



## Estimating Number of Fertilizable Women an Effect on Increase in Isfahan Population (Based On Anticipate Till 2060)

Reza KIANI<sup>1</sup>, Nadia SHAKERI<sup>2</sup>

<sup>1</sup>(Ph.D) Supervisor of Inspection and Supervision Department, Medical Records' Center, Social Security Organization, Isfahan

<sup>2</sup>MA Student, Islamic Azad University, Yasooj Branch

Received: 01.02.2015; Accepted: 06.06.2015

**Abstract.** Isfahan as province which follows population pattern of the country (Iran) is progress to the elderliness. One of the most important factors of fertility is women's ability and age. To achieve the best welfare in society, scientific and statistical anticipates are needed which are emphasize by women's health area. Purpose of this study is estimating number fertilizable women till 2060 based on each year. Participants of this study are population of Isfahan (Iran). Data analysis is based on demographic software techniques. As it's investigated age of fertility is 15 to 49. Although this percentage in the first year of study (2011) is more than 60% but after that, in next years, decrease and finally in 2060 it's quite a bit more than 41%. In other word, percentage of fertilizable women decreased 19% in 2060 into 2011. Findings of this study indicate that number of fertilizable women till 2015 to 2060 will be changed. On the other word, numbers of fertilizable women in 2060 are more than current year. This means extremely decrease of fertility! So, it's completely impossible, even if the country politics is based on fertility.

**Keywords:** Fertility, Population Anticipate, Mother's Health, Women's Elderliness, Health of Society, Isfahan, Iran

### 1. INTRODUCTION

Demography is the study of human populations – their size, composition and distribution across place – and the process through which populations change. Births, deaths and migration are the 'big three' of demography, jointly producing population stability or change. A population's composition may be described in terms of basic demographic features – age, sex, family and household status – and by features of the population's social and economic context – ethnicity, religion, language, education, occupation, income and wealth. The distribution of populations can be defined at multiple levels (local, regional, national, global) and with different types of boundaries (political, economic, and geographic). Demography is a central component of societal contexts and social change.

High mortality logically implies high fertility. For instance, a mean life expectancy at birth of 25 years compels – on average – every woman surviving to menopause to give birth to approximately five children to maintain existing population size. Purpose of this study is estimating number fertilizable women till 2060 based on each year.

### 2. BACKGROUND

One of the most important factors of fertility is women's ability and age. According to experts of World Health Organization (WHO), fertility age is between 15 to 49 years and this period is universal. On the other side, to achieve the best welfare in society, scientific and statistical anticipates are needed which are emphasize by women's health area. This study investigates population of Isfahan. Purpose of this study is estimating number fertilizable women till 2060

\*Corresponding author. Email Address: kiani.abadan@yahoo.com

based on each year. Population Future studies in Iran start after the first statistic by organization, research centers and investigators of demographic and now is continues. During this period many researches done. Such as anticipate of Social Study Institute, Tehran university (1335) till 1365, anticipate of H.Farzaneh & A.S.Darbandi (1345) till 1370, anticipate of Economic Research Institute of Tehran university (1345) based on statistic till 1360, Ministry of Health's anticipate (1355) based on statistics till 1385, anticipate of Program and Budget Organization (1345) based on statistic till 1385, anticipate of Zanjani, T.Noorelahi and A.R.Saharkhiz (1388) based on statistic in 1385 to 1405 so on. Other anticipates can add to but according to previous explanations above examples are the most important one. The process which is emphasis by this study is attention to local anticipate versus national one. Iran is a wide country which its citizenship has different believes and thoughts, so, in many cases huge anticipate and generalize it to all locale of Iran is hasn't valued usage.

### 3. METHODS

This is an applied one which is developed descriptively and statistically. Participants of this study are population of Isfahan. Data analysis is based on demographic software techniques.

### 4. RESULTS

One of the most important factors in process of fertilities changing and danger of elderliness is percentage of fertilizable women. As mentioned in previous studies the age of fertility is 15 to 49. Although this percentage in the first year of study (2011) is more than 60% but after that, in next years, decrease and finally in 2060 it's quite a bit more than 41%. In other word, percentage of fertilizable women decreased 19% in 2060 into 2011. This problem effects on decrease in fertility rate. Table (1) shows fertilizable women of 2011 into 2060.

