

SPATIAL ANALYSIS OF RURAL WOMEN'S FERTILITY AND FAMILY PLANNING IN BAGHDAD GOVERNORATE

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Abstract

This study is dealt with rural women's fertility and family planning, where the research aimed to identify the levels of fertility for women and to identify the most important factors responsible for the current levels of fertility, and also aimed to identify the most important means used in family planning, where the study included eight districts, namely: (Al Rashidiya, That Al-Silasil, Taji, Mahmudiyah, Abu Ghraib, Tarmiyah, Al-Madaen, and Al-Zohour), and map (1) illustrates this. Preparing a questionnaire that was distributed in the field according to the relative importance of the administrative units and included (777) rural women aged 15 years and over, for the period from (2/12/2020 to 29/12/2020).

Through which it was reached the variation of fertility rates according to the administrative units of the governorate of Baghdad, where the rate reached (3.7) for the whole of the governorate, while it reached (4.4) in the district of Al-Zohour, which is the highest recorded rate.

The lowest rate of fertility levels was recorded in the district of Al-Taji, as it was found through the research high rates of fertility Females who do not leave a period of two years between pregnancy and another reached (61.3%), and a decrease in the use of family planning methods was found throughout the governorate, reaching (26.3%).

Introduction

The study of population dynamics begins with fertility. Fertility expresses the number of births a population has during a certain period. The fertility rate is affected by the age and gender structure of the population, family size and social norms, as well as the population policies followed.

Since these conditions differ during time and to a large extent between countries, the registered fertility rates other are different. Therefore, population fertility varies from one community to another and from one population group to another within the same community, and varies from one

