



A STUDY TO ASSESS THE STATUS OF KNOWLEDGE AND PRATICE ON REGISTRATION OF BIRTHS AND DEATHS AMONG THE URBAN POPULATION OF ICHAPURAM AREA SRIKAKULAM DISTRICT (A.P).

1.Y. jagannadhapuri,

Research Scholar, Dept of Statistics
Acharya Nagarjuna University, Guntur, AP

2.Dr. R. SubbaRao, Professor

Department of Engg. Mathematics & Humanities
S.R.K.R. Engineering College (Autonomous)
Bhimavaram - 534 204, Andhra Pradesh, India
rsubbarao9@gmail.com

3. Dr. Ganapathi Swamy Chinthada

Department of Community Medicine,
GSL Medical College, Rajahmundry. India.

4.N. Lakshmana Rao,

Research Scholar, Dept of Statistics
Acharya Nagarjuna University, Guntur, AP.

4149

DOI NUMBER: 10.48047/NQ.2022.20.19.NQ99378

NEUROQUANTOLOGY 2022; 20(19): 4149-4167

Civil Registration System (CRS):

CRS means Civil Registration System, is one of the Indian Registration of vital events i.e. Births and Deaths under the Registration of Birth and Death (RBD) Act 1969, total monitoring under the Registrar General of India (ORGI) and the function of enrolments under the State

Government responsibilities and co-ordination and activities and publish the year wise data all are under the Registrar General of India. State Government respective under jurisdiction the events to be take i.e. rural as well as urban areas.

Methods: civil registration system

Births and Deaths Registration		
Within 21 Days	Free	Free Birth/Death Certificate (Sec-12)



After 21 days but within 30 days (Sec-13(1))	Late Fee	Birth/Death Certificate(sec-17)
After 21 days but within one-year Sec-13(2))	Late fee (affidavit and permission)	Birth/Death Certificate(sec-17)
After one-year Sec-13(3)	Later fee order of 1st class magistrate	Birth/Death Certificate(sec-17)

Source: CRS website

They should be responsible for addressing their communities on this belief which often be more beneficial to be individual as national important.

About Civil Registration System (CRS)

The Civil Registration System only one vital event enrolment of registration of Births and Death Act (RBD Act) 1969, under the Act the

respective state government, state government select bureaucrats to register and births and deaths whole country. The Directorate of Census Operations (DCO) is the main office, Office of Registrar General of India accountable of all implementations in the country.

4150

The Civil Registration System under count the events in the year 2019-2020		
Years	2019	2020
Registered Births	2,48,20,886	2,42,22,444
Registered Deaths	76,41,076	81,15,882
Registered Infant Deaths	1,65,257	1,43,379
Percentage of Infant death to a total Death	2.2	1.8
Gross Natural addition to Population	1,71,79,810	1,61,06,562

Source: CRS Website and Annual reports

Registration Process in your locality/area (Panchayat/Ward):

Registrar: As per the registration of Births and Deaths Act,1969, in respect of births and deaths in hospital, healthcentre, maternity or nursing home or other like institutions, responsibility of informing the events to the registrar

Institutions As per the registration of Births and Deaths Act,1969 in respect of births and deaths in a hospital, healthcentre, maternity or nursing home or other like institutions, responsibility of informing the events to the registrar.

Public: In case of Birth and Death, citizen should inform about the event within 21 days to the registrar of their jurisdiction, in case Death, citizen should place Doctor’s certificate in original form along with burial/cremation.

CRS-Birth Registration:The Registration of Civil Registration throughout India 34 State/UTs registered births is 73.7%. The registered births are in the year 2.48 crores where as the in the year 2.42 crores, clearly indicating the birth rate is low compare than the 2019 year. And the Gender wise taken the aspect male and female births respectively 52% and 48%, male births are more number compare than female births. Whereas within time period 21 days Majority of states are 15 namely ,Punjb,Harayana,A&N,Himchal Pradesh,Odisha,Goa,West Bengal,Gujart,Puducherry,Tamil Nadu,Chandigarh,Lakshdweep,Mizoram,D&N and Daman & Diu and Andhra Pradesh are achieved more than 90% achieved the events to be enrolment, whereas 2 states MP and



Chhattisgarh are 80-90 percent, Further 9 States Karnataka,Kerala,Telangana,Bihar Rajasthan,Tripura,Meghalaya,Jharkhand and J&K in the category of 50-80 percent and the remaining 7 states are Assam,Aruchal Pradesh,UP,Manipur,Uttarakahand,Ladkh and Nagaland are 50 percent, or less than 50 percent of the registration process done within 21 days' time period of time.

CRS-Death Registration:Under the Civil Registration System India under the Office of the Registrar General of India, the Deaths events are 76.4 lakhs in the year 2019 where as the 81.2 Lakhs in the year 2020,so tht the Death Registration increased compare than 2019,share of Deaths are Male 60.2%,female 39.8% ,The Institutional deaths registered from 34 States/UTs are 28%,within time period of 21 days 11 States occupied registered more than 90% to the total deaths registred.7 States/UTs are 80-90 percent of the total deaths share, Further 7 States are between 50-80 percent,reaminining 8 states are less than or equal to 50 percent in completing the birth registration within time limit of 21 days.

Background:Developed countries like countries update the vital statistics online system they will update every induvial and demographic and population data day by day whereas the developing countries like India and other countries are Vital events ofBirths and Deaths are enrolled in the CRS (Civil Registration System), this is incomplete due to lack of awareness and illiteracy and the complete registrationsystem will by the major states in an around the majority states.

