

Effect of conditional cash transfer schemes on registration of the birth of a female child in India

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Abstract

Girls have traditionally been neglected in India. The neglect is reflected in adverse sex ratio of 914 girls per 1000 boys as reported in 2011 census. The declining sex ratio can be prevented by the registration of female children and by ensuring their progress and safety. The study aims at finding the effect of the introduction of a conditional cash transfer scheme ('Majoni' scheme) upon the registration of a female child. It was a hospital record-based study where the preferential treatment of female children during registration into the birth register before and after the introduction of the Majoni scheme was measured. An effect of the scheme on the registration of male and female children was also compared. The introduction of this scheme increased the female to male ratio of applications for the registration of births from 1.06 to 1.34 and also increased the number of formal requests for the registration of the birth of a female child from 24.45% to 39.05%. Financial incentives or securities have been shown to modify human behavior. The increase in the numbers of applications for the registration of a female child, after the introduction of the 'Majoni' scheme was due to the financial incentive attached with the registration. The increasing trend in the number of applications with every passing month was probably due to the increase in awareness regarding the benefit of the scheme. Conditional cash transfer schemes, such as Majoni, can have a significant effect on increasing the registration of female children. Further study is required to evaluate the effect of the factors other than the financial incentive upon the registration of female children.

Keywords: Conditional cash transfer, Majoni scheme, Birth registration, Female children, India.

Introduction

South Asia is the only region in the world where there is an altered sex ratio in comparison to the global standard.¹ The cultural preferences for sons in many South Asian countries, and the increasing use of sex selection during pregnancy are the major causes for this alteration.¹ The sex ratio, defined as the number of females per thousand males, is an important and useful indicator to assess the relative excess or deficit of men or women in a given population at that point of time.² Sex differentials can be caused by a difference in mortality rate, migration, sex ratios at birth, and the undercounting of women at the time of population enumeration.³ Hospital records are crucial for estimating the influence of female feticide on the sex ratio, as it is not affected by factors like infanticide and neglect of female children.⁴

The child sex ratio in India has declined to 914 girls per 1000 boys in 2011.⁵ In order to improve the status of women in society, increase their chances of survival, and to reverse the distorted sex ratio, both the national and state governments in India have launched special financial incentive schemes for girls and women (also called as 'conditional cash transfer schemes' or CCTs). Dhanlakhmi scheme, Janani Suraksha Yojana, and Balika Samridhi yojana, are some of them.⁶ One such scheme, known as 'Majoni', was introduced in the state of Assam (India)

Practice Points

- South Asia is the only region in the world where there is an altered sex ratio in comparison to the global standard.
- Girls have traditionally been neglected in India which may be due to the payment of dowry during their marriage, or due to financial non-contribution to their family of origin after marriage.
- The 'Majoni' scheme, a conditional cash transfer scheme, has increased the awareness of the parents and guardians towards the registration of their female children.
- Conditional cash transfer schemes create incentives for households to adjust their behavior towards the protection of female children.
- Culturally relevant schemes and other strategies should be taken to improve the quality of life of girls and women in India.

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on 1st February 2009 with the aim of improving the child sex ratio.^{7,8} Under this scheme all girls born after this date were to get fixed deposit of Rs 5000/ into an account of the Apex Bank.⁷ Fixed deposits were tied to conditions of institutional delivery of the female child, the compulsory registration of the child, the adherence to the two child norm by the family, the prevention of marriage of the female child before her eighteenth birthday, giving the female child a right to en-cash the fixed deposit on her eighteenth birthday, and disallowing hypothecation of the fixed deposit till that period.⁷

Girls have traditionally been neglected in India.⁹ The analysis of 10 years of delivery records of one hospital from 1980 onwards showed that there were 44 million women missing in India.⁴ About 1.12 million fetuses were also found to be terminated each year due to the fetus being female.¹⁰ The preferential bias for males in the society¹¹ creates a negative view of women resulting in the neglect of girls and women, the early death of female children^{12,13}, antenatal sex determination, infanticide,¹¹ and female foeticide.^{14,15}

