

The Use of Contraception in Algeria: An Analytical Study Through National Survey Data

استعمال وسائل منع الحمل في الجزائر: دراسة تحليلية من خلال معطيات المسوح الوطنية

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Abstract

In recent years, Algeria has witnessed a decline in the use of contraceptive methods, as indicated by various demographic surveys conducted within the framework of the national statistical system. This study aims to explore the impact of certain social and demographic factors, such as age, number of living children, residence area, educational level, housing sector, and employment, on the contraceptive use among Algerian women of reproductive age. The descriptive-analytical approach was employed, analyzing data from national surveys, including the 1987 National Fertility Survey, the 1992 Algerian Maternal and Child Health Survey, the 2002 Algerian Family Health Survey, and the 2006 MICS Cluster Survey. The findings reveal that fertility rates began to decline in the 1980s, leading to a decrease in the total number of children per woman, which reached 2.27 children per woman in 2006. The contraceptive use rate in 2006 was 61.4%.

Keywords: Family Planning, Fertility, Contraception, Birth Control, Demographic Growth.

ملخص:

شهدت الجزائر خلال السنوات الأخيرة حسب ما تشير إليه مختلف المسوحات الديموغرافية التي نفذت في إطار النشاط الإحصائي للمنظومة الإحصائية الجزائرية ظهور تراجع في استعمال وسائل منع الحمل، لهذا ارتأينا في هذا المقال معرفة تأثير بعض المميزات ذات الطبيعة الاجتماعية والديموغرافية، على غرار السن وعدد الأطفال الأحياء ووسط الإقامة والمستوى التعليمي وقطاع السكن والعمل، على مدى استعمال المرأة الجزائرية في سن الإنجاب لوسائل تنظيم الأسرة ولتحقيق أهداف الدراسة. تم اتباع المنهج الوصفي التحليلي، من خلال وصف وتحليل بيانات المسوحات الوطنية كالمسح الوطني حول الخصوبة سنة 1987 والمسح الجزائري لصحة الأم والطفل سنة 1992 والمسح الجزائري لصحة الأسرة سنة 2002 والمسح الوطني العنقودي MICS سنة 2006 وقد تم التوصل إلى النتائج التالية: منذ الثمانينات بدأت نسبة الخصوبة في التدني المستمر هذا ما أدى إلى انخفاض عدد الأطفال النهائي لكل امرأة إلى طفلين فقط حيث قدر سنة 2006 بـ 2.27 طفل لكل امرأة، بلغت نسبة استخدام وسائل منع الحمل 61.4% سنة 2006.

كلمات مفتاحية: التخطيط العائلي، الخصوبة، منع الحمل، المواليد، النمو الديموغرافي.

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Introduction

Between 1962 and 1988, Algeria's population more than doubled, increasing from 12.23 million to 22.8 million (ONS, 1989, p.5), resulting in a remarkable natural growth rate of 3.3% (Haffad, 2004, p. 97), one of the highest in the world. This increase was due to a significant decline in mortality rates, especially child mortality, which decreased from 131.7‰ in 1962 to 64.42‰ in 1987 (MSPRH, 2003, p. 4), a reflection of improved living standards in Algerian families and the establishment of numerous health facilities alongside free treatment.

At the same time, the birth rate continued to rise. By the early 1980s, the death rate had decreased to below 10‰, while the birth rate stood at 40.4‰ in 1984 (Flici et al, 2012, p. 5). In 1970, the total fertility rate was as high as eight children per woman, a reflection of high fertility levels driven by limited access to contraception and early marriages. The average age at first marriage for women was 21 years in 1980, compared to 19 years in 1970 (MSPRH, 2001, p. 5).

Algeria has since experienced a marked reduction in fertility rates, with the general fertility index declining from 7.4 children per woman in 1977 to 2.27 children per woman, as reported in the 2006 Multi-Indicator Cluster Survey. This decline in fertility coincided with the rapid expansion of contraceptive use, which began in earnest in the late 1960s. According to the Algerian Association for Demographic and Economic Research, 8% of women of reproductive age (15-49 years) were using contraception in 1968 (AARDES, 1970, p. 82), a figure that grew to 61.4% by the 2006 Multi-Indicator Cluster Survey (MICS3). This rapid adoption of contraceptive methods has been closely associated with the decline in fertility rates, prompting the following research question:

What is the extent of contraceptive use in Algeria?

Given the nature of the study, which focuses on the patterns of contraceptive use in Algeria, a descriptive research approach was adopted, involving the collection and analysis of data to draw meaningful conclusions. The study aims to achieve the following objectives:

- To ascertain the types of contraception methods employed in Algeria.
- To evaluate the extent of contraceptive use in Algeria from 1986 to 2006,

1. Historical Overview of Family Planning in Algeria

In the 1950s, following World War II, Algeria experienced significant population growth, primarily as a natural response to compensate for the substantial human losses incurred during the conflict. This rise in births was further exacerbated by the prolonged period of stagnation in fertility rates,

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which had been influenced by the absence of Algerian conscripts and the widespread poverty that characterized the era. This socio-economic context should be understood within the broader global circumstances of the time. By the end of the 1940s, Algeria's annual demographic growth was estimated at 1%.