Objectives:A collection of births and deaths real time data was conducted in the field level of various displines in the back-ward District SrikakulamDistrict in the Ichapuram Municipality which is boarder of Odisha and their Awareness of Births and Deaths, attitude and practice of registration and policy making and study the Andhra Pradesh and Indian level registration data to fitted to compare of secondary and primary data. The Very

Important part of India and world is the Vital Statistics development are essential for health care and administrative, so that to Crete Awareness of the Survey public, CRS staff enrolment centres and other public awareness of this journal publication.

Data Collected: A Household each house or individual or benefiries person or already certificate person or relative like these data related of 666 members/Households/families/Individual/benefices/other related of this vital statistics system data.

Abstract: The Study showed that to conduct awareness of Birth and Registration certificate of their national importance and individual benefiers means cent per cent results, major information collected from neighbours and relatives/benefireiecs. The Awareness of Death Registration is low compare than births. The data which were 666 families already using birth certificates more than 250 families and death certificates are 130 remaining all are data from relatives or known ones or their family side awareness purpose conducted of this survey.

Conclusion: Registration of birth is 100 per cent self-oriented and almost awareness whereas death registration requires awareness and national importance and individual importance required and these types of surveys forward improving the quality and 100 per cent registration in India.

Aim & Objective:

- 1.To Know and createthe Knowledge of Registration of Births and Deaths and also develop the attitude and practice of regarding registration of Births and Deaths in the study group
- 2.To Educate the study group regarding Registration of birth and death.
- 3.To Create Awareness of 666 families of Rich/Middle class and Poor people
- 4.To Compare the India and Andhra Pradesh Registration Data.



Statistical Methods and Time Period of the study:

The Pilot study was conducted from February to March 2021, the final study was conducted May 2021 to June 2021, by the Local field level organizers, students of Community Medicine related, Population Research Centre Vizag Field level officers also helped me lot and Municipality staff members, Asha Workers and Aganwadi Workers all are involved to study the group. The information was taken from each and every house hold beneficiary and non-beneficiary to collect the data from above 18 years of their relative any one get this certificate from anywhere in the India, trained doctors collected from this data and also involved local Medical Department and also check the quality data of various social phenomena, gender, literacy and their class of economy under this registration. Analysis of this data by using various frequency data literacy, socioeconomic and other aspects.

Keywords: Birth Registration, Death Registration and Urban

Results: The study shows that awareness of birth and death registration was very high compare than previous decades, now the

benefits of Birth and Deaths certificates more important aspects while joining of school, registration of Aadhaar and other government policies whereas the Death certificates importance are insurance policies, pension purpose and other registration of documents etc these are very helpful Now a days the registration of birth on the spot and taking within 21 days where as some non-beneficial compare than births, deaths less priority of taking certificates. Frequently Awareness created for Technical staff those who are collecting vital data as well to public of this national important.

Census 2011 Ichhapuram Municipality Statistical Deatils:

Ichhapuram Located at Odisha and Andhra Boarder, and it was from Head Quarter Srikakulam to 132 Kms, far away, and it was main area of Kaviti, Kanchili, somepta and the way public puja to andhra and Odisha gods. And it was Boarder of Andhra as well as close to Capital of Berhampur and Bhubaneswar areas. So that to creating awariness of public in the vital statistics sytem of Andhra region as well Odisa region to cover all aspects.

As per Census 2011 (Ichhapuram Municipality)	
Total Households	8290
Total Population	36493
Total Male	17716
Total Female	18777
Children below 6 years	4004
Children below 6 Male	2050
Children Below 6 Female	1954
Total Literates	23105
Literates Male	12731
Literates Female	10374
Total Workers	13207
Total Workers Male	9226
Total Workers Female	3981

Source: Census 2011 Data

SAMPLING METHOD:

Cluster sampling method was used in this study. 4 clusters were selected from 4 wards

randomly and each cluster represent each ward contain slum, non slum, posh locality and education localaity, the numbers of clusters are



sufficiently large that statistical precision at the level of population is adequate and the number of wards are divided into various economic back ground/literacy/slum/semi slum for the survey remains logically feasible. And the Beneficiaries of Birth and Death Certificate getting each family anywhere, relative, friends and others selected as random in this survey. (666/4=166 or 167).

ESTIMATION OF SAMPLE SIZE:

A study conducted by suribabu Team PRC, Community Medicine students, Asha, Aganwadi Workers and other Municipality staff. et al. in Srikakulam District,IchhapuramMunicipality

$$N = \frac{Z^2 * p * q}{e^2}$$

Where N is total number of Households/individuals covered i.e. 666

Z is the standard normal deviate, which is equal to 1.96 at 5% significance level.

p is the prevailing knowledge about Vital Statistics related activities

p=80.63%=0.8063(proportion of people with knowledge of Vital Statistics related activates)

q = (1-p) – (1-0.8063) = 0.1937 (Proportion of people without knowledge of Vital Statistics system and related activities)

e = Acceptable (allowable) error on the estimate of p = 4% of p
 = 4% of 0.8063
 = 4/ 100 x 0.8063
 = 0.03

So Z=1.96; p=0.8063; q=0.1937; e=0.03

$$N = \frac{(1.96)^2 * 0.8063 * 0.1937}{0.03^2} = 666.555 \text{ approximately } 666$$

(sampling = 166.5 x 4 = 666)

The list of houses in the villages was obtained from the Municipality Ward office

The first house was identified from the list randomly by using a currency note where the last two digits were considered. From pre-test and after pre-test the data is very high quality and accuracy results.

