pISSN 2394-6032 | eISSN 2394-6040

# **Research Article**

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20160941

# Coverage of birth registration in municipal corporation area of Ahmedabad, India

Kamlesh G. Jain<sup>1</sup>\*, Haresh R. Chandwani<sup>1</sup>, Bala D. V.<sup>2</sup>, Kartik N. Trivedi<sup>3</sup>

**Received:** 19 February 2016 **Revised:** 22 February 2016 **Accepted:** 15 March 2016

# \*Correspondence:

Dr. Kamlesh G Jain

Email: medico\_22981@yahoo.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# **ABSTRACT**

**Background:** It is a recognized child right to acquire a name and a nationality, and birth registration may be necessary to allow access to services. Birth registration is not only a matter of human rights but it also serves as an important instrument for planning about health, education and overall development. This study examines level of registration of birth in the Municipal Corporation area of Ahmedabad and to study the perception of people about birth registration system.

Methods: Observational descriptive study was carried out in urban area of Ahmedabad Municipal Corporation which consists of six zones. One ward from each zone was chosen randomly for the study. The sample size was determined as per the total births registered in that particular year, which came out to be 940. The required sample size was stratified according to different zones depending on the births occurring in that particular zone. To know the perception of people about birth registration, house to house visit was carried out in the defined area. Only those parents whose children were ≤3 years were interviewed. Data collected was analyzed using Epi-Info software.

**Results:** Out of 940 children, 889 (94.57%) were registered and mean age of child was 1.906±092 years. Number of registrations increased with the educational status of the parents and birth order. Only 838 (94.3%) had applied for the registration of their child within stipulated time (<21 days) and mean time for getting the certificate was 1.46 days. The main reason for the delay was absenteeism of staff. The main source of information was hospital. The main use of registration was stated as admission in schools and colleges by 746 (83.9%).

**Conclusions:** The present study showed high levels of birth registration which were related to the awareness among the urban population regarding birth registration. Therefore, the efforts should be continued to make the community aware and sensitize regarding the importance and usefulness of birth certificate.

Keywords: Birth registration, Identity, Stipulated time

# **INTRODUCTION**

Civil registration was introduced in India in the last century, mainly as an aid to public health administration. However, registration was kept voluntary and different provinces had different legislation with no standardization of concepts, definitions and classifications.<sup>1</sup> Various commissions and committees were then set up to review the civil registration-based vital statistics system. These led to a uniform piece of legislation, the registration of births and deaths (RBD) Act, 1969, which replaced the diverse laws that existed on the subject and the model rules framed under this act sought to overcome the problem of multiplicity of acts

<sup>&</sup>lt;sup>1</sup>Department of Community Medicine, GCS Medical College, Ahmedabad, India

<sup>&</sup>lt;sup>2</sup>Department of Community Medicine, NHL Municipal Medical College, Ahmedabad, India

<sup>&</sup>lt;sup>3</sup>Department of Community Medicine, Adani Institute of Medical Sciences, Bhuj, India

and rules. The Registration of Births and Deaths Act provides for compulsory registration of all births and deaths in the country. The Act provides for a Chief Registrar at the state level, District Registrars at the district level and Registrars at local levels to discharge the work of vital registration.<sup>2</sup>

Vital registration system has a number of social, political, and economic benefits. Birth registration is considered as the first step in providing an identity to the child both as an individual and as a member of the society. It is supposed that the birth register is the first legal document in which the name of the child gets entered along with other information including the parent's details.<sup>3</sup> A primary function of civil registration system is to create and maintain legal documents proving an identity of the children. The deprivation from the birth registration leads to the exclusion of the children from the other basic rights notably enjoying the benefits of social resources.