However, this growth rate accelerated to 2.7%, with the population increasing from 10.5 million in 1962 to 12 million by 1966, and peaking at a growth rate of 3.4% by the late 1960s. Birth rates during the 1950s and 1960s were notably high, standing at 50‰ and 51‰, respectively. This period is typically associated with the Baby Boom phenomenon (Dekkar et al, 1999, p. 9).

Despite this demographic surge, the Algerian government did not view the increase in population as an obstacle to economic development. Rather, it was seen as one of several challenges that needed to be addressed through strong economic policies capable of keeping pace with demographic trends. This would, in turn, meet the growing demands for housing, educational facilities, healthcare, employment, and recreational services.

It is crucial to note that in 1966, the unemployment rate among the active population reached a staggering 33%. Demographers have argued that the reluctance to implement a formal population policy during this time was influenced by the ideological tensions of the Cold War. Algeria's alignment with the socialist bloc and its industrial policies led to a perception that population control, often associated with Western strategies, was aimed at asserting dominance over Third World countries and fostering capitalist agendas—frequently through the provision of financial aid in exchange for adopting such policies.

2. Phases of Family Planning in Algeria

2.1 Phase between 1962-1979

This period was marked by the first general census of population and housing conducted post-independence in 1966. The census data revealed that 57% of the population was under the age of 20, with 31.4% living in urban areas and approximately 68.6% residing in rural settings. The general mortality rate was recorded at 15.9%, and the mortality rate for children under one year old was alarmingly high at 174‰.

In parallel, the population growth rate stood at 3.4%, one of the highest globally (Dekkar et al, 1999, p. 23). Despite these statistics reflecting deteriorating health conditions and continuous population growth—particularly among the youth—the Algerian government did not take substantial steps toward adopting an official population control policy. Although the issue was recognized, it was neither openly nor formally acknowledged.

During the inaugural conference of the National Union of Algerian Women, President Houari Boumediene suggested that the organization could begin addressing family planning as both a woman's and a health right. He also discussed promoting family planning through legislative changes aimed at reducing dowries and discouraging polygamy. Following this, the women's association endorsed a resolution calling on the government to promote the use of contraceptives in order to protect the health of mothers and children (Kouaouci A, 1996, p. 62) .

In 1967, the first Family Planning Service was established at Mustapha Pasha University Hospital, initially focusing on infertility treatments and pregnancy planning. This marked a significant step toward implementing a demographic policy. The initiative was followed by two important reports on population growth in 1968.

The first report, produced by the National Council responsible for birth policy, titled *The Necessary Requirement for Family Planning*, emphasized the urgency of establishing a national network of family planning centers. The second report, authored by the State Secretariat for Planning, titled *The Impact of the Demographic Explosion on the Housing and Construction Problem*, highlighted the need for a family planning policy as a crucial solution to the ongoing housing shortage (Kouaouci A, 1996, p. 19).

During the same period, between 1967 and 1986, the Algerian Association for Demographic, Social, and Economic Research (AARDES) conducted a comprehensive field study to evaluate the attitudes of Algerian families toward family planning. The results of this study revealed a significant disparity in the awareness of birth control methods between urban and rural populations. In urban areas, 44.5% of women and 65% of men were aware of at least one birth control method.

However, these figures were considerably lower in rural areas, where only 15% of women and 20% of men were familiar with birth control methods (Khalifi Ahmad, 1991, p. 192) . This stark contrast highlighted a major issue, particularly among rural populations, who were at least 80% unaware of any contraceptive methods, whether traditional or modern. This was especially concerning, given that rural residents made up around three-quarters of the population at the time.

In response to growing concerns about population growth and its impact on the national infrastructure, the Ministers of Education and Health repeatedly emphasized the critical implications for the future of the educational system and the broader perception of family planning in Algeria.

In 1968, the Ministry of Health took a significant step by seeking guidance from the Supreme Islamic Council, requesting a fatwa regarding the use of birth control. The fatwa issued was unequivocal: decisions about birth control were to be made by individuals without any form of coercion. It also

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emphasized the importance of educational campaigns that would inform the public about the necessary conditions for raising healthy children (Ministry of Health and Population, 2004, p. 16).

Despite these progressive efforts, the official stance of the Algerian government remained cautious. This position was reaffirmed by President Houari Boumediene during the inauguration of the El Hadjar complex in 1969, where he remarked, "Algeria can accommodate 40 million people... regarding the demographic issue... we are not advocates of false solutions" (Safir T, 1999, p. 243).

Around the same time, in 1970, the National Survey of Statistics and Population was carried out by the National Institute of Public Health. The survey results indicated that 24% of married women of reproductive age were aware of at least one modern method of contraception, and this awareness increased to 48% among men.

Nonetheless, a significant proportion of the population remained unaware of these methods, 73.6% among women and 50.2% among men. During the survey, 8% of women reported using family planning methods, predominantly traditional ones (AARDES, 1970, p. 81). The survey highlighted a significant need for birth spacing among married women of reproductive age, especially as their familiarity with contraceptive methods exceeded their actual usage, and their fertility rates remained high. The goal was, therefore, to better engage and educate these women to implement family planning effectively.

The first World Population Conference held in Bucharest in 1974 did not introduce any novel approaches regarding the need for developing countries to adopt population policies. However, the head of the Algerian delegation emphasized that "changing international economic relations and adopting a development strategy aimed at a fair distribution of income among nations would create conditions for more growth and greater harmony between the economy and demographic factors" (Benkhelil R, 1998, p. 15). This statement by the delegation head echoed the sentiments of many developing nations during that era.

