

Internship at Integrated Child Development Services(ICDS) Mahesana, Gujarat

**Presented by
Dr. Megha Ranjan
PGDHM-17 (Health)**

**Under the guidance of
Dr. Monika Chaudhary**

DISSERTATION STUDY

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Title of the Study

A Comparative study on Fertility patterns and factors affecting the fertility rates in Magpara Urban Slum and Gokalpura Village of Mahesana Block in Mahesana district of Gujarat.

Introduction

- Fertility is the most important variable affecting population growth rate in most contemporary populations. The level of fertility in a population affects not only its current size, but also has a significant impact on its future rate of growth, as well as the current and future age structure of the population¹.
- Over last few decades, both fertility and mortality rates fell in India, but decline of mortality was strong enough to offset that of fertility. As a result, the decline in birth rate is now faster than the parallel decline in the mortality rates. However, the core problem is that majority of women suffer from unregulated fertility and its consequences^{2,3}.

Literature Review

- As per the report on Health and Living conditions in Eight Indian Cities ⁴, in seven out of the eight cities studied, contraceptive prevalence rate is lower in slum areas as compared to non-slum areas.
- Total Fertility Rate is higher by 0.2-0.5 children in slum areas than in non-slum areas in every city except Nagpur.
- In general, the poor have much higher fertility rates than the non-poor.
- Teenage fertility is also high among the slum women than in non-slum women (Kamla Gupta, Fred Arnold and H.Lhungdin).

- In another study of Fertility Indicators In Slum Areas of Ahmedabad City of Gujarat⁵ (B.Puwar, T. Puwar and K. Trivedi), Total fertility rate in Urban slums of Ahmedabad city is 3.4 and Pregnancy Prevalence rate is 71.62 per thousand married women of reproductive age (15-49 years).

Rationale

- One-eighth of India's urban population i.e. approximately nine million people lives in slum according to data from the latest round of National Sample Survey Organization (69th Round)⁶.
- According to the report, Gujarat accounts for ten percent of the un-notified slums in Urban India.
- Twelve percent of the total population of Gujarat lives in these slum areas; still the urban slum population is not having well-structured health services as compared to rural population.

- All the studies so far in the area of fertility have been conducted in Ahmedabad and Surat areas.
- Mahesana which is one of the fast growing urban centre of Gujarat just 73Km from the capital city of Gandhinagar and largest district of Gujarat Ahmedabad. Mahesana being one of the fastest growing city has also seen the growth of 10% in urban slum settlements in past 5 years.
- Therefore, a need has been felt to study the fertility in Magpara urban slum of the Mahesana and compare the total fertility rate of Gokalpura village of Mahesana.

Research Question

What is the total fertility rate of women of reproductive age and factors contributing to fertility rate of women living in Magpara Urban slum and Gokalpura village of Mahesana?

Objectives

- To determine the fertility rate of women of reproductive age i.e. 15-49 years of age living in Magpara urban slum and Gokalpura village.
- To examine the socio-economic factors i.e. the mean age at marriage, female literacy, knowledge about the contraceptives; affecting the fertility of the women living in Magpara urban slum and Gokalpura village.
- To compare the fertility rates of women living in Magpara slum area with that of the Gokalpura village of Mahesana block.
- To compare the fertility rates of women living in Magpara slum and the Gokalpura village with that of the Gujarat state.

Methodology

- **Study Period:** March 2014- April 2014
- **Study Design:** Cross-sectional descriptive study
- **Study area:** The study has been conducted in Magpara urban slum and Gokalpura village in the Mahesana Block of Mahesana district of Gujarat. The study area is confined to a these particularly selected areas.

The reason of selecting these two areas for comparison is that both the areas have equal population size of 300 as per the Department of Statistics, District Panchayat, Mahesana and the areas are easily accessible for data collection purpose.