A birth certificate is needed to obtain passport, marriage or driver's license, to apply for and secure formal employment and to inherit property; to obtain family allowances, ration card, insurance and pension, to identify age which is the gateway to democratic participation in civil society, enabling a person not only to vote in electoral processes, but to contest for public office, education, housing, water and sanitation, employment, agricultural and industrial production and many others. It helps in understanding the progress of different socio-economic groups, including the maternal and child health care programs.<sup>4,5</sup>

No doubt, India's registration system provides a good basis for the consistency related to concepts, definitions, classifications and tabulations for the coverage of vital statistics, but the situation is unfortunately different (NSSO, 2001). The progress of civil registration system in India has been very low. As per the report of the National Family Health Survey-III (2005-06), more than 59% children born every year are not registered.<sup>7</sup> The level of registration varies substantially across the states. In all states, birth registration is comparatively very low in rural areas as compared to urban areas. According to the report, only 41% of children less than five years of age are found registered with civil authorities in spite of the fact that India's National Population Policy 2000 has set the goal of achieving universal birth registration by the year 2010<sup>7</sup>. Despite various steps introduced to increase the coverage of birth registration, its volume is very low in the country.

The main reasons for not picking up momentum of vital registration in India are; it not being perceived as a fundamental right, its importance not seen by society at large, lack of political will, insufficient and poorly trained personnel, lack of awareness of the need of birth and death registration among the public and the district officials, insufficient monitoring by the chief registrar of births and gender discrimination, etc.<sup>8</sup>

To meet the challenges providing accurate and update data on birth there is no escape but system of registration of birth and death has to function efficiently. Good statistical system should meet the information need for their users in an efficient, credible and objective manner. In order to bridge this data gap and try to estimate population every year, the Registration of Birth and Death Act, 1969 is available. Under this act every event of birth, death, and stillbirth is required to be registered.

There is a long way to go to achieve completeness of birth registration in Gujarat, as is the case elsewhere in India. Complete, timely and accurate registration of birth events is crucial for understanding population dynamics and planning effective development programs. Each year 50 million new born children are not registered. <sup>11</sup> As per report of working group on birth 2005 national level approximate 63% of birth was registered. <sup>12</sup> Most people in Africa and Asia and in other region are born and die without leaving a trace in any legal record or official statistics and without attaining the UN proclaimed right to recorded name and nationality.

Goal of country is to achieve 100% registrations of birth<sup>10</sup> to fulfill that goal; the requirement is fully prepared system by means of allocation of resources, sensitization of worker and people about the registration. Therefore, knowing the current situation is the first step of any improvement in the situation. Looking at all above factors, the present study "coverage of birth registration in municipal corporation area of Ahmedabad, India" was selected.

The objectives of this study were to study the level of registration of birth in the Municipal Corporation area of Ahmedabad and to study the perception of people about birth registration system.

### **METHODS**

Observational descriptive study was carried out in urban area of Ahmedabad Municipal Corporation which consists of six zones namely Central, North, South, West, New West and East. One ward from each zone was chosen randomly for the study. The randomly selected wards were Dariapur, Sabarmati, Chandlodiya, Asarava, Odhav and Danilimda respectively. The sample size was determined as per the total births registered in that particular year, which were 93784 and 1% of that came out to be 940. The required sample size was stratified according to different zones depending on the births occurring in that particular zone.

To know the perception of people about birth registration, house to house visit was carried out in the defined area, all people were explained about the aims of the study and informed verbal consent was taken and information was collected from the each respondent. Inclusion criteria were Parents with child of less than or equal to 3 years of

age who had given oral informed consent and exclusion criteria were those who had not given oral informed consent and parents with child of more than 3 years of age.

Predesigned and pre tested questionnaire was used for the study. Initially pilot study was carried out among the sample size of 25. Preliminary analysis was done to reformulate the questionnaire and then final questionnaire was prepared. Data collected were analyzed using Epi-Info software (version 6.04d).

#### RESULTS

The results show that maximum number of subjects 623 (35.2%) were in age group 1-3 years and lowest number 63 (6.7%) were in age group <1 month. Out of total 940 study population, 53.8% were males and 46.2% were females. Highest percentage in both sexes was in age

group 1-3 Years. Mean age of males was  $1.78\pm0.95$  years while females were  $2.04\pm0.86$  years. Mean age in total population was  $1.90\pm0.92$  years. Highest registration in either sex was observed in the age group <1 month (Table 1).