Kouaouci explained that the persistence of this position during that period was partly due to the rise in oil prices, which precipitated a severe global economic crisis. However, this crisis paradoxically resulted in substantial income for Algeria, thereby reinforcing its economic and political stance (Kouaouci A, 1996, p. 25).

In 1974, coinciding with the general adoption of free healthcare, the national program for birth spacing began at the Mother and Child Protection Center of Mustapha Pasha University Hospital. Subsequently, several centers were established across the country. Furthermore, the Health Law ratified in

1976, specifically in its Article 119, acknowledged the adoption of a national policy for birth spacing utilizing contraceptive methods (Kouaouci A, 1996, p. 30).

This program, spanning between 1974 and 1979, received significant funding from external sources, including the United Nations Fund for Population Activities (UNFPA), the World Health Organization (WHO), and UNICEF. These funds were allocated for acquiring equipment for mother and child care centers, purchasing contraceptives, and covering the training of professionals in this program, both within Algeria and abroad (Kouaouci A, 1996, p. 30).

2.2 Phase between 1980-1988

At the outset of the 1980s, Algeria faced a series of economic challenges, primarily driven by a sharp decline in oil prices, a key source of national revenue. This economic downturn had a direct and significant impact on the government's capacity to sustain its commitments, including the planned housing programs, job creation efforts, the provision of free healthcare, and other essential subsidies.

These economic difficulties prompted a critical reevaluation of demographic growth issues. Initially resistant to the idea of a formal population policy and relying solely on the outcomes of the national birth spacing program, the need for a comprehensive national population policy became increasingly urgent. This urgency was driven by the rapid population growth and the government's growing inability to meet the rising demands of the population.

The shift in Algeria's stance became apparent during the extraordinary conference of the National Liberation Front in 1981, where delegates emphasized the pressing need to implement a comprehensive family policy, incorporating measures for birth spacing. They urged the government to accelerate the review and enactment of family law. Furthermore, in the general report for the five-year plan covering 1980-1984, it was declared that "Working towards an effective reduction in the birth rate is a necessary condition to improve the effectiveness of economic construction and the ability to meet the social requirements of the population satisfactorily and sustainably" (Kouaouci A, 1996, p. 33).

In 1983, the first National Program for Demographic Growth Control (PNMCD) was officially ratified, organized around three main objectives:

- Development of birth spacing activities.
- Advancement of studies and research focused on determining the factors affecting fertility.

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- Expansion of informative, awareness-raising, and educational activities related to family planning.

This policy represented the culmination of efforts initiated under the birth spacing program, which had significantly contributed to reducing child mortality rates by improving the health conditions of mothers and children.

The declaration of this policy took place during the Second Population Conference held in Mexico City in 1984, a pivotal event attended by developing countries experiencing population booms and seeking external support for their population policies. At this conference, Algeria articulated a new stance that marked a clear departure from its previous positions.

Subsequently, several important surveys were carried out to assess the impact and progress of these policies. Notably, the National Fertility Survey (ENAF) conducted in 1986 marked the beginning of a demographic transition, according to specialists. This transition was further supported by data from the General Population and Housing Census of 1987.

That same year also witnessed the establishment of the Algerian Association for Family Planning (AAPF), a significant step forward in the country's commitment to addressing population issues. Additionally, 1987 was notable for the initiation of economic reforms, particularly following the significant political and social upheavals of October 5, 1988. These reforms aimed at restructuring the economy and were closely linked to the broader demographic strategies being pursued by the government.

3.2 Phase between 1988 and the Outlook for 2010

From 1988 onwards, the Algerian Association for Family Planning was entrusted with overseeing the National Program for Demographic Growth Control until 1994 (Benkhelil R, 1998, p. 16). This period was marked by significant challenges, including widespread insecurity, high unemployment, and political instability characterized by frequent changes in government. Additionally, national revenues declined, compelling the state to focus on more immediate concerns, thereby sidelining demographic growth issues. As a result, Mother and Child Protection Centers struggled with significant shortages of contraceptives, as demand consistently outpaced the available supply.

During this tumultuous period, several international organizations played crucial roles in supporting demographic research and surveys. Notably, UNICEF funded studies focused on child mortality, while the United Nations Population Fund (UNFPA) provided grants totaling 9 million dollars between 1983 and 1989 (Kouaouci A, 1996, p. 35).

Despite these challenges, the population policy (family planning) did not come to a complete halt. Instead, it underwent significant revisions,

particularly influenced by the recommendations of the International Conference on Population held in Cairo in 1994. New objectives were set with the goal of improving health and demographic indicators by the year 2000, and these goals were notably achieved ahead of schedule.

Following these successes, Algeria implemented additional measures after its participation in the UN General Assembly session in New York in 1999 and the Millennium Summit in 2000. The key targets included:

- Achieving a total fertility rate of 2.1 children per woman.
- Increasing contraceptive usage to 65% by promoting modern contraceptive methods.
- Reducing the maternal mortality rate by 50%, which stood at 117 deaths per 100,000 live births in 1999, and decreasing the child mortality rate by 30%, which was recorded at 31.2‰ in 2002.
- Ensuring that 95% of births take place in hospital settings.
- Reducing the incidence of reproductive cancers among women of reproductive age by 25%, which was estimated at 0.2‰ in 2002.
- Reaching an expected lifespan of 75 years at birth for both sexes by 2010.