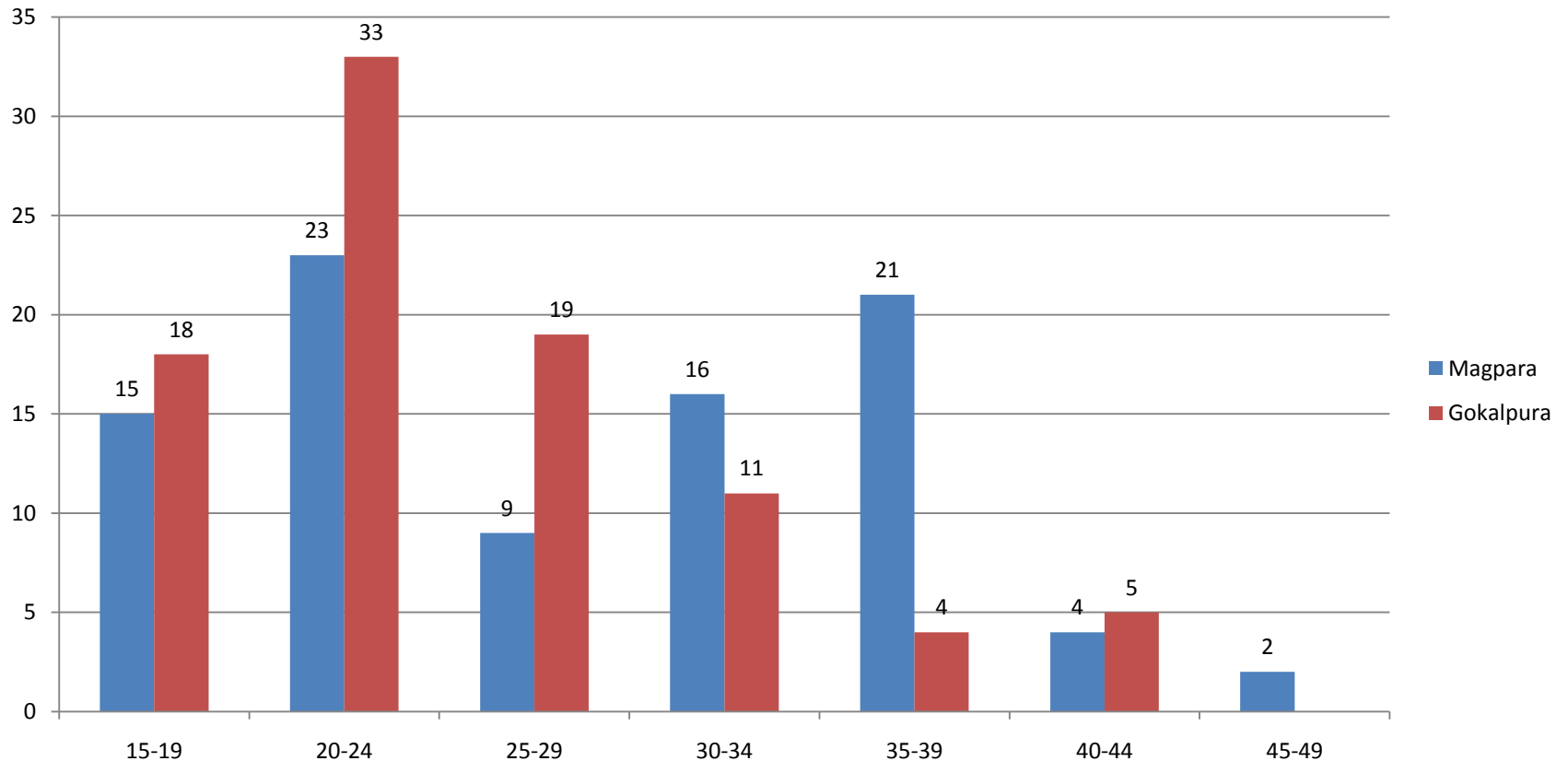
- **Study Group:** Ever married women of Reproductive age group (MWRA) i.e. 15-49 years will constitute the study group. Ever married women have been selected as socio-cultural environment of Gujarat doesn't permit the birth of children out of wedlock. Also, the age group has been selected from 15 years as it is a common practise in Gujarat to get the children married earlier.
- **Sampling Method:** In ICDS, the district is divided into 13 blocks Mahesana 1 and 2 constitute Mahesana Taluka and Mahesana city is the administrative unit of the District. Since Mahesana block is the largest among all and is the administrative unit of the district; Mahesana block has been selected for the purpose of the study.

