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Socio-Demographic Factors Affecting Reproductive Health and Maternal Health: A Field Study of Setif City

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Abstract:

This study aims to explore the key socio-demographic factors influencing reproductive and maternal health. It also examines the relationship between specific economic and social indicators and the prevalence of chronic diseases experienced by mothers both before and after childbirth, as well as the rise in severe pregnancy and childbirth complications. The focus is on monitoring the significant side effects these conditions have on maternal reproductive health, as well as their impact on the health of the child. Additionally, the study seeks to assess the quality of healthcare provided to mothers before, during, and after childbirth, and its correlation with maternal and child mortality rates. The research was conducted through a field survey at three clinics in Setif city, involving a sample of 300 pregnant women and mothers with one or more children, all aged between 15 and 49 years. A descriptive-analytical approach was utilized. The findings reveal that social, economic, and cultural factors substantially affect maternal reproductive health.

Keywords: Reproductive Health; Maternal Health; Health Awareness; Chronic Diseases; Pregnancy Complications.

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I. Introduction

Reproductive health is a concept that extends beyond just physical and mental health. It represents a holistic, integrated framework concerning an individual's sexual and reproductive well-being in its entirety. The significance of reproductive health stems from the broad scope of its components, which include family planning, sexual education, maternal health, and child care.

Today, reproductive health is particularly relevant due to its role in enhancing health awareness, which serves as a preventive strategy for many reproductive health challenges. The goal of reproductive health is to improve the quality of life and personal relationships, particularly in relation to maternal health. This is achieved by providing healthcare for safe motherhood (during pregnancy and post-birth) and newborn care, which includes breastfeeding and addressing the mother's essential needs. Moreover, it encourages safe and responsible sexual practices between partners.

Maternal reproductive health is a crucial indicator used by countries to gauge community welfare and measure progress toward comprehensive development. It varies across societies due to differences in social, economic, and cultural conditions. In Algeria, there is a strong focus on reproductive health, especially maternal and child health, through a series of policies and programs designed to enhance healthcare for mothers. These efforts have a direct impact on the health of future generations, with socio-demographic factors playing a pivotal role.

Given this context, the fundamental question that arises is: Do socio-economic and cultural factors influence maternal reproductive health? To test the statistical significance of the relationship between these explanatory variables, the following sub-questions were formulated:

- Does a lack of awareness about reproductive health contribute to the deterioration of maternal health?
- Does a lower economic and social status among mothers lead to a higher incidence of chronic diseases and increased pregnancy complications?
- Does the absence of specialized medical care for pregnant women elevate the risks during delivery and increase maternal and infant mortality rates?

Considering the significant rise in private gynecology and obstetrics clinics in Setif, the overarching hypothesis for this study is: Socio-demographic factors have an impact on maternal reproductive health.

Sub-Hypotheses:

- Insufficient health awareness among mothers leads to a deterioration in their health.
- Lower economic and social status among mothers results in a higher incidence of chronic diseases and increased pregnancy complications.
- The lack of specialized medical care for pregnant mothers heightens the risks during childbirth and contributes to higher maternal and infant mortality rates.

Study Objectives

This study aims to achieve the following objectives:

- Identify the primary cultural, economic, and social factors and their association with the decline of maternal reproductive health in Setif city.
- Assess the level of health awareness among mothers and its correlation with the overall deterioration of their health, particularly in relation to reproductive health.
- Examine specific economic and social indicators and their relationship with the prevalence of chronic diseases and the escalation of pregnancy and childbirth complications.
- Analyze the quality of healthcare provided to mothers (before, during, and after childbirth) and its relationship to maternal and infant mortality.
- Investigate chronic diseases that mothers experience both before and after childbirth, and track the significant side effects these conditions have on their reproductive health and the health of their children.

1. Study Concepts

1.1 **Health**:

Perkins defines health as “a state of relative balance of the body’s functions, and this state of balance results from the body’s adaptation to harmful factors it is exposed to. Adaptation is a positive process carried out by the body’s forces to maintain its balance.”