The effectiveness of these population policies was further validated through the evaluation of implemented programs. Notable among these were the 2002 National Population Health Survey, funded by the Arab League, and the 2004 investigation into maternal and perinatal mortality, funded by the World Health Organization. These studies collectively confirmed significant improvements across most demographic and health indicators (MSPRH, 2003, p. 67).

In addition, a special program focusing on maternal and child health was launched in 2002 in cooperation with the United Nations Population Fund, with a duration spanning six years, from 2002 to 2006. This initiative was complemented by revitalized cooperation between Algeria and Belgium, particularly in the fields of health and development. These efforts were notably concentrated on improving reproductive health care, combating maternal mortality, and addressing AIDS in the Tamanrasset province. The investigation related to these initiatives commenced before the end of 2005 (MSPRH, 2003, p. 79).

3. Awareness of Contraceptive Methods and Types

The awareness rate of contraceptive methods among surveyed women can be measured in two ways: In the first method, women are asked to name and count all the contraceptive methods they know without assistance. In the

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second method, the interviewer lists all contraceptive methods and asks the respondent to identify those they are familiar with.

The second method is preferred because it eliminates the factor of forgetfulness, as recent studies have shown that not presenting or mentioning contraceptive methods to the respondent does not allow for an accurate assessment of the real level of awareness and their application. Data in this area was collected using the second method.

Table (01): Distribution of Non-Single Reproductive Age Women (15 – 49 years) by Awareness of Contraceptive Methods

Awareness of Contraceptive Methods	1986 ENAF(1)	1992 PAPCHILD(2)	2002 PAPFAM(3)	2006 MICS3(4)
Pills	97.7	98.5	99.9	99.1
IUD	84.5	98.3	94.2	88.6
Condom	50.5	60.5	69.3	69.6
Injection	77.7	67.5	71.6	62.3
Vasectomy	-	-	24.6	9.1
Tubal Ligation	68.5	60.5	63.7	61.1
Topical Creams or Gels	-	-	37.4	19.9
Withdrawal	52.5	44.1	67.6	59.8
Periodic Abstinence	45.9	49.7	76	73.1
Breastfeeding	-	80	85	83
Other Methods	37.2	54.4	42	6.7

Source: (1) National Fertility Survey, 1986, p.123 (2) Algerian Survey on Maternal and Child Health, 1992, p.145, (3) Special Survey on Family Health, 2002, p. 129, (4) Algerian Multi-Indicator Survey, 2006, p. 145

Observational data from various national surveys conducted in Algeria provide a comprehensive overview of the evolving awareness and utilization of contraceptive methods among women. These findings reveal significant trends and shifts in contraceptive knowledge over several decades.

According to the Algerian National Survey on Fertility in 1986, a remarkable 97.7% of surveyed women were aware of contraceptive pills, making it the most recognized method at the time. This was closely followed by 84.5% awareness of Intrauterine Devices (IUDs), 77.7% for injectables, and 68.5% for female sterilization. Awareness of withdrawal was reported by 52.5% of women, and periodic abstinence by 45.9%.

By 1992, the Algerian Special Survey on Maternal and Child Health showed a slight increase in awareness: 98.3% of women knew about contraceptive pills, 86.1% about IUDs, and 67.5% about injectables. Notably, the survey highlighted a rise in awareness of traditional contraceptive methods. For example, 80% of surveyed women considered breastfeeding as a method to delay pregnancy, significantly impacting the data, as this method was not included in the 1986 survey. Following breastfeeding, awareness rates were 49.7% for periodic abstinence and 44.1% for withdrawal. Excluding breastfeeding, awareness of traditional methods did not exceed 50% among surveyed women in 1992.

In the 2002 Algerian Special Survey on Family Health, awareness levels had further increased, with 99.9% of women knowledgeable about pills, 94.2% about IUDs, and 71.6% about injectables. This survey also noted the emergence of awareness regarding topical creams, with 37.3% recognition—a method not identified in previous surveys. Tubal ligation was recognized by 63.7% of women, and awareness of breastfeeding continued to rise, reaching an estimated 85%. Awareness rates for periodic abstinence and withdrawal were 76% and 67.6%, respectively.

The 2006 Algerian Multi-Indicator Survey showed a slight fluctuation in these trends. Awareness of contraceptive pills was at 99.1%, IUDs at 88.6%, and injectables at 69.6%. Awareness of topical creams dropped to 19.9%, while tubal ligation was known by 61.1% of women, reflecting a decrease that could be attributed to advancements in modern contraceptive methods. However, the awareness of breastfeeding remained stable at 83%, followed by periodic abstinence at 73.1%, and withdrawal at 59.8%.

These surveys reflect a dramatic increase in contraceptive awareness, from as low as 26.5% in 1968, according to a demographic-social survey by the Algerian Association for Demographic, Economic, and Social Research (AARDES), to 98.3% in 1986, and finally reaching 99.2% in 2006, according to the Algerian Special Survey on Maternal and Child Health.

4. Utilization Rate of Contraceptive Methods

The utilization rate of contraceptive methods among Algerian women provides insights into actual contraceptive use, which is a direct determinant of fertility levels. This metric refers to the use of any contraceptive method by previously or currently married women during their reproductive period.