- In Mahesana Block, there are 10 discretely situated urban slums with the population size ranging from 300-500. There are 3 slum areas namely Magpara, Dhobighat, and Daferiya; which has the correct estimation of population size (i.e. 300) as per the Department of Statistics; District Panchayat, Mahesana.
- There are 116 villages in Mahesana block out of which 10 villages have the population size of 300. Random sampling i.e. Lottery Method has been done to select the urban slum and the village out of the 3 urban slums and 10 villages respectively for the comparison purpose.
- To select a sample size representative of the population, 30% of the population size is taken as the sample. Therefore, the random sample of 90 women of reproductive age group i.e. 15-49 years each from the Magpara and Gokalpura has been taken for the study.

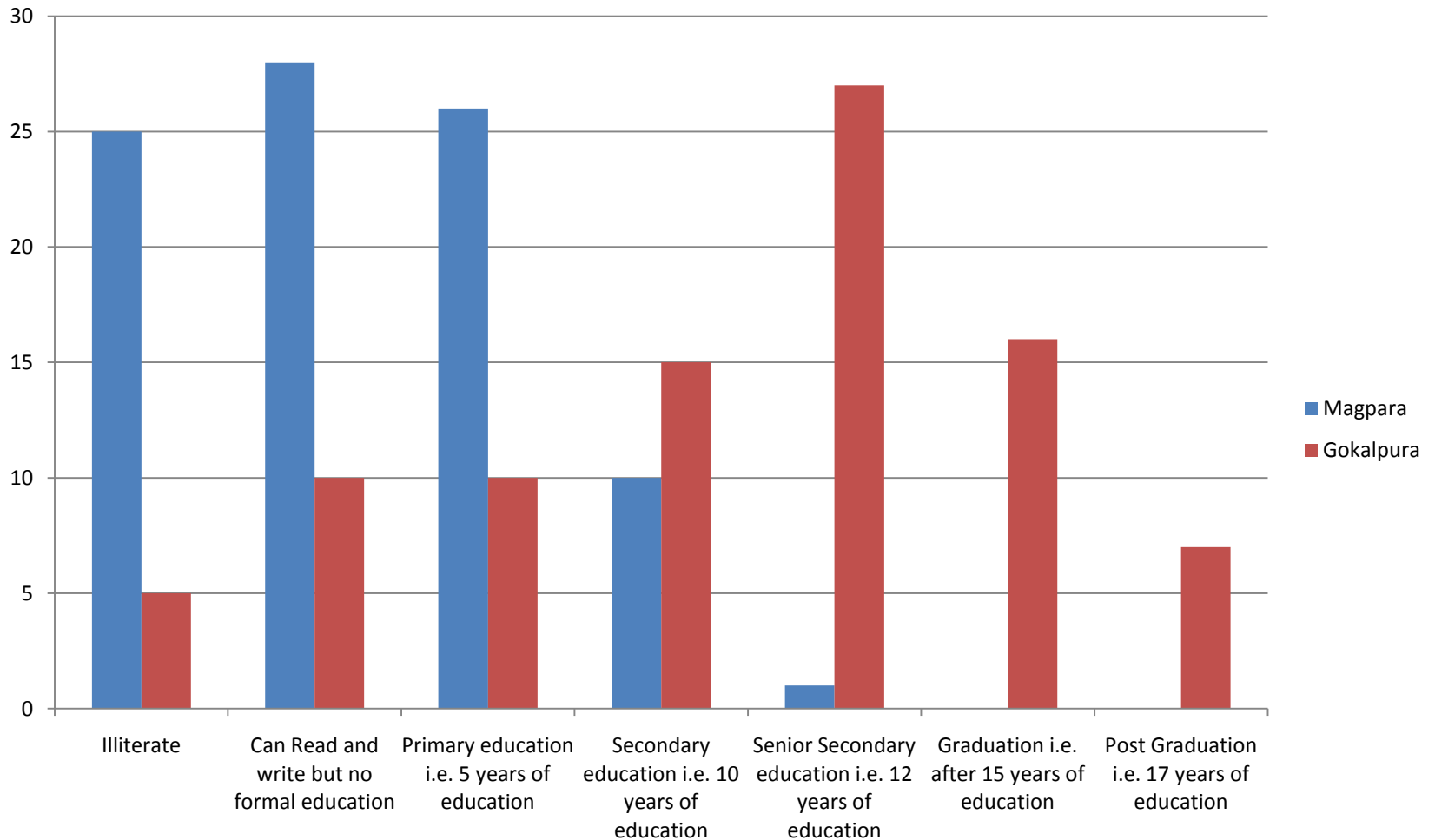
- **Methods:** A pre-designed face to face interview schedule has been administered to collect the data regarding the fertility indicators of women of reproductive age from the selected community.
- All pregnancy and their outcomes taking place; between March, 2013 to March, 2014 will be recorded for computation of the fertility indicators.