Birth registration according to educational status of fathers shows that highest registration was seen among fathers who were educated up to graduate and above level. The coverage of birth registration according to mother's education shows that lowest registration was seen among mothers who were educated up to high school level (Table 1).

Out of total 940 children, 195 (20.7%) were of the birth order 3 and above. Maximum registration (97.95%) was seen among children of birth order 3 and above followed by birth order 2. Percentage of registrations increased with increase in birth order (Table 1).

Table 1: Coverage of birth registration according to various characteristics of respondents.

	Birth registered		Birth not registered		Total	
	Number	%	Number	%	Number	%
Age of child						
< 1 month	63	7.09 (100)	0	0 (0)	63	6.7
1month-1year	246	27.7 (96.9)	8	15.7 (3.2)	254	27
1year- 3years	580	65.2 (93.1)	43	84.3 (6.9)	623	66.3
Total	889		51		940	
Sex						
Male	480	54 (94.9)	26	51(5.1)	506	53.8
Female	409	46 (94.2)	25	49 (5.8)	434	46.2
Total	889		51		940	
Father's education						
Illiterate/Just literate	189	21.3 (87.5)	27	52.9 (12.5)	216	23
Primary/ Middle	130	14.6 (92.2)	11	21.6 (7.8)	141	15
Higher School/ Intermediate	94	10.6 (94.9)	5	9.8 (5.1)	99	10.5
Graduation and above	476	53.5 (98.3)	8	15.68 (1.7)	484	51.5
Total	889		51		940	
Mother's education						
Illiterate/Just literate	291	32.7 (88.2)	39	76.5(11.8)	330	35.1
Primary/ Middle	158	17.8 (96.3)	6	11.8(3.7)	164	17.4
Higher School/ Intermediate	110	12.4 (98.2)	2	3.92(1.8)	112	11.9
Graduation and above	330	37.1 (98.8)	4	7.84(1.1)	334	35.5
Total	889		51		940	
Birth order						
1	359	40.4 (93)	27	52.9 (7.0)	386	41.1
2	339	38.1(94.4)	20	39.2 (5.6)	359	38.2
3+	191	21.5 (98)	4	7.84(2)	195	20.7
Total	889		51		940	

Out of total 889 registrations, 838 (94.3%) had applied for the registration of their child within the stipulated time (<21 days). Among those who had applied for birth

certificate within stipulated time, mean time required for getting the certificate was 1.46 days while those who had

applied after stipulated time, the mean time required for getting the birth certificate was 5.98 days.

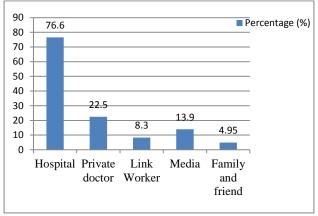
Almost half of the respondents who applied for the birth certificate with in stipulated time period stated that the most common reason for delay in getting the birth certificate was the absence of staff while 45% of the respondents who applied after stipulated time cited the long procedure as the most common reason for delay in getting the certificate (Table 2).

Table 2: Time required and reasons for delay in getting birth certificate.

	Within stipulated time		After stipulated time		Total			
	No.	%	No.	<b>%</b>	No.	%		
Time required for getting certificate (days)								
1	647	77.2	0	0	647	72.8		
2	126	15	0	0	126	14.2		
3	39	4.7	26	51	65	7.3		
>5	18	2.1	25	49	43	4.8		
Not answered	8	1	0	0	8	0.9		
Total	838		51		889			
Reasons for delay								
Staff absent	93	48.7	4	7.8	97	40.1		
Staff had some other work	64	33.5	11	21.6	75	31.0		
Document incomplete	17	8.9	13	25.5	30	12.4		
Procedure was long	0	0	23	45.1	23	9.5		
Others	17	8.9	0	0	17	7.0		
Total	191*		51		242			

(Figures in parentheses indicate percentages); \* Indicate those who received birth certificate after 1 day.

Out of total 889 registration, 609 (75.3%) were given certificate on promised date, but 13 (1.5%) were demanded money for issuing certificate.



<sup>\*</sup> Some people had more than one source of information.

Figure 1: Source of information for birth registration.