STUDY PERIOD:

Pilot study was conducted at February to March 2021 (Conducted and announced the

shows that 80.63% of people were aware of Vital Statistics related surveys . For the present study sample size is estimated by using the prevalence of knowledge and awareness of the public towards Birth and Death related activities enrolment isrespectively 98.11% & 84.5, with minimum errorsi.e., who have no events in their family excluded and the event of their family any number not only in the residence anywhere residence, in that case 5% percision level of sigifince with absolute error less than 4% fitted. In this Birth & Death Certificates enrolment is 91.05%,

survey and at least one family/known/neighbour/friends they received this certificate anywhere, that data and their personal opion after awareness conducted of the above survey)

The final study was conducted May to June 2021

. (The quality of data of each individual or known ones to known at least certificates received from their family data)

Results of Survey Reports:

Table:1 Various Awareness of Registration of Vital Statistics:



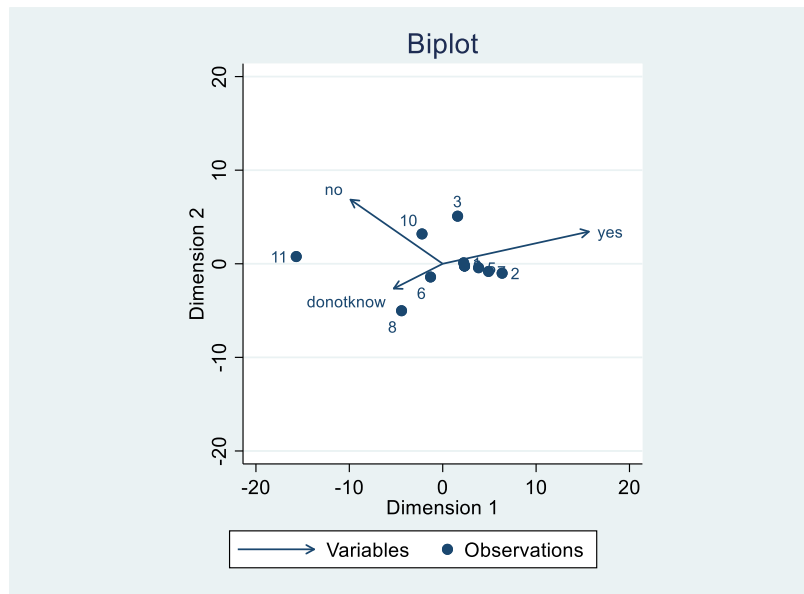
Variables	Yes	No	Do not know	Yes, Percentage	No, Percentage	Do not know, Percentage
1) Registration of Birth and Death Awareness	588	61	17	88.29	9.16	2.55
2) Birth Certificate Awareness	652	14	6	97.9	2.1	0.9
3) Death Certificate Awareness	612	108	46	91.89	16.22	6.91
4) Birth and Death Registration Aware Forms etc	589	58	19	88.44	8.71	2.85
5) Place of Registration Birth Certificates	612	42	12	91.89	6.31	1.8
6) Place of Registration Death Certificates	531	87	48	79.86	27.48	13.66
7) Municipality Authorities and Hospital issue of Certificates	628	29	9	94.29	4.35	1.35
8) without Name Enrolment of Birth Certificate and later name include	478	96	92	71.77	14.41	13.81
9) Within Time Taking Birth Certificates	589	58	19	83	32.13	19.22
10) Social media and others awareness	523	124	19	78.53	18.62	2.85
11) Within Time Taking Death Certificates	311	243	112	46.7	36.49	16.82

4154

N=666 Numbers involved family numbers/individuals

The data which shows the using the Biplot highest number “yes”, clearly shows that majority of the public knows these two certificates Importance.





Of the 666 numbers of Family/invidual/Relative/Other family members taken from this certificate and other all type of each category was explained above table, out of 666 involved in this category 98% known from Birth certificates as we all 92%.

4155

Table:2 Involved various Respondents of their Background of Literacy levels:

Variables	Below 25	25-30	30-40	40-50	50+	Total
Illiterate	29	83	42	15	24	193
literate formal education	45	35	25	12	13	80
school up toX class	82	77	32	11	16	218
up to intermediate	53	24	19	8	4	108
degree and other equailanet studies	2	31	12	2	1	48
PG and other studies	0	8	6	2	3	19
Total	211	258	111	38	48	666

In the above respondent’s majority of age 30 years below are participated more number and their accuracy mean age is 35 years of all categories.

Table:3 The Respondents Socio Economic back ground Levels:



Socio-economic status	Births	Deaths	Total
Lower middle class	86%	76%	81%
Very poor class	82%	69%	76%
Upper high class	99%	96%	98%
High class	100%	100%	100%
Total	92%	85%	89%

N=666 Numbers involved family numbers/individuals.

In the above Socio-economic conditions of the category majority of upper and High Upper-class cent percent taking certificates, remaining category have required awareness of the programme.