Results

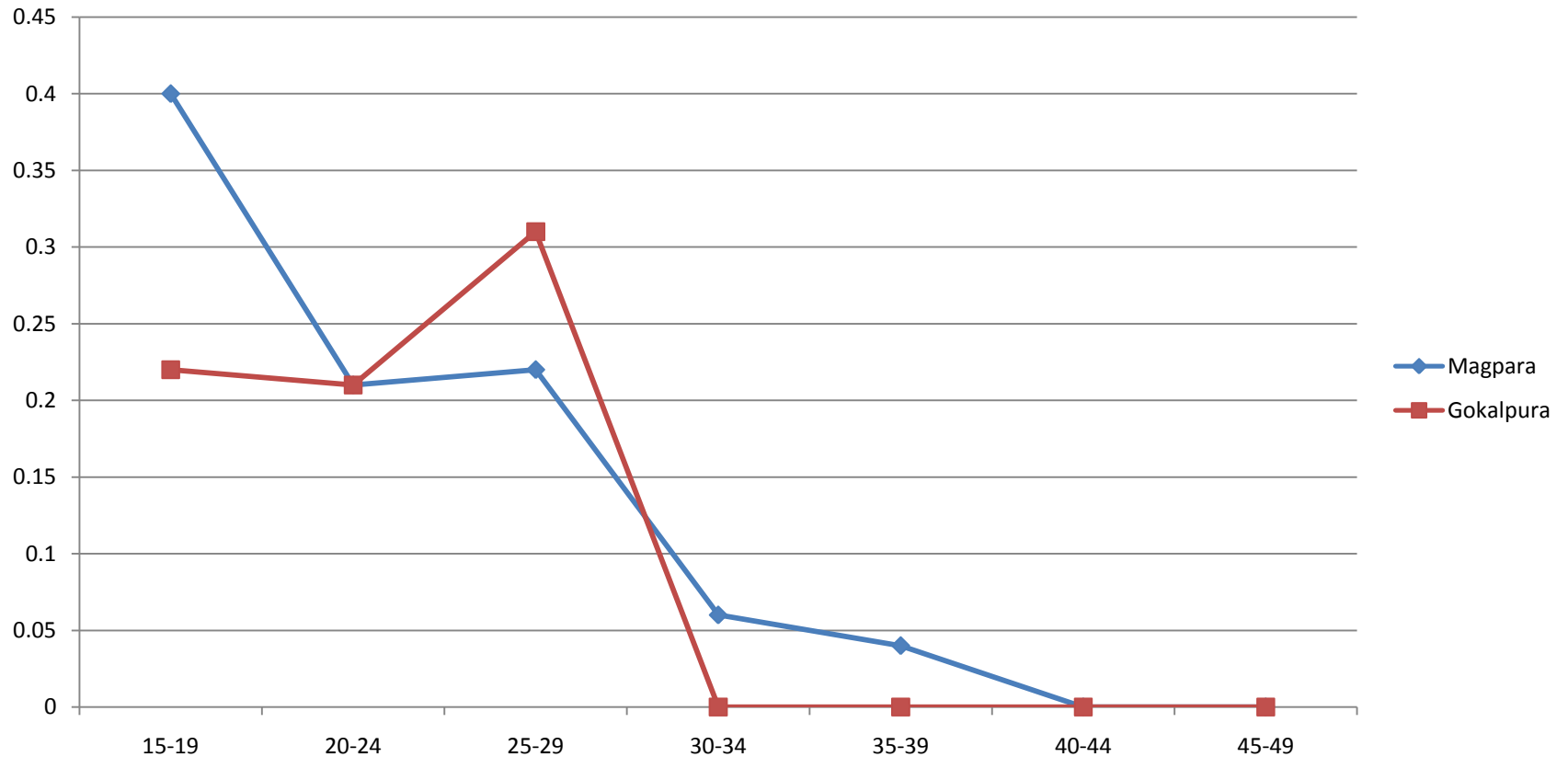
1) Age group distribution of sample population of Magpara and Gokalpura (n=90)