1.2 **Reproductive Health**:

Reproductive health is described as “a complete state of physical, mental, and social well-being, not merely the absence of disease, and it concerns all matters related to the reproductive system and its functions” (Sbitan, 2012, p. 104). The World Health Organization defines it as “a state of complete physical, social, and mental well-being, not just the absence of disease or dysfunction” (Abdelmohyi, p. 17).

1.3 **Reproductive Healthcare**:

This term refers to a collection of methods, techniques, and services aimed at promoting well-being by preventing and addressing reproductive health issues. It includes sexual health, which aims to improve the quality of life and personal relationships between spouses. It is not limited to providing medical care and advice regarding reproduction and sexually transmitted infections (Tahoune, 2010, p. 87).

1.4 **Health Awareness**:

Health awareness pertains to individuals' knowledge and understanding of health-related information and facts, along with their sense of responsibility for their own health and that of others. In this context, health awareness involves the intentional practice of health behaviors based on understanding and conviction. It also implies that health practices evolve into habits, performed automatically without conscious thought or effort. In essence, health awareness is the objective we strive to attain, wherein health information becomes an integral part of our health culture (Salama, 1997, p. 22).

1.5 **Health Culture**:

Health culture refers to the process by which individuals and communities learn how to protect, sustain, and improve their health, as well as how to recover or correct it when ill. This process involves mental, psychological, and social dimensions, aiming to enhance individuals' ability to make informed decisions that benefit their health and promote behavioral changes within individuals and families (Zoghbi, 2000, p. 34).

2. Literature Review:

Previous studies serve as valuable references for researchers, helping them distinguish how their work differs from existing studies. Given the significance of the current study's topic, we have relied on the following studies:

- A study by Aïssa Dallenda (2004) titled *"Changes in Reproductive Behavior in Algeria."* This research aimed to explore the relationship between the development of Algerian society, both economically and socially, and shifts in demographic behavior. The study focused on key indicators of social and economic development, including compulsory and free education, housing availability, access to life facilities, and employment opportunities. It concluded that there is a notable relationship between a woman's educational level and her reproductive behavior. The higher her level of education, the fewer children she tends to have, with this relationship being more pronounced in urban areas compared to rural ones. Furthermore, improvements in social and economic conditions led to higher

fertility rates, and the developmental policies adopted by Algeria post-independence contributed to increased birth rates and reduced infant mortality, thereby raising overall fertility levels (Dallenda, 2004).

- A study by Houari Rahal and Redwan Masli (2020) titled *"The State of Reproductive Healthcare in Algeria According to the MICS4-2012 Survey Data."* This study aimed to shed light on the state of reproductive healthcare available to women during pregnancy and childbirth in Algeria, based on data from the MICS4-2012 health and demographic survey. The research sought to determine whether there were disparities in women's access to reproductive healthcare based on factors such as age, residence, wealth index, education level, and regional programming. The study found improvements in reproductive healthcare compared to the PAPFAM-2002 data. One key finding was that having four or more visits to a qualified healthcare provider is a critical factor reflecting the accessibility of necessary healthcare. Additionally, the study revealed that regional disparities contributed significantly to inequalities in access to reproductive healthcare, followed by the wealth index and the mother's education level (Rahal & Masli, 2020).
- A study by Dalila Azzizi and Salima Belkhiri (2022) titled *"The State of Reproductive Health for Women in Algerian Society."* This research aimed to assess the state of reproductive health among Algerian women, addressing various health issues and disorders in this domain, and evaluating the effectiveness of health programs designed to ensure appropriate health standards for mothers and children. The researchers posed the question: What is the current state of reproductive health for Algerian women amidst significant societal transformations? Some notable findings included a shift away from traditional practices and an increased awareness of health issues such as osteoporosis and its impact on women's reproductive health (Azzizi & Belkhiri, 2022).
- A study by Amal Hachem and Nawel Lachichi (2023) titled *"Spatial Disparities in the Distribution of Healthcare Services in Reproductive Health for 2018."* This study aimed to identify disparities in the distribution of healthcare services across various Algerian provinces, analyzing 2018 statistics to pinpoint regions suffering from deficiencies in both material and human resources. Key findings included that disparities in healthcare infrastructure and resources between Algerian provinces created significant pressure on major cities, which in turn led to a decline in the quality of healthcare services. The study also found that populations in underserved provinces faced significant challenges in accessing comprehensive reproductive healthcare services (Lachichi & Hachem, 2023).