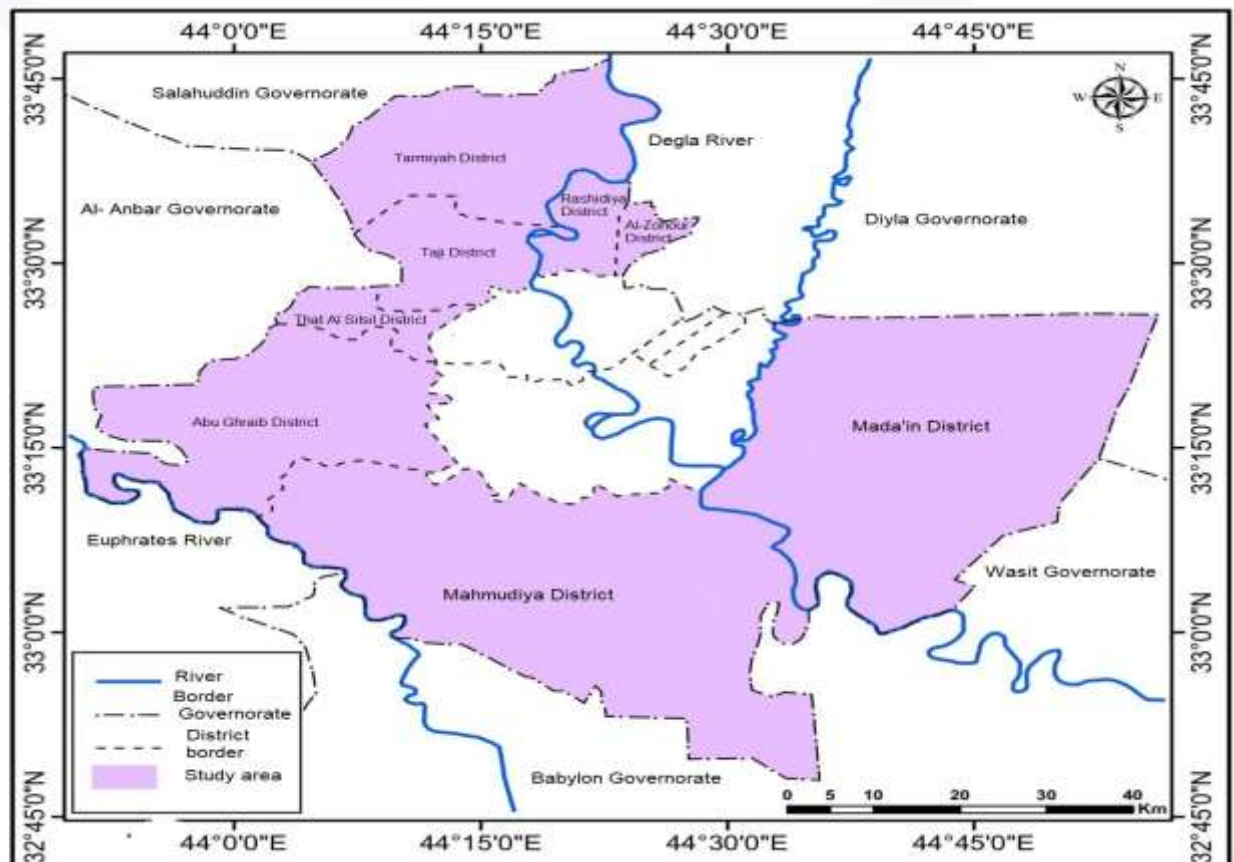


place to another and from one period of time to another even within the same community. It is itself a demographic characteristic on the other hand, and the study of fertility is more difficult than the study of death, because fertility is affected by economic, social and cultural variables, as well as the desires and behavior of society, while death is an inevitable result with no dispute (1).

Keywords: fertility, rural women, family planning.

First, the rate of children born:

The number of children a woman gives birth to is affected by a number of demographic, economic, social, political and cultural factors surrounding her. These factors interact with each other, and at the same time affect the process of procreation, and the view of society and spouses towards this process, although, in some cases, one of these factors can be the strongest, but it cannot work alone without being affected by other factors. The average number of



Map (1) The location of the study area for Baghdad governorate for the year 2020

References: Republic of Iraq, Ministry of Water Resources, General Directorate of Survey, Baghdad Governorate map - at a scale of 1/100,000, 2015.

children a woman gives birth to vary from one country to another, depending on her level of development, the educational level of females in them, and the extent of women's contribution to the labor market (2).

The population fertility rate varies from one place to another and from one period of time to another. The birth rate of any country may be subject to large fluctuations over time. There are also large differences in birth rates between groups and groups that make up the population according to the categories of residence, economic and social conditions, religion and culture(3).

The average number of children who were born in the study area was (3.7), as shown in Table (1), and this rate is higher than the birth rate at the level of Baghdad governorate, which is (2.9). (4)

The reason for the discrepancy in fertility rates is due to a group of factors, the most important of which are age at marriage, duration of marital life, customs and traditions, educational level in addition to the economic status of the family.

Second: The rate of children desired to be born:

It means the number of children that a woman actually wants to have, and this number often affects the number of children who have actually been born, and when we note Table (1), it becomes clear to us that there is a difference between the rate of children who have been born and the rate of children desired to be born, where the rate reached (4.7) at the level of the region The study This rate varies between administrative units, and Al-Zohour district recorded the highest rate, reaching (5.5), while the lowest rate was recorded in Al-Taji district, which amounted to (4.2), and this shows the reason for recording the highest fertility rates in Al-Zohour district.

Third: The period between one pregnancy and another:

Multiple studies conducted around the world have shown that negative outcomes affecting mothers during the peri-pregnancy period and infants result from close periods of pregnancy.

As a result, the World Health Organization recommended that the period after the last birth should not be less than 24 months before trying to have another

child in order to reduce the negative consequences affecting mothers and newborns (5).