The findings of the census of India highlights that the sex ratio has declined gradually over the century in India, with an abrupt fall being observed after 1980, coinciding with the availability of ultrasound examinations for antenatal sex determination. As the sex ratio of children delivered in hospitals is not influenced by infanticide, the decline in sex ratio at birth was due to an increase in the feticide of female fetuses deliberately⁴ and after birth due to the deliberate neglect of female children.¹⁶

Registration of birth forms the first line of attack to prevent the mortality of infants as it gives them their identity¹⁷ – about 25% of children born in India don't have an identity.¹⁸ The Registrar General of India's (RGI) data shows that the birth of 6.6 million children in India, and 27% of the births in the state of Assam went unregistered in 2007.¹⁸ The Article 7 of the UN Convention on the Rights of the Child states: 'The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and as far as possible the right to know and be cared for by his or her parents'.¹⁹

Conditional cash transfer programs (CCT) gives money to poor people in return for fulfilling specific behavioral conditions.²⁰ Financial incentives have long been used in the health sectors of low and middle income countries with the aim of achieving pre-specified performance targets related to health. A 25% decrease in the prevalence of anemia among primary school children in China and an improvement of anthropometric indicators of malnutrition by 6% in children of urban slums in India due to performance incentives paid to school principals and day care workers respectively, are some of the examples of achieving the specified targets.²¹

A common alternative to achieving pre-specified performance targets is to reward the use of health services

and inputs, particularly those that are relatively sensitive to provider effort. Pay-for-performance incentives to health care providers in Rwanda have been able to increase institutional delivery rates by 23% and preventive service use among children under the age of 4 years by 25-50%.²¹ It also led to a 15% increase in the rate of HIV testing and counseling among couples, and an 18% increase in the probability that both partners in HIV discordant households had been tested for HIV at least once.²¹

Payments, as conditional cash transfers, are made for using prevention services and achieving educational targets, and are believed to improve health outcomes.²² Financial incentives attached to the Majoni scheme were aimed at ensuring the birth registration of female children and thereby increase their chances of survival. The present study attempts to assess the effect of financial incentives on the application pattern for the certificate of registration of birth of a female child in the State of Assam, India.

Materials and methods

The study was conducted in a tertiary care health centre situated in the eastern part of India (State of Assam), where about 6000 to 7000 births take place per year in the Obstetrics and Gynaecology Department. These children are registered and the Medical Record Department (MRD) of the centre maintains the records of the date of birth, sex of the newborn, names of the parents, date of receipt of the formal request for the certificate of registration of birth, and date certificates were given. Although all children born in the centre are registered, a certificate of registration of birth is awarded to the parents of the child only after receiving a formal request from them.

The data was obtained through a hospital record-based cross-sectional study over a period of 2 years (February 2008 -January 2010). Records were assessed by the investigators from Medical Record Department. A formal permission from the Hospital Superintendent for the collection of the data was taken. To maintain confidentiality, no data pertaining to the identity of the patients (such as name and address) were recorded.

The demographic records of infants, along with records of applications requesting a certificate for children born both before and after the implementation of the 'Majoni' scheme were collected. Records of only those children whose applications were received within one month of the birth of the child (legal time limit - 21 days) were analysed.

The female to male (F/M) ratio of applications for the certificate and the trend of applications for the certificate of registration of girls were compared for children born before and after the implementation of the 'Majoni' scheme. Student's 't' test using SPSS Version 21 was done to test the significance of the difference.

Results

A total of 6345 children were born during the period of Feb 2008 to Jan 2009 and 6823 children were born between Feb 2009 and Jan 2010 (Table 1). There was no significant difference between numbers of girls and boys born before and after the implementation of the scheme; 911 and 924 females per 1000 boys born before and after the implementation of scheme respectively.