2) The level of education among the sample female population of Magpara and Gokalpura



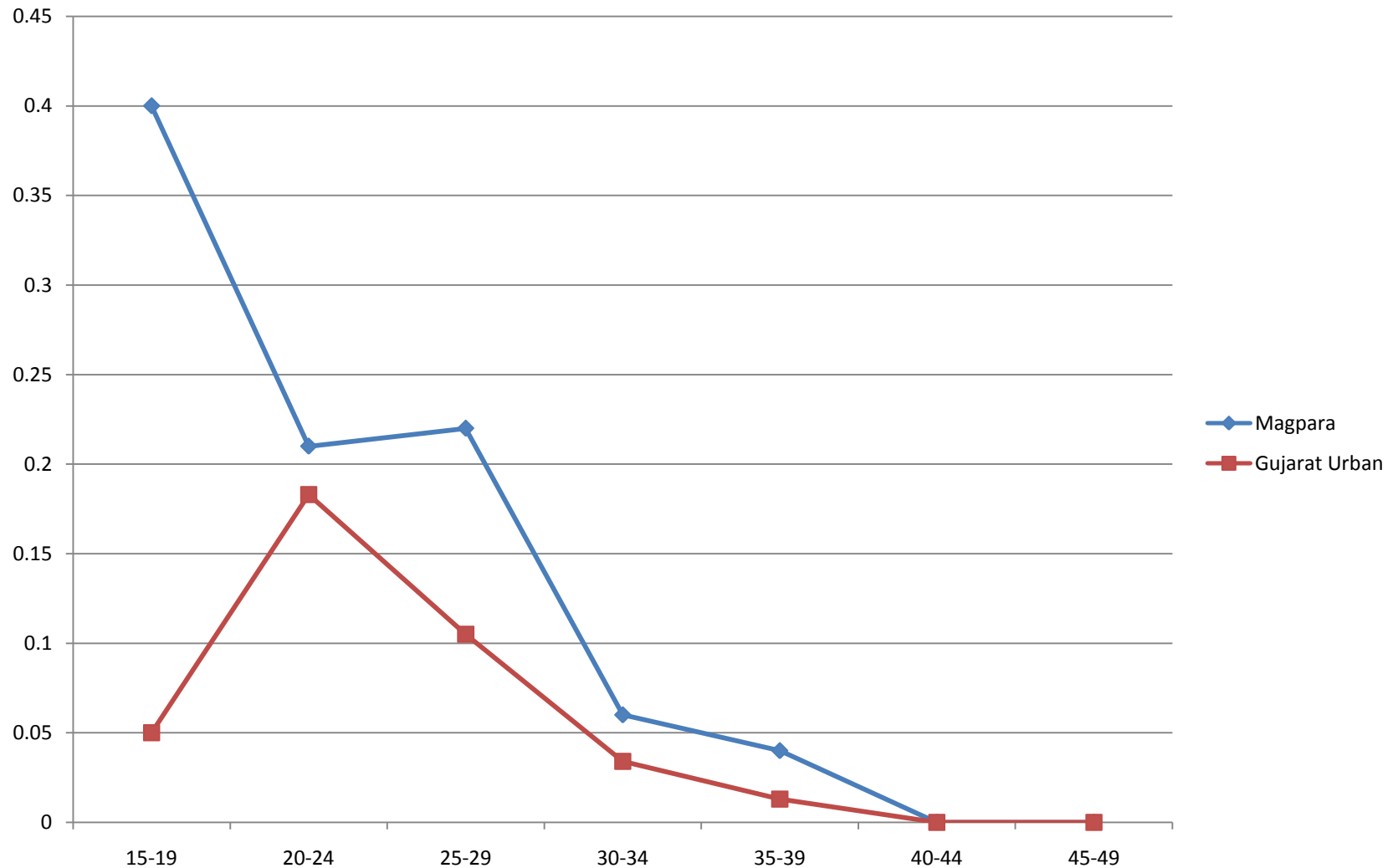
3) Age Specific Fertility Rates of Magpara and Gokalpura by Age groups (15-49 years in 5 years intervals)