Table (1) Numerical distribution and birth rates for rural women in Baghdad governorate for the year 2020

Total No. of married women	Aver. No. of children desired to have		Aver. No. of born-children		Administrative units
	No.	Aver.	No.	Aver.	
50	4.3	217	3.7	184	Rashidiya District
50	4.6	230	3.7	183	That Al Silasil District
50	4.2	209	3.4	169	Taji District
190	4.4	829	3.5	661	Mahmudiya District
96	4.9	471	4.0	355	Abu Ghraib District
149	4.8	715	3.8	563	Tarmiyah District
142	4.8	675	3.7	524	Mada'in District
50	5.5	275	4.4	219	Al-Zohour District
777	4.7	3653	3.7	2,894	Total

Reference: From the work of researchers based on the field study.

Despite these recommendations and the negative results affecting health resulting from the short interval between pregnancy and another, the percentage of women who do not leave two years between one pregnancy and another is still very high, reaching (61.3%) at the level of the countryside of Baghdad governorate, and this percentage varies significantly between administrative units and as shown in Table (2).

The decrease in the percentage of women who leave two pregnancies between one pregnancy and another is due to the lack of health and cultural awareness of the risks of frequent and repeated pregnancies on women's health.

Fourth: Factors affecting fertility levels:

Fertility levels in any society are a product of the interaction of demographic, economic, cultural and political factors with each other, and one of these factors may have a stronger role than others in some societies, due to the distinctiveness of this society with a certain characteristic, or its presence within specific influences that have to be affected by it more than others. .

1- Current age and age at first marriage:

The number of children having children increases with increasing age. As it is known, the age of the husband and wife has a great influence on the number of children they have, as the higher the age of the spouses, they will have obtained a greater number of children, or at least achieved the desired number of children, and the wife's age at the first marriage has a greater impact than what is known. Age occurs at the first marriage of the husband. A woman who marries at an early age is usually at a somewhat low level of education because she will leave school and devote herself to her home and children, and her view of childbearing is usually in the direction of having as many children as possible because she considers that these children will support her in the future.

Table (2)

Numerical and relative distribution of pregnancy spacing for two years in Baghdad governorate for the year 2020

No		Yes		Administrative units
%	No.	%	No.	
54.5	24	45.5	20	Rashidiya District
74.5	35	25.5	12	That Al Silasil District
67.4	29	32.6	14	Taji District
52.9	90	47.1	80	Mahmudiya District
53.3	48	46.7	42	Abu Ghraib District
71.1	97	28.9	40	Tarmiyah District
59.3	77	40.7	52	Mada'in District
71.1	32	28.9	13	Al-Zohour District
61.3	432	38.7	273	Total

Reference: From the work of researchers based on the field study.

2- Duration of married life:

The duration of the marital life is related to the woman's current age, her age at the first marriage, in addition to the stability of the marriage, so the longer the period a woman spends married, the more children she can have (6).

3- Educational level:

Population literature indicates the importance of the relationship of social and economic factors to the issue of population fertility and its trends. Perhaps the education level of the spouses is the most important variable in this regard. Studies show the importance of the impact of this type of variables on the reproductive behavior of individuals, and consider it an important and influential factor in shaping individuals' attitudes and the quality of decisions they can take in this regard.

A woman's education is an important tool in changing her view of her traditional roles and position in the family, which is often based on having children, raising them, and caring for and serving the husband. Raising the level of women's education effectively contributes to increasing their economic contribution (7).

4- Economic factors:

Undoubtedly, society and its economic conditions affect the rates of reproduction and fertility, as economic factors greatly affect the birth of children in the study area. so the average per capita income is inversely proportional to the number of children once and in a direct way again and strikingly depending on other factors (8).

The practical situation also affects the fertility rates, as working women are usually more educated, and therefore they may marry at an older age than the non-working and educated women, and the working woman spends a long period outside the home, and does not have enough time to take care of a large number of children and take care of them, and therefore She needs someone to help her raise children, or put them in nurseries and kindergartens, which increases the burden of supporting these children, and working and educated women are usually more knowledgeable and use family planning methods (9).