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The current use rate is typically estimated from the number of users of these methods during the survey or in the month preceding the survey among married women of reproductive age at the time of the survey. This data is crucial for understanding the practical impact of awareness and availability of contraceptive methods on population growth control efforts.

Table (02): Utilization Rates of Contraceptive Methods by Method and Their Development Over the Period 1986-2006.

Type of Method	1986 ENAF (1)	1992 PAPCHILD (2)	2002 PAPFAM (3)	2006 MICS3 (4)
Pills	26.4%	38.7%	45.5%	45.9%
IUD	2.1%	2.4%	3.0%	2.3%
Condom	0.5%	0.7%	1.2%	2.3%
Injectables	0.6%	0.1%	1.8%	1.4%
Other Methods	2.1%	1.3%	1.1%	1.4%
Total Modern Methods	31.1%	43.1%	50.8%	52%
Withdrawal	3.1%	1.7%	1.7%	3.3%
Breastfeeding	-	4.1%	0.9%	1.9%
Safe Period	1%	1.6%	2.2%	4.1%
Total Traditional Methods	4.4%	7.7%	5.4%	9.4%
Total	35.5%	50.8%	56.2%	61.4%

Source: (1) National Fertility Survey, 1986, p.123; (2) Algerian Survey on Maternal and Child Health, 1992, p.145; (3) Algerian Survey on Family Health, 2002, p.129; (4) Algerian Multi-Indicator Survey, 2006, p.163.

The rate of contraceptive use, as indicated by national surveys, represents the percentage of women actively using one of the methods at the time of the survey. It is important to note that the methodology used to calculate this rate can vary significantly across different countries and surveys. This variation often arises due to differences in what is counted in the numerator or

denominator; some countries include methods such as female sterilization and natural breastfeeding as methods of contraception, while others do not.

Based on data from **Table (02)** of the **National Fertility Survey of 1986**, the national contraceptive usage rate was estimated at 35.3%. This rate saw a substantial increase to 61.4% by the year **2006**, with breastfeeding accounting for 1.9% of this figure in the latter survey. The growth in contraceptive use from **1968** to **1986** was significant, marked by an increase of 27.5 percentage points over an 18-year period, which translates to an average annual increase rate of 1.5%. The period from **1986** to **2006** witnessed a rise of 25.9 percentage points over 20 years.

In more detailed terms, by **2006**, the use of traditional contraceptive methods accounted for 9.4% of the total, whereas modern methods were used by 52% of the women surveyed that year. This is compared to **2002**, where traditional methods were used by 5.4% and modern methods by 56.2%. Specific methods such as periodic abstinence (safe period), withdrawal, pills, and IUDs saw noteworthy increases in their usage rates by **2006**, with respective increases recorded at 4.1%, 3.3%, 45.9%, and 2.3%.

Conversely, the use of injectables declined slightly, with a usage rate of 1.4% in **2006**, down from 1.8% in **2002**. Other modern methods showed signs of stabilization in usage rates. Notably, the substantial rise in contraceptive usage from **1986** to **2006** was primarily driven by an increase in the number of women using pills, which surged from 26.4% in **1986** to 45.9% in **2006**, marking an increase of 20.5 percentage points.

5. Prevalence of Contraceptive Methods in Algeria

In the realm of global family planning, the role of contraceptive use in reducing fertility rates is widely acknowledged, particularly in many industrialized countries. Throughout the current century, the prevalence of contraception in European countries has expanded to such an extent that it has led to very slight increases in births, resulting in reduced natural population growth rates. This trend is currently evident in countries such as France, Poland, and Romania, where fertility rates have plummeted to their lowest levels owing to the widespread use of effective modern contraceptives.

In Algeria, the use of contraceptives began in the 1960s, albeit at initially low rates. According to the demographic-social survey conducted by the Algerian Association for Demographic, Economic, and Social Research (AARDES) in 1968, the national rate of contraceptive use among married women of reproductive age (15-49 years) was just 8%, with a stark contrast between urban (17.5%) and rural areas (4%).

The rate in rural areas was four times lower than that recorded in urban areas. Building on this, estimates by Ali Kouaouci based on the National Fertility Survey data of 1986 and retrospective assessments every five years according to the ages of women at the time of each survey, suggested that the

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national rate of married women using contraceptives in 1962 ranged from 2 to 3% (approximately 4% in urban areas and only 1% in rural areas).

This rate increased during the period from 1967 to 1972 to 9%, with the rates estimated at 14% in cities and 6% in rural areas. According to these estimates, the use of contraceptives nationally doubled during the period from 1972 to 1977, reaching 14%, estimated at 24% in urban areas versus 9% in rural areas. These figures reflect the gradual but significant adoption of contraceptive methods over the decades, highlighting a clear urban-rural divide in their uptake and prevalence.

This notable disparity in contraceptive usage rates between urban and rural areas underscores that the dissemination of contraceptive methods was uneven, initially gaining traction in cities before gradually spreading to rural communities. Between 1977 and 1982, the use of contraceptives in rural areas saw a rapid rise, doubling the percentage of rural women using them from 9% to 18%, while urban usage increased to 40%, resulting in an average national rate of 25%.