Regarding the source of information about getting the birth certificate, majority (76.6%) got the information from the hospital followed by private doctor (22.5%) (Figure 1).

Regarding the use of birth certificate, majority (83.9 %) believed that its main use is for admission in school and college followed by use as age proof (61%) and entry in ration card (46.3%) (Table 3).

Table 3: Uses of birth certificate.

Use of certificate*	Number	Percentage (%)
Admission in school and college	746	83.9
Age proof	542	61
Entry in the ration card	412	46.3
For getting the passport	150	16.9
To open a bank account	113	12.7
For marriage registration	118	13.3
Getting job in the Government	111	12.5
Not known	08	0.9
Total	889	100

<sup>\*</sup> Some people had more than one answer.

Out of total 889 registrations, only 212 people had given suggestion for improvement. Making the procedure fast was the most common suggestion given by majority 137 (64.6%) of respondents.

## **DISCUSSION**

As discussed earlier, importance of birth registration should be taken seriously since it bestows a legal identity of children for life. Without a birth certificate, children may be excluded from education as well as health and social services. The study findings highlight that the overall birth registration was 94.58% in two years which indicate the awareness of people residing in urban area towards birth registration. This shows a very positive sign that the state and central governments are putting more and more emphasis on vital registration and it is up to the mark in our study area. These findings are in accordance with FRHS study<sup>13</sup> where it was 93.00% and in the state of Haryana where it was 94% <sup>14</sup>, more than 80% for the state of Delhi as reported in 2008. <sup>15</sup> These findings are in contrast to the national average of 63.8%. <sup>3</sup>

Our finding that maternal education improves the likelihood of children being registered is not surprising as it is consistent with normative and empirical evidence. A study from Eastern Uttar Pradesh, India documented the similar findings that the education of parents has positive impact on the coverage of birth registration. The other studies found similar issues relative to child registration and maternal education. Among the many returns to education is an expectation that it will eventually increase the stock of quality and quantity of available information. This finding is, therefore,

consistent with our expectations. Education especially maternal has long been considered an important influencing factor on diverse developmental/social issues, e.g., fertility and inter-alia maternal and infant health has been shown to have a profound effect on the number of births and the risk of adverse birth outcome. In this study, we have demonstrated that the financial cost associated with child registration was a barrier to registration. Formal education for women therefore provides a useful strategy for improving child registration

The time elapsed between birth and registration was found to be very encouraging. The maximum birth registration occurred with-in the stipulated period of 21 days as prescribed under CRS thereby indicating rising community awareness, motivation, importance of need for certificate (especially to avail benefits under child developmental schemes and at the time of school admission etc.). This was aided by easy access to CRS and relative user-friendliness of the health system.

The relatively low awareness of the study respondents regarding the multifaceted use of birth certificate, the legality of the document, and the rights issue related to it can be attributed to a significant percentage of subjects being either illiterate or having received only primary education. The studies from other parts of the world 19,20 also revealed the similar findings. A large proportion of the study participants (78.5%) believed that the birth of a child cannot be registered before the identification of the child with his/her name. Some of the societies follow the custom of naming the child on a particular ceremony organized a few weeks after birth. This may be the reason for the delay in getting the birth registered especially in a country like ours where rituals still dominate the mind-set of the people. These findings are in agreement with the similar findings of the other studies conducted in India. 21,22

Around 45% of the respondents believed that the procedure for birth registration was too long. This information could be the reason of one's experience of a delayed birth registration or maybe an involvement of an intermediary agent. Another study from Uttar Pradesh, India also reported the similar findings. <sup>16</sup>

The source of information was reported as hospital by 76% of the participants and private doctor by 22.5% of the respondents. The other sources of media including the print media and the audio visual media seem to contribute minimally to their information. These points toward the need for increased IEC efforts through involvement of various effective channels of mass communication, which can repeatedly reinforce the concepts.

# **CONCLUSION**

Birth registration and subsequent issuance of certificate does not only promote human rights to citizenship but

also facilitates human rights to good health, education, social security and overall human development. Therefore, timely registration of children should be pursued as a right issue. This study found that high levels of birth registration were related to high level of awareness among the urban population regarding birth registration. However, findings from this study seem to suggest that it is more of a privilege for children whose parents are educated, wealthy and live in urban areas. Yet, without a comprehensive birth, measures aimed at monitoring progress of achieving the MDGs will continue to rely on surveys, which may not be as comprehensive as continuous birth registration system.