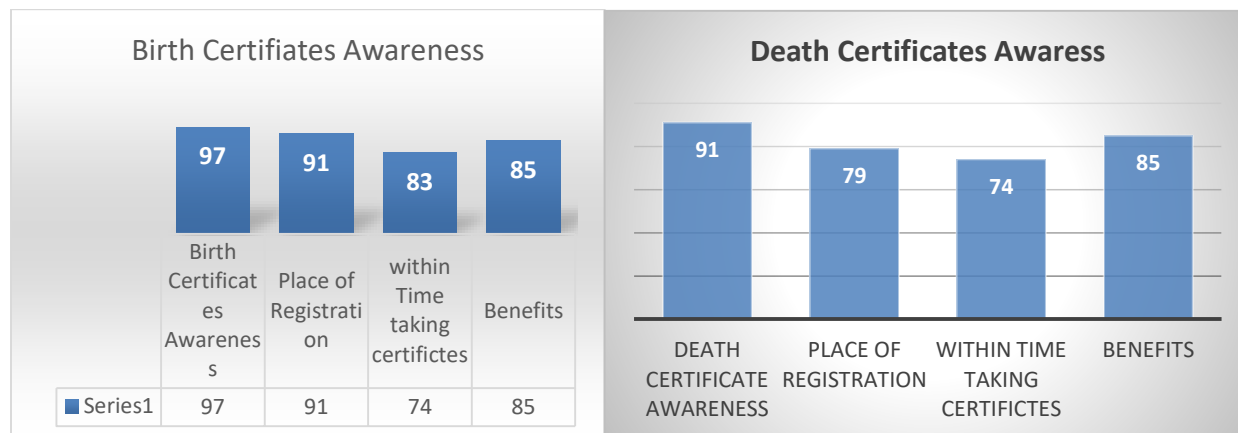
Table: 4 Various Groups persons of males and female and marital status:

Variables	Married	Unmarried	Total
Male	203	109	312
Female	286	68	354
Total	489	177	666

4156

Fitted above data in STATA, between the unmarried and married coefficient, majority married men/women's knows very well in all aspects.





The knowledge of Birth and Death clearly shows that above Birth certificates knows 97%, due to time and the certificate importance starts from school admission, so that little bit delay to taken, remaining all aspects all are aware of the programme, whereas death certificates 91 per cent knows all aspects.

Table: 6 Knowledge with respect to Birth Certificate

Variables	Yes	No	Do not know	Yes, Percentage	No, Percentage	Do not know, Percentage
School Admission Purpose	634	18	14	95.20	2.70	2.10
Aadhar card & Ration Card Purpose	587	53	26	88.14	7.96	3.90
Various Schemes Purpose like JSY, SSY and other benefits	542	101	23	81.38	15.17	3.45
Future Purpose Like Passport and other	348	224	94	52.25	33.63	14.11
Aware about certificate and all Category	642	18	6	96.40	2.70	0.90

N= 666 data as compare each category above

The Purpose of the certificate and the importance fitted in the ANVOVA, in the STATA, majority of the public taken these certificates because of various benefits and other purpose.



. regress yes no donotknow, noconstant

Source	SS	df	MS	Number of obs	=	5
Model	546748.545	2	273374.273	F(2, 3)	=	0.80
Residual	1026808.45	3	342269.485	Prob > F	=	0.5271
				R-squared	=	0.3475
				Adj R-squared	=	-0.0876
				Root MSE	=	585.04
Total	1573557	5	314711.4			

	yes	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
no	3.25095	11.88248	0.27	0.802	-34.56439	41.06629
donotknow	-.8260585	29.61995	-0.03	0.980	-95.08996	93.43785

Table:7 Knowledge regarding Death Certificate

Variables	Yes	No	Do not know	Yes, Percentage	No, Percentage	Do not know, Percentage
Insurance Policy Purpose	541	18	14	81.23	2.70	2.10
Registration and change of Assets records Purpose	165	288	213	24.77	43.24	31.98
Pension Benefits and other	568	75	23	85.29	11.26	3.45
National Importance to Delete Voter Id/Other Benefits from Record	159	224	283	23.87	33.63	42.49
Aware about certificate and Importance	593	49	24	89.04	7.36	3.60

N= 666 total number will be categorized is above table

The majority the public needs certificates because of multipleuse, the ANVOVA table clearly indicating below.

. *(4 variables, 8 observations pasted into data editor)

. regress yes no, noconstant

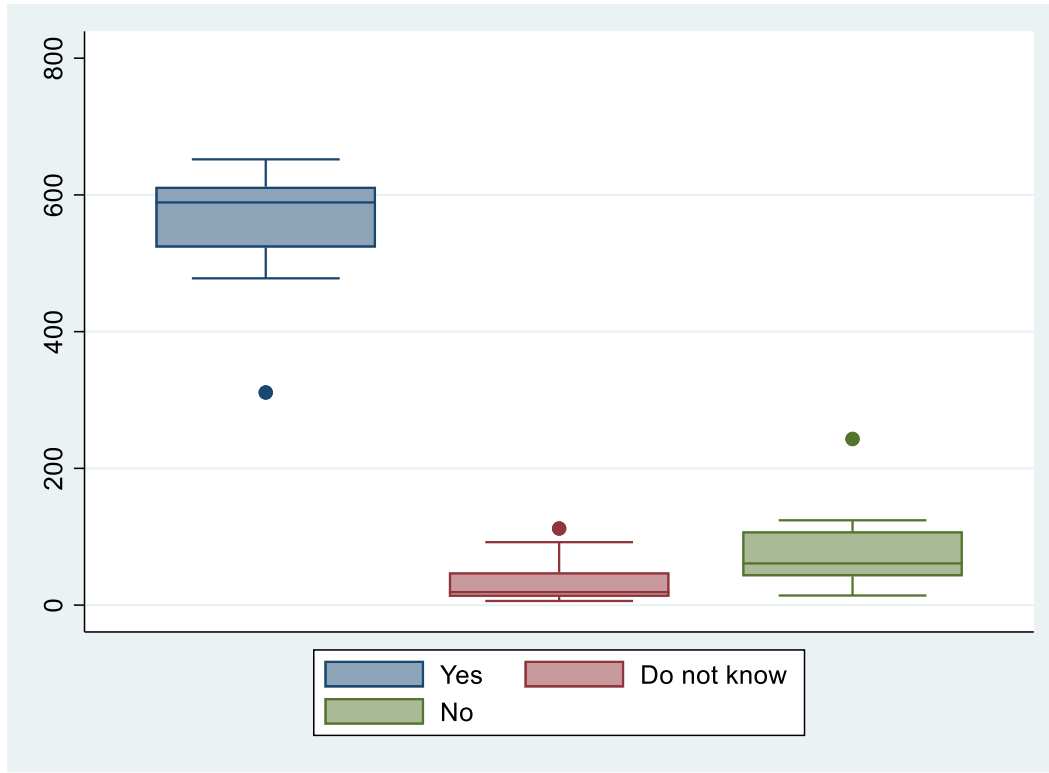
Source	SS	df	MS	Number of obs	=	5
Model	191351.17	1	191351.17	F(1, 4)	=	0.92
Residual	828108.83	4	207027.208	Prob > F	=	0.3908
				R-squared	=	0.1877
				Adj R-squared	=	-0.0154
				Root MSE	=	455
Total	1019460	5	203892			