Fifthly: family planning methods:

The issue of family planning does not stem from a vacuum, but rather is a reflection of the nature of a set of independent social, economic, health and demographic variables and according to these variables the population policies of each community are drawn between natural resources and human resources - population - and the consequent population shortage or overpopulation (10).

Family planning has long been a major component of population policies and programs and an integral part of reproductive health. It enables couples and individuals to decide freely and responsibly the number of their children, the period of time between them and the timing of their children, a right that was firmly established at the United Nations Conference on Population and Development held in Cairo in 1974 and established in the 1974 Cairo Conference on Population and Development. The control of the reproductive process is therefore fundamental to their quality of life.

In fact, it has been widely shown that women's health and children's health are at high risk if pregnancy occurs too early, too late, too many or too close to each other (11).

The first step in the field of family planning in Iraq began in the second half of 1969, when Iraq participated in the Conference on Population Reproduction and Family Planning at the invitation of the World Health Organization. After that, the Family Planning Department was established in the Iraqi Medical Association. In the second half of 1971, the family planning department was established and named Establishment of the Iraqi Family Planning Association. The World Health Organization contributed to the planning of the Family Health Project to develop and expand maternal and child care and family planning services (1970-1971). Karkh Maternity Hospital in 1971, then three clinics was opened in Baghdad and Mosul (1972-1973).

In the period 1974-1980, there was an expansion in the opening of clinics in public hospitals in the governorate centers. The period (1981-1994) witnessed many changes, wars, difficulties, and the multifaceted economic blockade, as well as the population policy aimed at increasing forced childbirth, which negatively affected health services, especially in the field of maternal and child health, family planning, and the lack of contraceptives in Iraq through the Ministry of Health Or the private sector or from any other party, which led to a rise in morbidity and mortality of mothers and newborns and children under the age of five.

During the years (1994-1996), the Family Planning Association obtained a limited amount of means from the International Planned Parenthood Federation (IPPF) covering special health cases and a limited number of female beneficiaries for the benefit of the Ministry of Health institutions and voluntary clinics. The start of a project to support reproductive health services in 1996, funded by the United Nations Population Fund with the Iraqi Ministry of Health

and the Iraqi Family Planning Association, led to the rehabilitation and opening of family planning clinics to reach 136 in 2000, and the number of beneficiaries was 948,559.

The period (2001-2003) witnessed the complementary phase of the project to improve the quality of reproductive health and obstetric services in Iraq, which also included the provision of family planning methods as well as the equipment of clinics and training of workers to develop and raise performance efficiency. The United Nations Population Fund (2004-2005) provided emergency support for services and the provision of family planning methods to cover the requirements and management of family planning clinics for the Ministry of Health and popular clinics, which was used for the year 2006.

Choosing the appropriate method of family planning is important for couples to achieve their reproductive desires in terms of preventing pregnancy too early or too late, , or to influence the time between births or to limit the number of children to stop having children.

The results of the Multiple Indicator Cluster Survey in Iraq (2006) showed an increase in the use of family planning methods with the increase in the number of children in the family. It also found an increase in the rate of use in urban areas (53%) compared to rural areas (44%), and contraceptive use rates rise with the increase in the educational level of married women (12).

As for the study area, it is clear from Table (3) that the percentage of women who use family planning methods is still very low, reaching (26.3%), and the highest percentage was recorded in Abu Ghraib district, which amounted to (34.5%), while the lowest percentage was (16.7%).) and recorded in the district of Tarmiyah.

As for the means used, cereals ranked first, with a percentage of use (62.1%), The use of the coil came in the second place with a rate of (23.6%), as for periodic abstinence, the percentage reached (7.9%), and a percentage of (7.9%) was recorded for the use of sterilization (the contract), and the use of injections with needles came at a rate of (3.4%).