By 1984, estimates from the National Office of Statistics through the Labor and Demographics Survey (MOD) indicated that the national rate of contraceptive users was 25%. This figure rose to 35.5% by 1986, with urban areas reporting a 46% usage rate compared to 29% in rural areas. By 1992, the rate escalated to 50.7% nationally, with 57.5% in urban areas and 44.1% in rural areas.

Notably, the utilization of breastfeeding as a contraceptive method in 1992 accounted for 3% of all users in urban areas and 5% in rural areas, culminating in a national rate of 4.1% of all users. These statistics illustrate the extensive adoption of contraceptive methods post-1986, particularly in rural areas. The usage rate doubled between 1984 and 1992, with the average annual increase estimated at about 3.8% in urban areas and 7.2% in rural areas.

By 2006, approximately 84% of married women of reproductive age in Algeria had utilized family planning methods at some point during their reproductive years. The most commonly used method was contraceptive pills, chosen by over three-quarters of the women, followed by male condoms at 10.5%, IUDs at 7.6%, and injectables at only 1.1%.

Among traditional methods, breastfeeding was the most prevalent at 18.5%, followed by withdrawal at 15.1% and the rhythm method (periodic sexual abstinence) at 14.5%. When considering the residence, there was a slight variation in past contraceptive use between urban and rural women, with a marginal difference of about 2 percentage points between urban women (84.8%) and rural women (82.4%).

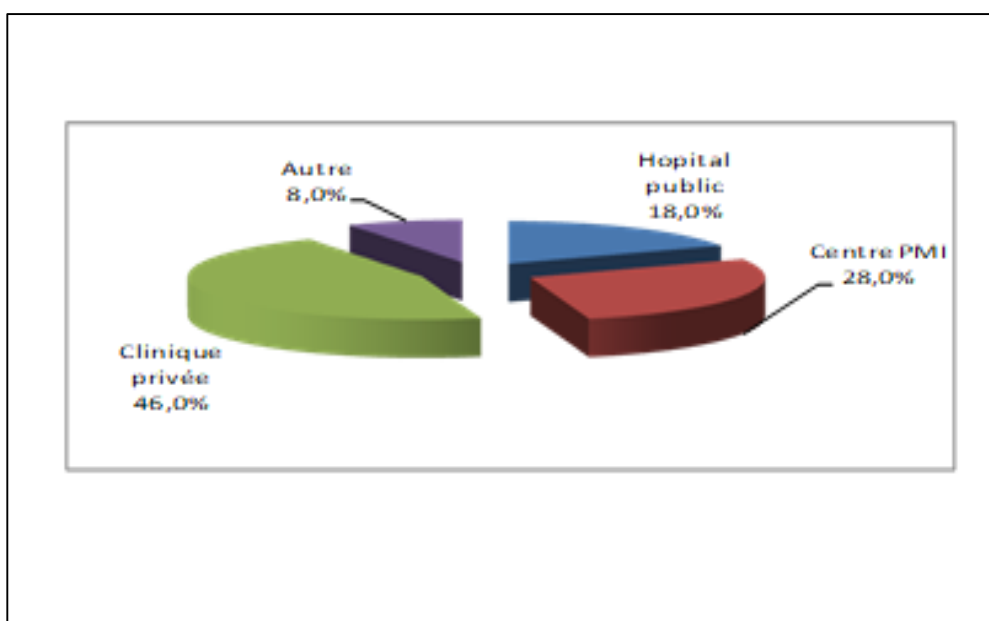
6. Sources for Accessing Modern Contraceptive Methods

The analysis of how modern contraceptive methods are accessed is crucial for understanding and demonstrating the role of various sectors in their distribution and how these sectors contribute to the proliferation of contraceptive use in Algeria. According to the data in Table (03) which reflects the distribution of married women (ages 15-49) using modern contraceptives according to their source of access, in 1986, 46.4% of women obtained contraceptive methods from the public sector.

This statistic is broken down further as follows: 28.2% of these women went to Mother and Child Protection Centers and 18.2% to maternity clinics and general health centers, including hospitals. The public sector has thus played a pivotal role in the distribution of methods, particularly those requiring medical intervention such as IUDs and female sterilization. A significant 82.5% of women opting for sterilization and 68.1% of IUD users acquired these services through public facilities.

Additionally, 29% of pill users and 8.3% of condom users accessed these through Mother and Child Protection Centers. Hospitals and general health centers contributed 15.3% to the distribution of pills, highlighting the essential role of public healthcare facilities in facilitating access to contraceptive methods (Figures 01 and 02).

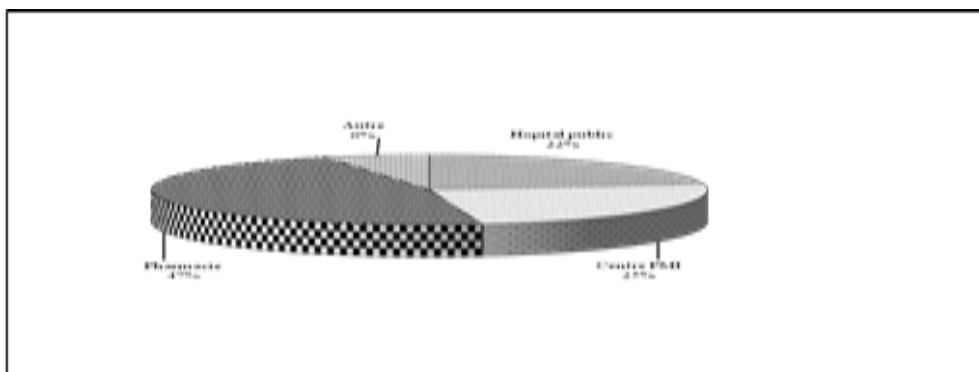
Figure (01): Distribution of Married Women (Aged 15-49) Using Contraceptives According to the Source of Obtaining the Method or Service (ENAF 1986)



Source: National Fertility Survey, 1986, p. 124.