	yes	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
no	1.16301	1.209711	0.96	0.391	-2.195686	4.521705



The Box plot clearly indicating the Awareness in all aspects very high, and cent percent, while taking certificates only delay.

Using the Box Plot more number of Yes in the all Programmes:



4160

Table: 8 Socio-economic status and knowledge with respect to getting Awareness about get their certificates within 21 days of time:

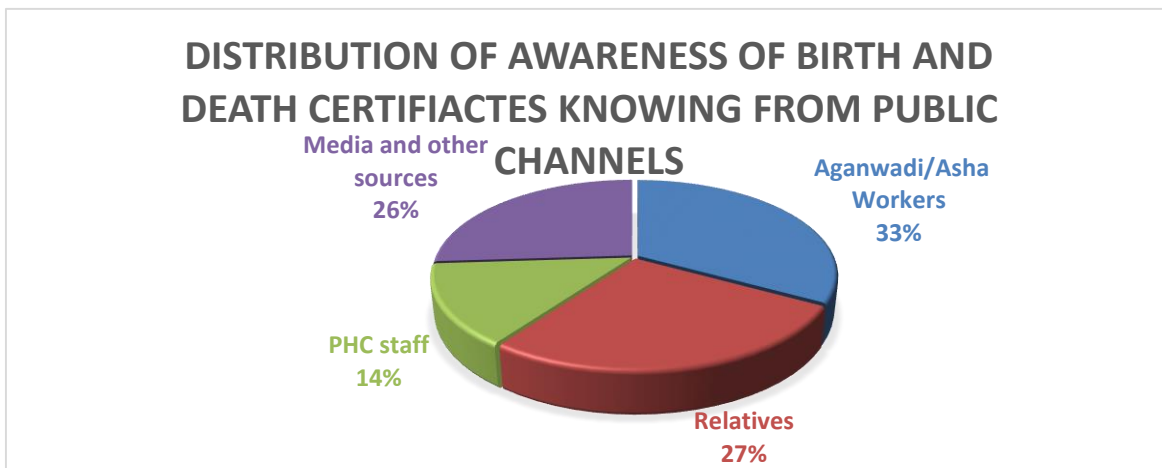
Variable	Knows Male side	Knows Female Side	Awareness about Birth and Death Certificates	Percentage
Aganwadi	292	354	646	97.00
ASHA workers	252	412	664	99.70
PHC staff	212	320	532	79.88
Teachers and other govt servants	289	324	613	92.04
Various Survey Departments visiting or Awareness campaign time any other situation	214	352	566	84.98



Relatives	121	245	366	54.95
Friends	186	298	484	72.67
Media	312	276	588	88.29
Staff from Local and others	111	234	345	51.80

N= 666 Numbers in parenthesis denote percentage of N

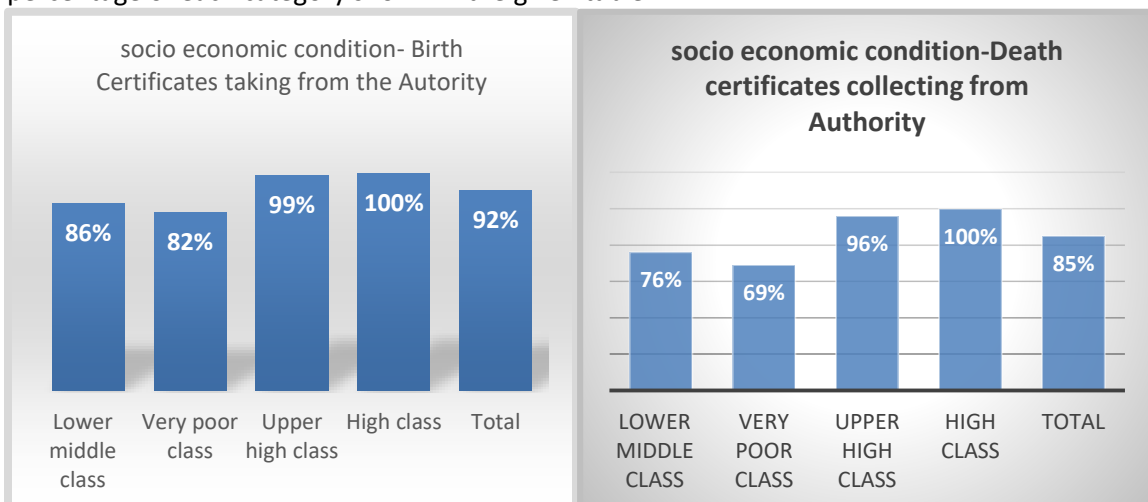
The Distribution of Awareness of various levels in the pie chart is as follows:



