she had started using contraceptives in July, the time to contraceptive use after the resumption of sexual intercourse is 6 months, however, she may have resumed sexual intercourse on 31st of January and she had started contraception on 1st July in which case the time to contraceptive use after the resumption of sexual intercourse would be 5 months. (ii)The accuracy of the information provided by the women would be overly compromised by recall bias as it is difficult to recall over five years. (iii)the analysis also doesn't account for time-varying exposures such as education and wealth status of the household. Further, the study was also limited to women's most recent birth in the three years preceding the survey.

Policy Implications

As our results show that women who had received antenatal and post-natal services had a shorter time to use contraception after resuming sexual activity thus strengthening of maternal health care services before and after delivery will make a positive impact.Poor wealth index was also found to be a onstacele in early use of contraceptive after resuming sexual activity after a recent birth thus low cost contraceptive can help in reducing time of using contraceptive after resuming sexual activity after a recent birth.Exposure to media helps women to gain knowledge about the advantages of using contraceptive and also various types of contraceptive methods so exposure to media can help in reducing time of contraception.

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