#### **ACKNOWLEDGEMENTS**

We would like to thank the authors would like to thank the Department of Birth & Death Registration, Ahmedabad Municipal Corporation for their support. The authors are also grateful to the respondents for their cooperation during the study period.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

#### REFERENCES

- Office of the Registrar General of India, vital statistics division. Physicians' manual on medical certification of cause of death. 4<sup>th</sup> ed. New Delhi: Ministry of Home Affairs, Government of India; 2000.
- 2. The Gazette of India. The Registration of Birth and Deaths Act, 1969 [Act No. 18 of 1969].
- 3. National Commission on Population. Report of the working group on registration of births, deaths and marriages. New Delhi: 2001. Available at, http://www.populationcommission.nic.in/RPM\_Report.htm. Accessed on 2015 Nov 10.
- 4. UNICEF. The 'Rights' start to life: A statistical analysis of birth registration. New York:UNICEF; 2005.
- United Nations. Convention on the rights of the child (entry into force September 1990). Article 7.
   Available at http://www.childinfo.org/files/birthregistration\_crc. pdf. Accessed on 2016 Feb 01.
- 6. NSSO. Concepts and definitions used in NSS, Government of India, New Delhi, 2001.
- 7. National Family and Health Survey, India. International Institute for Population Sciences, Mumbai. 1998-99;2005-2006.
- 8. United Nations Children's Fund. Every child's birth right: inequities and trends in birth registration. New York: UNICEF; 2013.
- 9. Szreter S. The right of registration: development, identity registration, and social security-a historical perspective. World Development. 2007;35(1):67-86.

- 10. Agrawal BL. Sample registration in India. Population Studies 1969;23(3):379-94.
- Bhat PNM, Preston SH, Dyson T. Vital rates in India 1961-1981. Committee on population and demography, Report No.24. Washington DC: National academy press; 1984.
- 12. Chandrasekharan C, Deming WE. On the method of estimating birth and death rates and the extent of registration. J Amer Statist Assoc. 1949;44:101-15.
- 13. Analysis of civil registration system data, 2004, Gujarat finding and policy recommendations. By foundation for research in health systems.
- Sachdeva S, Nagar M, Tyagi A, Sachdeva R, Kumar V. Early birth registration at a center in rural India. J Fam Med Primary Care. 2013;2:234-7.
- 15. Annual report on registration of births and deaths in Delhi: 2008. Delhi: Directorate of Economics & Statistics and Office of the Chief Registrar (B&D); 2009.
- 16. Kumar A, Yadava KNS, Singh VK. Extent of civil birth registration: a preliminary study of eastern Uttar Pradesh. J Adv Res Health Care Med. Inform. 2014;1(1):12-24.
- 17. Mahapatra P, Shibuya K, Lopez AD et al. Civil registration systems and vital statistics: successes

- and missed opportunities. Lancet. 2007;370(9599):1953-63.
- 18. Ramkumar R. Technical demography. Wiley eastern limited press, New Delhi, 1986.
- Corbacho A, Osorio R. Travelling the distance: A GPS-based study of the access to birth registration services in Latin America. Inter-American development bank working paper series No 64458. 2011.
- 20. Salawu B. Strengthening vital registration systems as source of demographic data for effective socioeconomic development planning in Nigeria. Pak J Soc Sci. 2009;6(4):200-6.
- 21. Serrao A, Sujatha BR. Birth registration: a background note, community development foundation, Bangalore. 2004;5.
- 22. Anand K, Kumar G, Kant S, Kapoor SK. Seasonality of births and possible factors influencing it in a rural area of Haryana, India. Indian Pediatr. 2000;37:306-12.

Cite this article as: Jain KG, Chandwani HR, Bala DV, Trivedi KN. Coverage of birth registration in municipal corporation area of Ahmedabad, India. Int J Community Med Public Health 2016;3:982-7.