Sixth: Obtaining medical care:

Maternal health care refers to the concept that includes family planning care, preconceived conception, pregnancy and postpartum, including advance care and health promotion, screenings and interventions for women of reproductive age; To reduce the risk factors that may affect future pregnancies,

while prenatal care is the comprehensive care that women receive or provide for themselves during pregnancy, and this is evident through women who receive prenatal health care in an early period They have better deliveries than those women who receive less or no care during pregnancy (13).

By following up on reproductive health indicators, we find that Iraq has made remarkable progress in reducing maternal mortality and improving maternal health, as the maternal mortality ratio (MMR) decreased, according to international surveys, from 291 deaths per 100,000 live births in 1999 to 84 deaths per 100,000 live births in 2006/2007. Despite this, there are many indicators that indicate the urgent need to develop reproductive health services in Iraq to improve maternal health, including the quality of services provided to women during pregnancy, childbirth and the postpartum period, and their response to the health needs of women in Iraq in the public and private sectors.

Table (3) The numerical and relative distribution of family planning methods used according to the administrative units of Baghdad Governorate for the year 2020

Type of the medium used										Use of the means				Administrative units
Sterilization (Holding)		Injection		Periodic abstinence		Pills		spiral		No		Yes		
%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	
0.0	0	0.0	0	0.0	0	80.0	12	20.0	3	70.0	35	30.0	15	Rashidiya District
9.1	1	0.0	0	18.2	2	36.4	4	36.4	4	80.0	40	20.0	10	That Al Silasil District
0.0	0	0.0	0	18.2	2	18.2	2	63.6	7	78.0	39	22.0	11	Taji District
19.9	10	1.6	1	7.3	6	51.8	33	23.6	16	65.8	125	34.2	65	Mahmudiya District
6.1	2	12.2	4	0.0	0	76.0	25	18.2	6	65.5	63	34.5	33	Abu Ghraib District
11.1	2	0.0	0	24.3	3	60.4	17	28.5	5	83.3	124	16.7	25	Tarmiyah District
2.6	1	4.2	2	4.2	2	77.2	25	13.5	7	74.6	106	25.4	36	Mada'in District
0.0	0	0.0	0	11.1	1	88.9	8	0.0	0	82.0	41	18.0	9	Al-Zohour District
7.9	16	3.4	7	7.9	16	62.1	126	23.6	48	73.7	573	26.3	204	Total

Reference: From the work of researchers based on the filed study.



The results of previous research in Iraq showed a high rate of use of health care services during pregnancy and childbirth. For example, the results of the Multiple Indicator Cluster Survey in its third session 2006 showed that about 84% of pregnant women received health care during pregnancy from qualified persons, and that more than half of the women had 4 or more visits. The results of the same survey also showed that 5.88% of women gave birth by skilled and qualified hands, and that 63% of women gave birth in a health institution (14).

As for the study area, the percentage of women receiving health care was (90.3%).

Health care before pregnancy:

It is a set of preventive and curative measures aimed at early detection and intervention before pregnancy and reducing or preventing the occurrence of health, behavioural, social and environmental risks affecting women's health, pregnancy and childbirth in order to obtain the best result: "a healthy pregnancy and safe delivery".

Health care before pregnancy helps women and couples maintain health in terms of following a healthy pattern, avoiding risks that affect health, and treating health problems and psychological, social and environmental conditions before pregnancy occurs to prevent any possible complications during pregnancy and the upcoming delivery (15).

The results of the field study indicated that the percentage of women receiving health care before pregnancy is still very low, reaching (12.5%), and that this percentage has clearly varied at the level of administrative units.

Health care during pregnancy:

Nations, regardless of their level of progress and advancement, and their different social systems, constantly stress the importance of caring for the human being in general and for the rising generations in particular. Hence, caring for the health of pregnant women and children has been a high priority in most parts of the world, as human care begins from the beginning of the formation of a fetus in his mother's womb. Therefore, caring for pregnant women is one of the most important reasons for the success of the formation of a natural family.