The implementation of the 'Majoni' scheme increased the average female to male ratio (F/M) of applications for the registration of births from 1.06 to 1.34 (Table 1) (Fig 1) and also increased the number of formal requests made for a certificate of registration of birth for a female child from 24.45% to 39.05% (Table 1) (Fig 2). The increase in the number of applications made for female children after implementation was significantly more ($p < 0.000$).

Discussion

The average national sex ratio at birth (SRB) in humans is slightly male biased (105 males per 100 females),²³ and this was also observed in the present case where there were found to be 109.6 and 108.1 male births per 100 female births during the first and the second years of the study period, respectively. The sex ratios in the pre and post implementation years were comparable

denoting that the sex ratio was independent of any financial incentives and that the difference in numbers of the registration at birth of female children was not due to any change of the sex ratio at birth.

Girls, in many parts of India, have traditionally been seen as an economic liability due to the payment of dowry during their marriage, or due to financial non-contribution to their family of origin after marriage.²⁴ A Tamil proverb says: 'Having a daughter is like watering a flower in the neighbour's garden'.¹¹ There has been a deliberate neglect of girls, sometimes leading to their early death.^{12,13} The financial burden has been a strong factor for the needs of children.²⁵ A reduction of the financial burden on the family of a female child can reduce this deliberate neglect. Changing the status of women from being an economic liability to an asset can bring around a change in this situation.²⁶

Financial incentives or securities have been shown to modify human behaviour in various situations. Conditional cash transfer programmes (CCT) give money to poor people in return for fulfilling specific behavioural conditions.²⁰ Conditional cash transfers were first started in the Latin American countries of Mexico, Brazil, Colombia, Honduras, and Nicaragua.²⁰ CCTs were also implemented or were discussed in other middle and low income countries, such as Bangladesh, Kenya,

Table 1: Applications for issue of certificate of birth registration before and after implementation of the Majoni scheme

Month/year	Total Male children	Application received for male children	Application received for male children (%)	Total female children	Application received for female children	Applications received for female children (%)	F/M ratio
Feb 08	235	62	26.38	241	58	24.06	0.912
Mar 08	292	61	20.89	233	58	24.89	1.19
Apr 08	214	53	24.76	209	50	23.92	0.96
May 08	227	50	22.02	188	38	20.21	0.91
June 08	218	47	21.55	208	45	21.63	1
July 08	277	60	21.66	241	64	26.55	1.22
Aug 08	335	91	27.16	297	74	24.91	0.91
Sept 08	299	60	20.06	300	61	20.33	1.01
Oct 08	314	76	24.2	292	89	30.47	1.25
Nov 08	283	50	17.66	236	50	21.18	1.19
Dec 08	292	64	21.91	285	88	30.87	1.4
Jan 09	333	94	28.22	296	72	24.32	0.86
					Average	24.45	1.06
<i>Majoni Scheme implemented</i>							
Feb 09	266	64	24.06	267	73	27.34	1.13
Mar 09	321	79	24.61	307	102	33.22	1.34
Apr 09	286	85	29.72	227	74	32.59	1.09
May 09	259	89	34.36	232	100	43.1	1.25
June 09	231	80	34.63	202	87	43.06	1.24
July 09	299	80	26.75	266	117	43.98	1.64
Aug 09	304	86	28.28	272	109	40.07	1.41
Sept 09	339	74	21.82	326	125	38.34	1.75
Oct 09	327	92	28.13	326	136	41.71	1.48
Nov 09	277	87	31.4	287	116	40.41	1.28
Dec 09	321	117	36.44	274	116	42.33	1.16
Jan 10	315	100	31.74	292	124	42.46	1.33
					Average	39.05	1.34