**Table 1.** Population of fertilizable women -2011 into 2060.

| <b>Population(millions)</b>     |              |                                 |              |
|---------------------------------|--------------|---------------------------------|--------------|
| <b>fertilizable women 15-49</b> | <b>years</b> | <b>fertilizable women 15-49</b> | <b>years</b> |
| 47.32                           | <b>2036</b>  | 60.77                           | <b>2011</b>  |
| 46.29                           | <b>2037</b>  | 60.31                           | <b>2012</b>  |
| 45.29                           | <b>2038</b>  | 59.87                           | <b>2013</b>  |
| 44.35                           | <b>2039</b>  | 59.43                           | <b>2014</b>  |
| 43.52                           | <b>2040</b>  | 58.98                           | <b>2015</b>  |
| 42.82                           | <b>2041</b>  | 58.51                           | <b>2016</b>  |
| 42.28                           | <b>2042</b>  | 58.02                           | <b>2017</b>  |
| 41.89                           | <b>2043</b>  | 57.51                           | <b>2018</b>  |
| 41.62                           | <b>2044</b>  | 57.02                           | <b>2019</b>  |
| 41.43                           | <b>2045</b>  | 56.56                           | <b>2020</b>  |
| 41.26                           | <b>2046</b>  | 56.15                           | <b>2021</b>  |
| 41.13                           | <b>2047</b>  | 55.79                           | <b>2022</b>  |
| 41.02                           | <b>2048</b>  | 55.47                           | <b>2023</b>  |
| 40.95                           | <b>2049</b>  | 55.18                           | <b>2024</b>  |
| 40.92                           | <b>2050</b>  | 54.88                           | <b>2025</b>  |
| 40.92                           | <b>2051</b>  | 54.53                           | <b>2026</b>  |

Estimating Number of Fertilizable Women an Effect on Increase in Isfahan Population (Based On Anticipate Till 2060)

|       |      |       |      |
|-------|------|-------|------|
| 40.96 | 2052 | 54.25 | 2027 |
| 41.02 | 2053 | 53.91 | 2028 |
| 41.09 | 2054 | 53.48 | 2029 |
| 41.15 | 2055 | 52.93 | 2030 |
| 41.19 | 2056 | 52.24 | 2031 |
| 41.21 | 2057 | 51.42 | 2032 |
| 41.19 | 2058 | 50.48 | 2033 |
| 41.15 | 2059 | 49.44 | 2034 |
| 41.08 | 2060 | 48.38 | 2035 |

Findings of this study indicate that number of fertilizable women till 2015 to 2060 will be changed. This number is 58.98% in 2015. According to anticipates of this study it will be 41.08 in 2060.

## 5. CONCLUSION

This is a research on population anticipate. Based on finding of this study number of fertilizable women is extremely decreased. On the other word, numbers of fertilizable women in 2060 are more than current year. According to last statistic till 2011 this number is 60.77% which is show increase in women age and their elderliness. Based on investigations of this study number of women who are more than 65 years old in 2060 is 25.43% whereas the percentage of age group of 0 to 40 is only 4.28. This means extremely decrease of fertility! So, it's completely impossible, even if the country politics is based on fertility. Increasing in fertility on current years caused decreasing of this problem's effect. So, the researcher's suggestion is performance of persuasive policy on increase of fertility.

## REFERENCES

- [1] Afshar kohan,J , Sadeghi , R: Interaction of population and social system Sociological Approach to population problem, *Journal of population Association*, 2007;2;195-215
- [2] Iran in statistics mirror N25. Iran statistics organization. (2005).
- [3] Iran statistical yearbook. Iran statistics organization. (2005).
- [4] Iran statistical yearbook. Iran statistics organization. (2006).
- [5] Mirzaie,m,Askari,A; Development programs International political events and orientation of demographic issues the 20<sup>th</sup> century;*Journal of population Association*,2006 ;1;81-103
- [6] Report of a WHO Expert Committee on Family Planning and Health Services” . Technical Report series. No. 479,WHO. Geneva. ( 1979 )
- [7] Roudi, N «The Demography of Islam», *Population Today*(1988), 9-6 :(3)16.
- [8] United Nations World Population Prospects: the 2010 Revision, Population Database, Department of Economic and Social Affairs, Population Division, (2010) New York.