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Figure (02): Distribution of Married Women (Aged 15-49) Using Contraceptives According to the Source of Obtaining the Method or Service (PAPCHILD 1992)



Source: Algerian Survey on Maternal and Child Health, 1992, p. 137.

In 1992, the percentage of women using the public sector to access contraceptives was 45.9%, distributed as follows: 23.8% went to Mother and Child Protection Centers and 22.1% to other hospitals and general health centers. A high percentage of women using sterilization (79.9%) and IUDs (73%) accessed these services through the public sector. Mother and Child Protection Centers and hospitals continued to contribute significantly to the distribution of pills, with 23.9% and 20%, respectively.

Table (03): Distribution of married women (ages 15-49) using modern contraceptives by source at the time of the survey, according to 1986 ENAF and 1992 PAPCHILD

	1986 ENAF (1)						
	Type of Method or Service						
	Pills	IUD	Condom	Injection	Sterilization	Other Methods	Total
Public Sector	44.3	68.1	8.3	14.8	82.5	62.5	46.4
Hospitals and Health Centers	15.3	34.1	0.0	7.4	72.0	12.5	18.2
	29.0	34.0	8.3	7.4	10.5	50.0	28.2

Mother and Child Protection Centers							
Private Sector	53.1	27.7	20.9	77.8	12.3	12.5	48.5
Medical Clinics and Polyclinics	49.2	27.7	4.2	77.8	12.3	12.5	45.8
Pharmacies	2.9	0.0	16.7	0.0	0.0	0.0	2.7
Other Sources	3.7	4.2	70.8	3.7	5.2	25.0	4.6
Incomplete Data	0.5	0.0	0.0	3.7	0.0	0.0	0.5
Total	100 1187	100 (94)	100 (24)	100 (27)	100 (57)	100 (8)	100 1397
PAPCHILD 1992 (2)							
Public Sector	43.9	73.0	18.1	16.7	79.9	11.1	45.9
Hospitals and Health Centers	20.0	38.7	4.6	16.7	76.2	0.0	22.1
Mother and Child Protection Centers	23.9	34.3	13.5	0.0	3.7	11.1	23.8
Private Sector	55.2	27.0	77.4	83.3	4.0	88.9	52.9
Medical Clinics and Polyclinics	2.9	27.0	0.0	66.7	4.0	11.1	4.5
Pharmacies	52.3	0.0	77.4	16.7	0.0	78.8	48.4
Other Sources	0.3	0.0	0.0	0.0	4.0	0.0	0.4
Incomplete Data	0.6	0.0	4.0	0.0	12.1	0.0	0.8
Total	100 1823	100 (112)	100 (22)	100 (8)	100 (50)	100 (9)	100 (2022)

***Source:** (1) Algerian National Fertility Survey, 1986, p.127; (2) Algerian Survey on Maternal and Child Health, 1992, p.135.*

Private clinics have played a significant role in distributing contraceptives, especially for methods not requiring medical intervention. In 1986, 45.8% of contraceptive users obtained their methods through private clinics. However, by 1992, their contribution had dramatically decreased to only 4.5%. On the other hand, pharmacies, which had a limited role in 1986 (with only 2.7% of contraceptives being sourced from them), saw a dramatic rise, with their share increasing to 48.4% by 1992.

Specifically, injectables were predominantly accessed through private clinics and medical centers, with 77.8% of women using this method in 1986

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sourcing it from such facilities, although this percentage decreased to 66.7% by 1992.

By 1986, 49.2% of women obtained their contraceptive pills from private clinics. Since 1992, pharmacies have assumed a dominant role in contraceptive distribution, with 52.3% of pill users and 77.4% of users of other modern methods obtaining their contraceptives from pharmacies.

Table (04): Distribution of Women Using Modern Methods by Source of Access, 2002

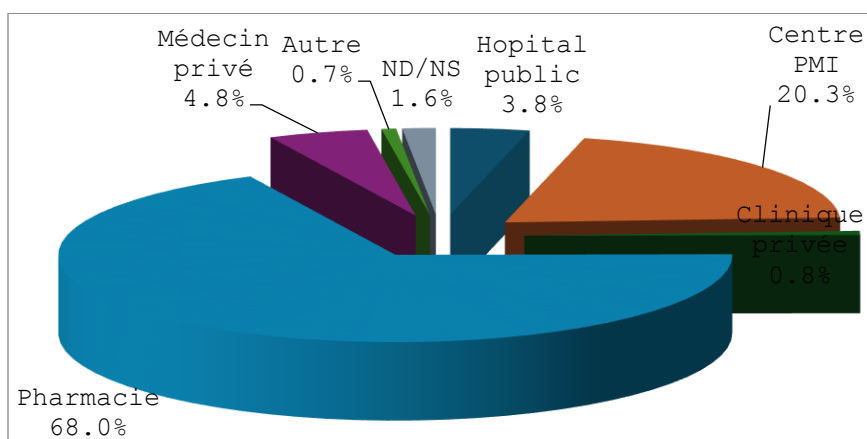
	Hospital	Mother and Child Center	Private Clinic	Pharmacy	Private Doctor	Other	Unspecified	Total (%)
Pills	3.4	18.5	0.4	72.1	3.2	0.7	1.6	100
IUD (Intrauterine Device)	11.2	51.7	6.9	1.7	27.6	0.0	0.9	100
Condom	0.0	6.1	0.0	86.0	6.4	0.0	1.4	100
Total	3.8	20.3	0.8	68.0	4.8	0.7	1.6	100

Source: National Survey on Maternal and Child Health, 2002, p. 128.