The provision of antenatal care services has been well proven to be effective when implemented in most countries. Pregnancy monitoring services by qualified cadres are relatively high in Iraq, as they cover 84% of pregnant women with at least one examination during pregnancy, knowing that almost all women receive an examination by doctors (16).

As for the study area, it is clear from Table (4) that the percentage of women who received health care during pregnancy was (97.6%).

Postpartum health care:

The time of delivery and its immediate aftermath is an important opportunity to provide life-saving health services to both the mother and the newborn. Recently, the Safe Motherhood Program has increased the emphasis on the importance of postpartum care by recommending that all women and newborns receive a health examination within two days of birth (17).

This period includes the first six weeks after childbirth, during which mothers face many health problems related to childbirth. These problems are not limited to acute health symptoms and have a short-term impact on the health of the mother, but also include health problems and their complications that cause chronic diseases related to reproduction, and many serious complications that threaten the life of mothers.

Moreover, about two thirds of maternal deaths occur after childbirth. Therefore, the World Health Organization recommended that every mother should have access to postpartum health care services during the first 24 hours, before the end of the first week after childbirth and after six weeks after childbirth, as postpartum care is an essential component of safe motherhood for its crucial role in reducing maternal mortality, and infants and to ensure the physical and mental health and well-being of mothers.

The results of the maternal health survey in the reproductive stage showed the disparities and intervention options that the percentage of demand and use of postpartum services is still low among Iraqi women, as only (38%) of women aged (15-49) years who gave birth to the last live birth during the previous five years For surveys in Iraq, they requested postpartum services. The report of the Ministry of Health 2011 indicated that the percentage of mothers benefiting from postpartum services is (51%) with one visit (18).

It is evident from the observation of Table (4) that the percentage of women who have access to postpartum health care services is (25.5%).

Table (4) The numerical and relative distribution of rural women's access to health care according to the administrative units of Baghdad Governorate for the year 2020

At the time of access to health care						Access to health care				Administrative units
After childbirth		During pregnancy		pre-pregnancy		No		Yes		
%	No.	%	No.	%	No.	%	No.	%	No.	
23.4	11	100.0	47	2.1	1	6.0	3	94.0	47	Rashidiya District
22.9	11	100.0	48	0.0	0	4.0	2	96.0	48	That Al Silasil District
0.0	0	100.0	41	2.4	1	18.0	9	82.0	41	Taji District
25.3	45	98.2	166	16.2	30	11.2	21	88.8	169	Mahmudiya District
20.2	19	96.8	91	33.0	32	2.1	2	97.9	94	Abu Ghraib District
30.9	41	96.3	128	9.0	12	10.7	16	89.3	133	Tarmiyah District
26.5	34	95.3	123	9.4	12	9.1	13	90.9	129	Mada'in District
43.9	18	100.0	41	0.0	0	18.0	9	82.0	41	Al-Zohour District
25.5	179	97.6	685	12.5	88	9.7	75	90.3	702	Total

Reference: From the work of researchers based on the field study.

Results:

1- A number of demographic, economic, social and cultural factors affected the number of children who were born, as the fertility rate in the study area reached (3.7).

2- The high percentage of women who did not leave for two years between one pregnancy and another, reaching (61.3%), and this is a dangerous indicator.

3- A number of factors contributed to the variation in fertility rates for rural women, the most important of which are the age at first marriage, the length of married life, and the educational level, in addition to the impact of economic factors.

4- Low rates of family planning methods used by rural women in Baghdad governorate, which amounted to (26.3%), and the use of pills was common among rural women in Baghdad governorate due to its ease of use and ease of access.

5- As for access to health care (maternity care), this indicator recorded high rates, reaching (90.3%) in Baghdad governorate, due to the high rate of access to health care during pregnancy, at a rate of (97.6%).

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