4161

The awareness distribution above pie chart clearly shows that majority of aganwadi and Asha workers remaing all aspects source is relatives, media and other sources also play important role of this national phenomena and

The percentage of each category shown in the given table



In the above tables Upper High class both death and birth certificates getting 100 per cent reaming category depend upon of their important getting more than 90 per cent in Birth certificates, whereas Death certificates compare than Birth certificates low process.

Important points covered after post Survey:

- To assess the status of enrolment of Birth and Death Certificates in the population of Srikakulam District, IchhapuramMunicipality area.
- To identify the various sectors involvement and Public awareness of the national Level Importance
- To Create Awareness among Public as well as Organizations
- To assess the quality and importance of national vital statistics system
- Traditional leaders must attend training workshop on Births and Deaths Registration Process
- Organise outreach programmes and distribution of Pamphlets and other Awareness Programmes to public as well as Enrolment agencies.
- Visiting schools and college levels to create Awareness of the Programme
- Promote the slogan of all level of categories.

Anganwadi workers/Asha Workers:

Only Direct access to the public is the Aganwadi, as well these collected every occurring event of Birth/death in their locality, so these play very important role in the rural as well urban, as well as Asha workers also very important role to compulsory of every event person to take this certificate.

PHC Staffs

- To discussion were the knowledge of the PHC staff with regards to issue of birth and death certificates is other important role.

Formal Panchayat members/ward level officers:

Every event monitoring whether they have knowledge or not and also follow up the household is the ward level officers in the urban as well as rural panchayat.

Teachers of schools and colleges

While national important of this issue frequently conductingquiz, seminars of this issue of birth and death certificates and the national importance.

Acknlodgement: Thanks to Population Research Centre, Visakhapatnam to arrange field level functionaries and also thanks to public as well as support and continuous help the self-help groups, Asha workers, Anganwadi and other Municipality &state government staff to continuous help all aspects.

Appendix for India and Andhra Pradesh Civil Registration System:

I. India level Birth and Registration of State and their level of Interval:

Level of Registration	Births		Deaths	
	States-2018	States-2019	States-2018	States-2019
Above 90	11	10	11	13
80-90	5	8)	Nil	2
50-80	4	2	8	5
25-50	NIL	NIL	1	Nil
Below 25	NIL	NIL	Nil	Nil

Source: CRS annual data

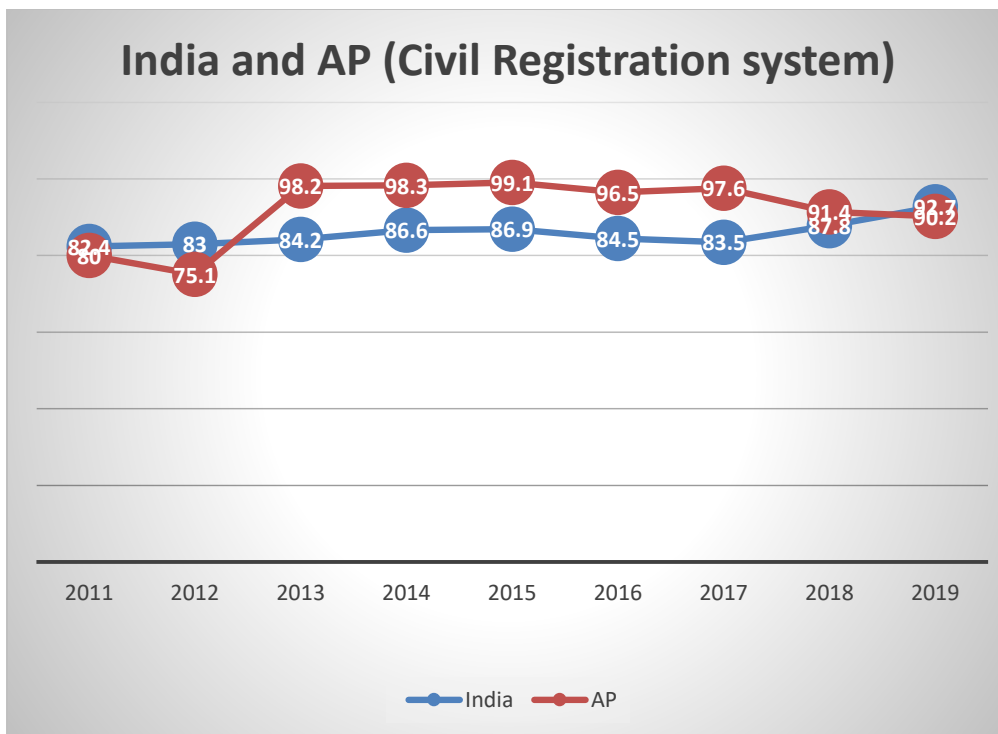


II.The India and Andhra Pradesh Vital Statistics from 2011-2019

Year	India	AP
2011	82.4	80
2012	83	75.1
2013	84.2	98.2
2014	86.6	98.3
2015	86.9	99.1
2016	84.5	96.5
2017	83.5	97.6
2018	87.8	91.4
2019	92.7	90.2