Table (04) illustrates the varying distribution of contraceptive methods. Notably, more than half of the women using IUDs sourced them from mother and child protection centers, indicating a centralized approach for providing these devices. In contrast, some women obtained their IUDs from pharmacies, demonstrating an alternative distribution path. These variations are visually represented in Figure (03).

In summary, the broad availability of contraceptive options and their easy accessibility have been instrumental in their widespread use. The expansion of mother and child protection centers, alongside hospitals and general health centers, has played a key role in distributing methods requiring medical intervention, such as IUDs and female sterilization procedures.

Figure (03): Distribution of Currently Married Women Using Contraceptive Methods by Source of Access, 2002



Source: The National Survey on Maternal and Child Health, 2002, p. 128.

7. Results Analysis

Contraceptive use in Algeria has evolved significantly since the 1960s, though initially at low levels. A socio-demographic survey conducted by the Algerian Association for Demographic, Economic, and Social Research (AARDES) in 1968 found that the national rate of contraceptive use among married women of reproductive age (15-49 years) was just 8%. The disparity between urban and rural areas was striking, with urban areas having a rate of 17.5% compared to 4% in rural areas, indicating that rural contraceptive use was substantially lower than in urban centers.

Estimates based on the 1986 National Fertility Survey and retrospective assessments suggested that in 1962, the contraceptive use rate was between 2% and 3%, with urban areas at about 4% and rural areas at just 1%. Between 1967 and 1972, this rate rose to 9%, with urban areas reaching 14% and rural areas lagging behind at 6%. From 1972 to 1977, national contraceptive use doubled, reaching 14%, with urban areas at 24% and rural areas at 9%. This marked a clear trend of contraceptive adoption beginning in urban areas and gradually spreading to rural regions.

Between 1977 and 1982, the contraceptive usage rate in rural areas rapidly increased, doubling to 18%, while urban usage reached 40%, leading to a national average of 25%. By 1984, the National Office for Statistics reported a rate of 25%, which rose to 35.5% by 1986, with 46% in urban areas compared to 29% in rural areas. In 1992, the rate reached 50.7% nationally, with 57.5% in urban areas and 44.1% in rural areas.

In 1992, breastfeeding as a contraceptive method accounted for 3% of all users in urban areas and 5% in rural areas, contributing to a national rate of

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4.1%. These figures demonstrate the widespread adoption of contraceptive methods, especially after 1986, with rural areas showing particularly rapid growth. Between 1984 and 1992, contraceptive use in rural areas more than doubled, with an annual increase of 3.8% in urban areas and 7.2% in rural areas.

By 2006, nearly 84% of married women of reproductive age had used family planning methods at some point in their lives. The most common method was the contraceptive pill, used by over 75% of women, followed by male condoms (10.5%), IUDs (7.6%), and injectables (1.1%). Among traditional methods, breastfeeding was the most prevalent, used by 18.5% of women, followed by withdrawal (15.1%) and periodic abstinence (14.5%).

The gap in contraceptive use between urban and rural women narrowed significantly, with 84.8% of urban women and 82.4% of rural women having used family planning methods at some point in their lives. This demonstrates the success of initiatives aimed at improving accessibility and awareness of family planning methods across the country, ensuring that the benefits of contraception reached both urban and rural populations.

Conclusion

Since the 1980s, fertility rates in Algeria have consistently declined, with the average number of children per woman dropping to approximately 2.27 in 2006. This significant reduction in fertility can primarily be attributed to the widespread use of contraceptive methods, which have played a central role in shaping the country's demographic trends.

Contraceptive methods, ranging from traditional to modern types, have seen increasing adoption over the years. By 2006, the overall contraceptive usage rate reached 61.4%, with modern methods becoming the preferred choice across various educational levels. Among modern methods, contraceptive pills have emerged as the most commonly used, with their usage rising significantly—from 26.4% in 1986 to 45.9% in 2006, marking an increase of 20.5 percentage points. This surge in pill usage has been a major driver behind the overall increase in contraceptive use during this period.

The widespread availability and accessibility of contraceptive methods have been crucial in promoting their use. The expansion of health infrastructure, particularly mother and child protection centers, hospitals, and general health centers, has been key in distributing methods that require medical intervention, such as IUDs and female sterilization. Meanwhile, pharmacies have played a significant role in distributing pills, which are considered the easiest and most accessible method of contraception for many women.

The strategic distribution of contraceptives across diverse healthcare facilities has directly impacted demographic trends in Algeria, making family planning more accessible and contributing to the country's socio-demographic development. These efforts have not only helped reduce fertility rates but also improved reproductive health and empowered women to make informed choices about their reproductive futures.

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