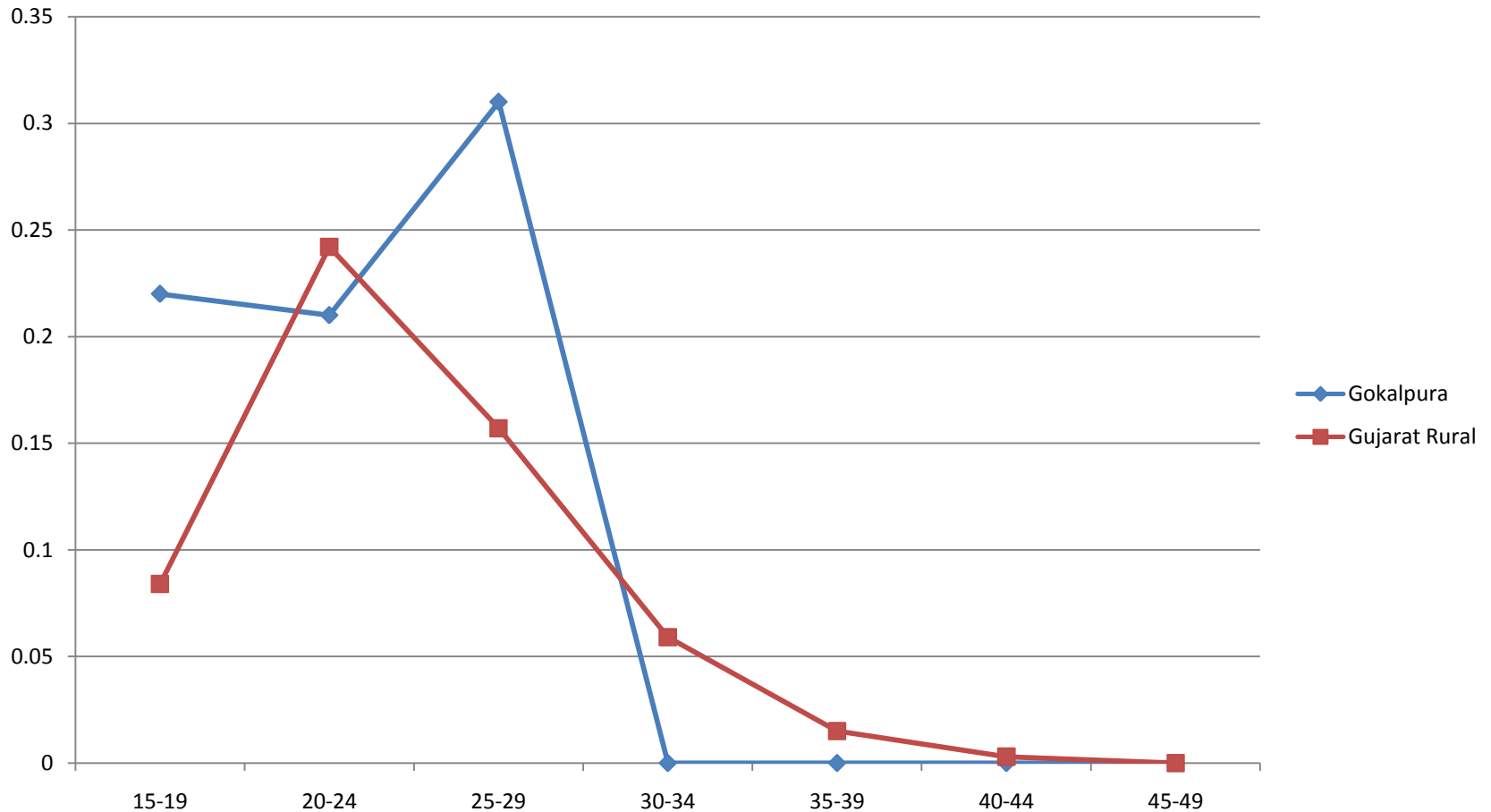
4) Comparison between the mean age at marriage and total fertility rate among the Magpara Urban slum, Gokalpura village and state of Gujarat

Indicator/Area	Magpara	Gokalpura	Gujarat (as per NFHS-3)8
Mean age at marriage	18.9	18.2	19
Total fertility rate	4.62	3.7	1.9 (Gujarat Urban) 2.8 (Gujarat Rural)

5) Comparison of Age specific Fertility rate of Magpara and Gujarat Urban by Age groups (15-49 years in 5 years intervals)