Source: CRS Annual Data

4163

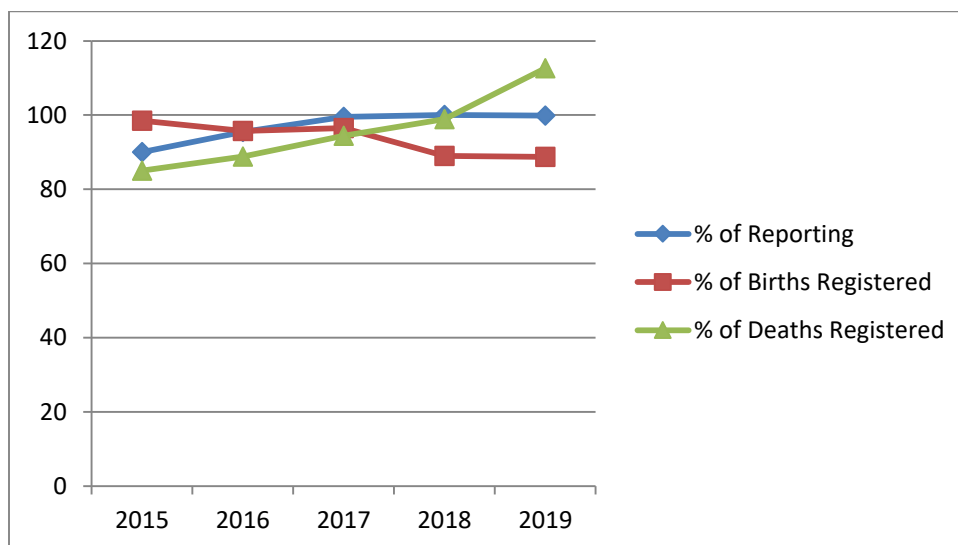


III.The Table Below the Reporting of Birth and Death Registration from 2015-2019



Year	% of Reporting	% of Births Registered	% of Deaths Registered
2015	90	98.5	85
2016	95.5	95.7	88.8
2017	99.5	96.5	94.4
2018	100	89	98.9
2019	99.9	88.7	112.6

Source:CRS annual data



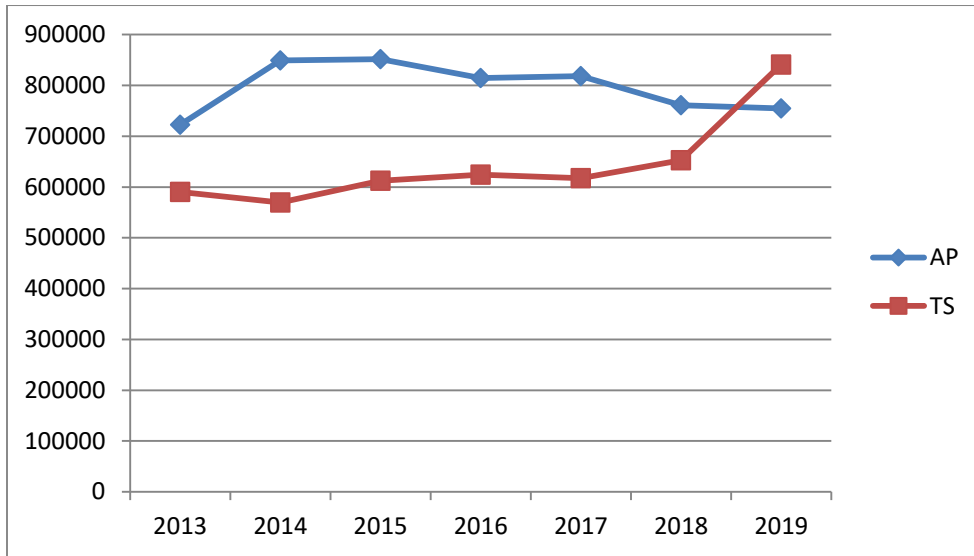
IV.The Total Number of Registation of Birth and Deaths in Andhra Pradesh

4164

z	AP	TS	AP	TS
	Births		Deaths	
2010	415050		5048	
2011	420646		9586	
2012	405909		7561	
2013	248110	156420	2130	3410
2014	306618	170145	2897	2345
2015	310640	192857	4788	2926
2016	313285	204917	4450	5777
2017	355546	178345	9115	5390
2018	375777	136528	7815	8848
2019	401472	228294	6967	6349