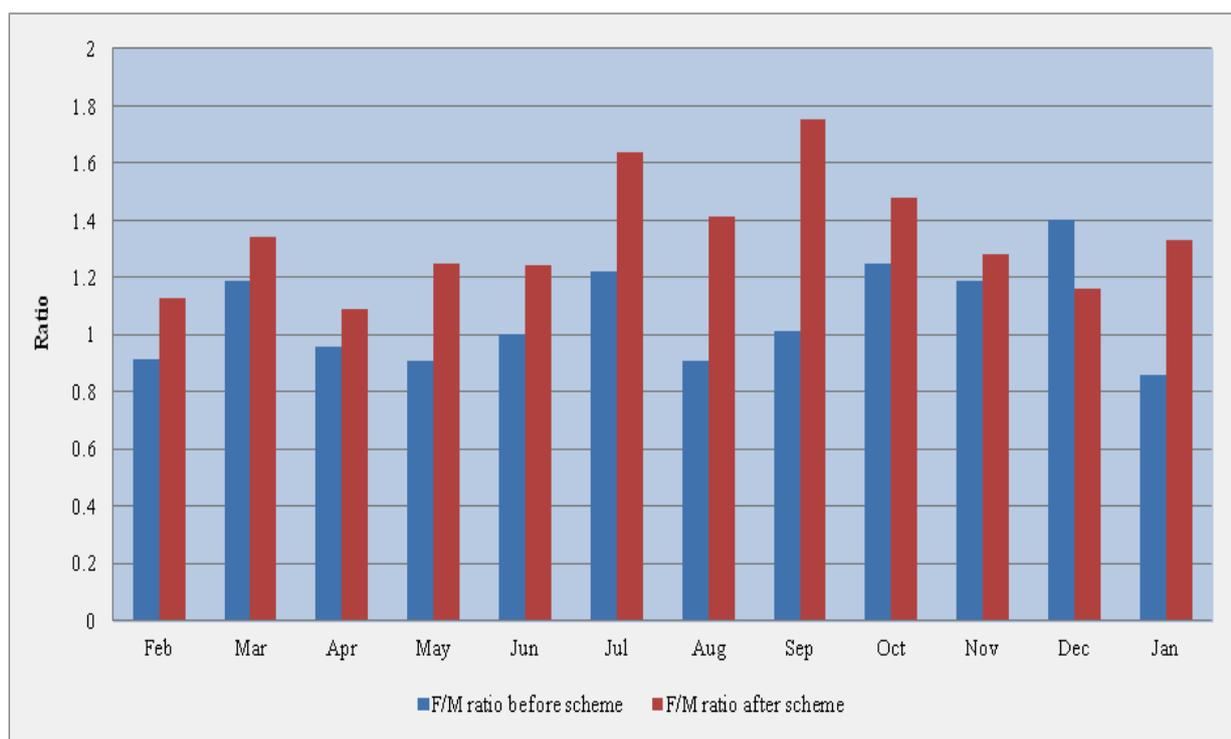


Figure 1: Female to male ratio of applications before and after implementation of Majoni scheme