6) Comparison of Age specific Fertility rate of Gokalpura and Gujarat Rural by Age groups (15-49 years in 5 years intervals)



7) Total Fertility Rate by Level of Education among the sample women population of Magpara and Gokalpura

Level of Education	Total Fertility Rate	
	Magpara	Gokalpura
No education	4.6	3.7
5 years of education	3.9	3.1
10 years of education	2.8	2.9
≥12 years of Education	2.6	2.5

8) Table below shows the comparison of Total Fertility Rate in sample women population of Magpara and Gokalpura by Knowledge about the contraceptives

Knowledge about contraceptives	Total Fertility Rate	
	Magpara	Gokalpura
Women having knowledge of contraceptives	3.1	2.6
Women having no knowledge of contraceptives	4.2	1.9

Discussion

- The Age -specific fertility rates for Magpara and Gokalpura are higher than the age specific fertility rate of Gujarat urban and rural respectively.
- The total fertility rate of Magpara slum is more than that of the Gokalpura village.
- The total fertility rate of Magpara and Gokalpura is more than that of Gujarat urban and rural respectively.
- Total fertility rate among illiterates is higher as compared to women having at least 5 years of education.
- Total fertility rate is higher among the illiterate women of Magpara as compared to illiterate women of Gokalpura due to the fact that 47 percent of women in Magpara do not have any knowledge about contraceptives.

Conclusion

- Fertility is an important measure for population stabilization. According to the National Population Policy 2000, India should have reached the replacement-level fertility rate of 2.1 by 2010, and ought to attain population stabilization at 145 crore by 2045.
- However, we are failing to take into account the population living in urban slum areas. Urban slums are the fastest growing corners of the fast paced urbanization of Indian towns and cities and the living conditions of these slum areas are unhygienic and unsafe. Moreover, people suffer from illiteracy and necessary knowledge which is required for development.

- From the current study on fertility patterns in urban slums re-emphasize the same situation and on comparing the figures with that of a village, infer that the situation is worse in slums than in villages. Thus, it can be safely concluded from the study that fertility control measures need urgent attention in the urban slum areas.

Bibliography

1. Neelavar Vasudevarao Raghu Ram (1974). *Management and Population. A systems view and review of family planning programme in India* (D.K.Publishing House, pp.52). Gujarat Institute of Development Research, Ahemdabad, Gujarat, India. Available from <http://www.popline.org/node/516913#sthash.1N9YvTFY.dpuf>
Last accessed on December 30, 2013
2. Total Fertility Rate. (2013) *The World factbook*. Central Intelligence Agency (US) Available from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2127rank.html>
Last accessed on December 30,2013
3. P.M.Kulkarni(2011). *Towards an Explanation of India's Fertility Transition*. George Simmons Memorial lecture(33rd Annual Conference of the Indian Association for the Study of Population). Lucknow, Uttar Pradesh, India.
4. Kamla Gupta, Fred Arnold, H.Lhungdim (2005-06). *Health and Living Conditions in Eight Indian Cities*(pp. 48). National Family health Survey (NFHS-3), India, 2005-06. Mumbai: International Institute for Population Sciences; Calverton, Maryland, USA: ICF Macro.

5. B Puwar, T Puwar, K Trivedi(2008). *Study of Fertility Indicators In Slum Area of Ahmedabad City In India*. The Internet Journal of Health. 2008(Volume 9 Number 1) Available from: <http://ispub.com/IJH/9/1/12215> Last accessed on 12-05-2014.
6. Key Indicators of Urban Slums in India (2013). *National Sample Survey Report (69th Round)*. Ministry of Statistics and Programme Implementation. Government of India. Available from http://mospi.nic.in/Mospi_New/upload/Press_Release_NSS_69th_Round.htm Last accessed on December 31, 2013
7. Naomi Rutenberg, Mohamed Ayad, Luis Hernando Ochoa, Marlin Wilkinson (1991). *Comparative Studies on Knowledge and Use of Contraceptives*. Demographic and Health Survey Program. Institute of Resource Development. Available from <http://dhsprogram.com/pubs/pdf/CS6/CS6.pdf>
8. India. Ministry of Health and family Welfare. *National Family Health Survey- 3*. Conducted by International Institute of Population Sciences. Reports available from : <http://www.rchiips.org/nfhs/> Last accessed on 12-05-2014

Thank You