Source:CRS annual Data



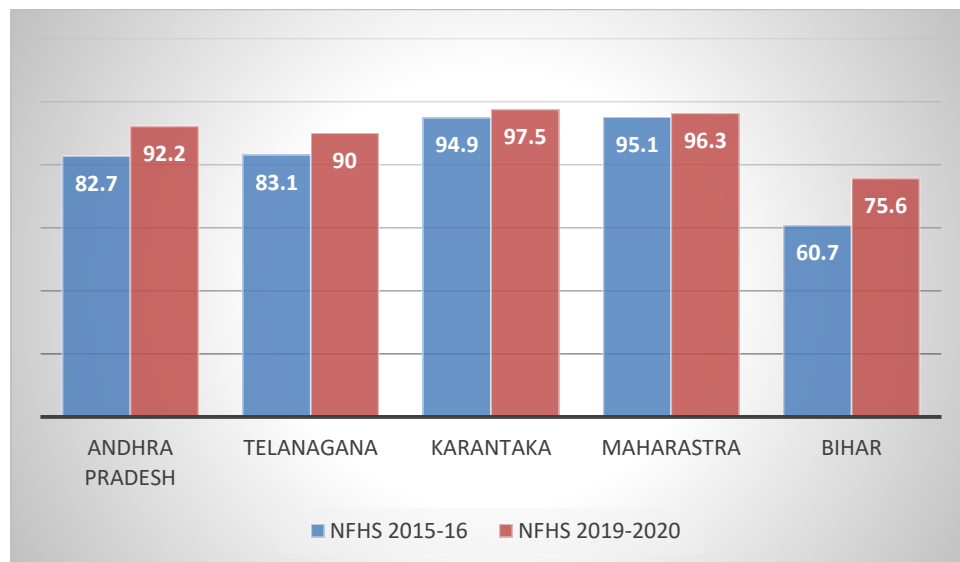


V.The Birth and Death Process data by NFHS survey:

Process in Birth registration by states 2015-16& 2019-2020		
State	NFHS 2015-16	NFHS 2019-2020
Andhra Pradesh	82.7	92.2
Telanagana	83.1	90
Karantaka	94.9	97.5
Maharastra	95.1	96.3
Bihar	60.7	75.6

Source:NFHS Data





References:

- 1.Lal S implement of strategies of National population policy,2000 of Indian community medicine,2000,25,10-23
- 2.Making every child count in the streets of Kolkata, available from <http://www.unicef.org>
- 3.Manul on vital statistics, History of civil registrion in India, newDelhi, CSO office from 2020.
- 4.Alex George, jaymon kc constantans in birth registration a case study in Andhra Pradesh
- 5.Universal birth registration, avabilefrom, <http://plan.org.au>,2011,12-18.
- 6.Gupta M Mahajan H ala p awareness about birth Registration in a resettlement colony of Delhi. Indian journal of community medicine,1998,21-26.
- 7.A survey on Birth & Death Registration semi urban settlent in middle belt Nigeria’s Akande sekone European journal of scientific research,1991,21-34.
- 8.Jewkes R Wood K competing discourses of vital registration and personhood perspectives from rural south Sfrica, Soci Med,1998,46(8),1043-56.
- 9.Gupta M, Rao C, Lakshmi PVM, et AL Estimating mortality using data from civil registration: a cross-sectional study in India. Bull World Health Organ 2016;**94**:1021.[doi:10.2471/BLT.15.15358](https://doi.org/10.2471/BLT.15.15358)
eISSN1303-5150

- 5pmid:<http://www.ncbi.nlm.nih.gov/pubmed/26769992>[PubMedGoogle Scholar](#)
10. Mills SL, Abouzahr C, Kim JH, et alCivil registration and vital statistics (CRVS) for monitoring the sustainable development goals. Washington D.C: World Bank Group, 2017. <http://documents.worldbank.org/curated/en/979321495190619598/Civil-registration-and-vital-statistics-CRVS-for-monitoring-the-Sustainable-development-goals-SDGSGoogle Scholar>
- 11.Mahapatra P, Shibuya K, Lopez AD, et alCivil registration systems and vital statistics: successes and missed opportunities. Lancet 2007;**370**:1653–63.[doi:10.1016/S0140-6736\(07\)61308-7](https://doi.org/10.1016/S0140-6736(07)61308-7)
[7pmid:http://www.ncbi.nlm.nih.gov/pubmed/18029006](http://www.ncbi.nlm.nih.gov/pubmed/18029006)[CrossRefPubMedWeb of ScienceGoogle Scholar](#)
- 12.Vital Statistics Division Office of the Registrar General of IndiaStatement 2: estimated events and level of registration by India, states 2017. In: *Vital statistics of India based on the civil registration system, 2017*. New Delhi: Ministry of home Affairs, government of India, 2019. http://crsorgi.gov.in/web/uploads/download/CRS_report_2017_2020_02_26_revised.pdf,[Google Scholar](#)
- 13.Rao CEvaluation of the quality of civil registration and vital statistics
www.neuroquantology.com



systems. In: Mrkic S, Cobos MI, eds. *Handbook on civil registration and vital statistics systems: management, operation and maintenance - revision 1*. New York: Department of Economic and Social Affairs: United Nations Statistics Division, 2018: 72–

101. <https://unstats.un.org/unsd/demographic-social/Standards-and-Methods/files/Handbooks/crvs/crvs-mgt-E.pdf>. [Google Scholar](https://scholar.google.com/)

14.SAMPLE REGISTRATION SYSTEM (SRS) IS A RELIABLE ESTIMATOR IN INDIAN VITAL STATISTICS SYSTEM1. Dr.R.Subba Rao , 2.Y.Jagannadha Puri,Internantional Journal of

Advanced Research in Science and Engineering, journal,ISSN 2319-8334,Volume 5 Issue 3 Published in the year 2016.

http://ijarse.com/images/fullpdf/1470903663_1079ijarse.pdf

15.STRENGTHENING VITAL STATISTICS IN INDIA BY USING UNIQUE IDENTIFICATION NUMBER (NPR) BASED ONLINE CENSUS SYSTEM, IJATES,ISSN-2348-7550,Volume No.4 Issue No.8 published in 2016. 1.Dr.R. SubbaRao,2.Y. Jagannadha Puri

http://www.ijates.com/images/short_pdf/1470894950_1106ijates.pdf