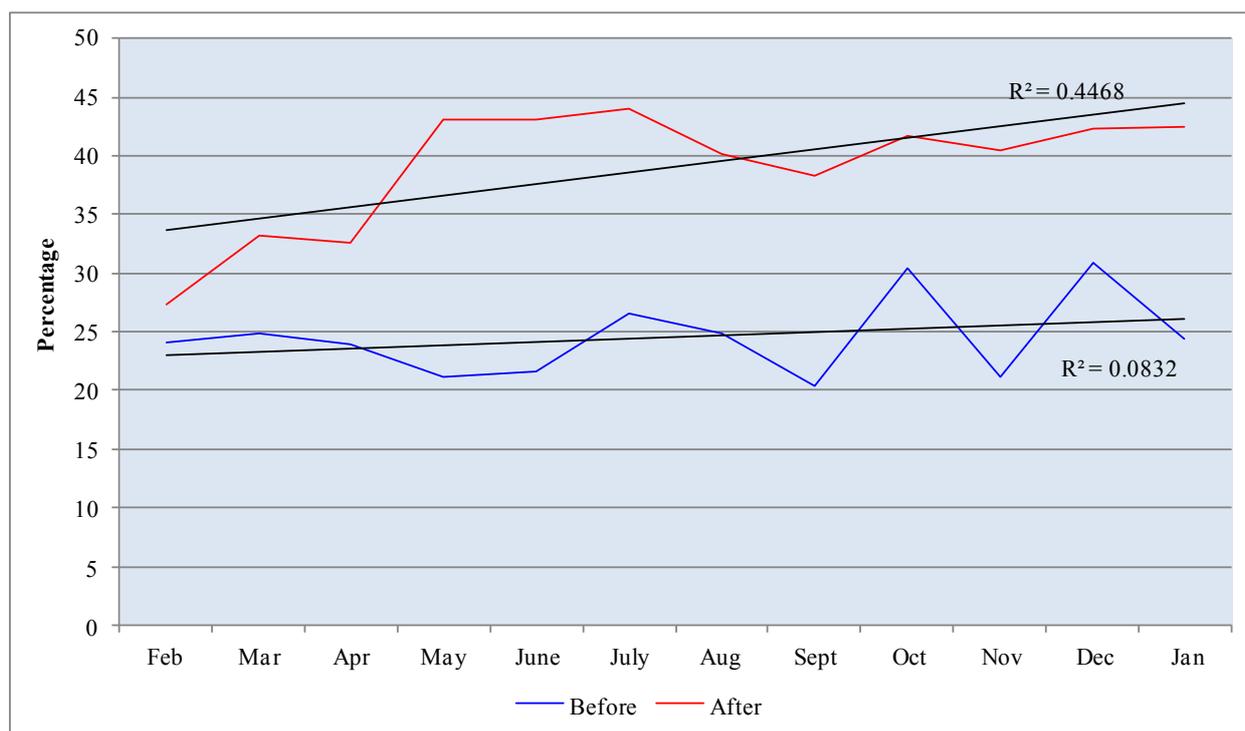


Figure 2: Trends of applications received for female children before and after implementation of the Majoni scheme

Cambodia, Turkey, South Africa, Indonesia and Côte d'Ivoire.²⁰ Evaluation results from the first generation of CCTs from Columbia, Mexico, and Nicaragua have shown that CCTs were successful in increasing school enrolment rates, improving preventive health care, and raising household food consumption.²⁷ In India, schemes with CCTs, such as the Janani Suraksha Yojana, have successfully achieved their aims of increasing institutional delivery.²⁸ The Majoni scheme was a

conditional cash incentive scheme providing financial incentive-based social security, ensuring the registration of female children, periodic check-ups for their progress and safety, and the prevention of early marriage.⁷ The present study shows that the provision of financial incentives for the registration of a female child under the Majoni Scheme has increased the preferential treatment of female children. This preferential treatment is indicated by an increase in the numbers of formal requests

by parents to get a certificate of registration of birth of a female child and by the significant improvement in female to male ratio of applications.

Raising awareness about health programmes increases the acceptability of the programme among the population.²⁹ An increasing trend in the percentage of applications with every passing month was probably due to an increase in awareness of the benefits of the scheme (Fig 2).

The study period included only the first year of the implementation of the scheme. Even though the time frame of the study is too short to comment on the success of the 'Majoni' scheme, the scheme has shown a positive effect on the registration of births of the female children. The evidence reveals that conditional cash transfer schemes can help in improving the numbers of female births that are registered in India.

The study has also a number of limitations. The study was limited to the year prior to implementation and the year just after the implementation of the scheme. The duration of the study is too short to comment on the long term benefits of the scheme. Other factors associated with the registration of female children were not studied.

Conclusion

The present study shows that the introduction of a conditional cash transfer scheme (the 'Majoni' scheme) increased the numbers of formal applications for the registration of female children. Such a scheme can prevent the alteration of the child sex ratio and can improve the health status of female children. Further study needs to be carried out to review the long term impact of the programme and its benefits to female children. Culturally relevant schemes and other strategies should be taken to improve the quality of life of girls and women in India.

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