II. Method and Tools

1. Methodology and Tools

For this study, we employed the descriptive-analytical method to gather data on maternal reproductive health, health awareness levels, and key socio-cultural and economic factors influencing reproductive health in the city of Sétif. The primary research tool used was a questionnaire, a structured instrument designed to capture key aspects of the topic. This questionnaire was presented to a sample of the community to collect their responses.

2. Study Sample

The study sample consisted of 300 women, including both pregnant women and those with one or more children, aged between 15 and 49 years. These women regularly visit gynecologists and obstetricians' clinics, including those of "Benalag Hadiya," "Maiza Toufika," and "Nasri Ismail."

III. Presentation and Discussion of Results:

Table 1: Age of the Couples

		Age						
		Under 20 years	**20–29 years**	**30–39 years**	**40–49 years**	**50–59 years**	**60 years and above**	**Total**
Wife	Frequency	1	71	142	86	00	00	300
	%	0,3	23,7	47,3	28,7	00	00	100
Husband	Frequency	00	16	107	122	54	1	300
	%	00	5,3	35,7	40,7	18,0	0,3	100

From this table, it is evident that the highest percentage of participants fall within the 30-39 age range (47.3%), followed by those in the 40-49 age range (28.7%), and then the 20-29 age range (23.7%). A very small percentage (0.3%) of participants are under 20 years old, and no respondents are above 50 years of age. Regarding the husbands, the majority are between 40 and 49 years old (40.7%), followed by those aged 30-39 years (35.7%), and then those aged 50-59 years (18%). Only 5.3% of respondents have husbands aged 20-29 years, and 0.3% have husbands over 60 years old, while no husbands are under 20 years of age.

It can be concluded that nearly half of the mothers in this study are between the ages of 30 and 39, while their husbands are predominantly aged between 40 and 49. This outcome is consistent with the common societal belief that husbands tend to be older than their wives.

Table 2: Educational Level of the Couples

		Educational Level				
		Primary	**Intermediate**	**Secondary**	**University**	**Total**
Wife	Frequency	24	65	102	109	300
	%	8,0	21,7	34,0	36,3	100
Husband	Frequency	31	79	92	98	300
	%	10,3	26,3	30,7	32,7	100

From this table, we observe that the largest percentage of participants have a university education (36.3%), followed by those with secondary education (34.0%). A further 21.7% have an intermediate education, and only 8.0% of participants possess a primary education. Regarding the husbands, the largest group also has a university education (32.7%), followed by those with secondary education (30.7%), then intermediate education (26.3%), and only 10.3% have a primary education level.

It can be concluded that more than one-third of the mothers in this study have either a university or secondary education, while about one-third of their husbands also hold similar educational qualifications. This suggests that many Algerian families have become increasingly aware of the importance of educating their daughters at all levels, which supports their ability to contribute to the household economy. This trend is particularly evident in the context of rising living costs and economic challenges.

Furthermore, the increasing participation of young people in higher education reflects a desire to enhance their employability and pursue postgraduate studies to secure higher-level positions. On the other hand, those with secondary or intermediate education may explore starting their own businesses or pursue vocational training to acquire specific skills, thereby preparing themselves to enter the future workforce.

Table 3: Occupation of the Couples

	Occupation

		Housewife	Employee	Private Sector Worker	Freelancer	Retired	Total
Wife	**Frequency**	173	83	27	17	00	300
	%	57,7	27,7	9,0	5,7	00	100
Husband	**Frequency**	11	97	118	69	5	300
	%	3,7	32,3	39,3	23,0	1,7	100

This table shows that the majority of female participants are housewives, accounting for 57.7%, followed by 27.7% who are employees, and 9.0% working in the private sector. Only 5.7% of the women are freelancers, and no women in the study are retired. As for the husbands, the largest group works in the private sector (39.3%), followed by 32.3% employed in the public sector, and 23.0% who are freelancers. Only 3.7% of the husbands are unemployed, while 1.7% are retired.

It can be concluded that more than half of the mothers in the study are housewives, while a majority of their husbands work in the private sector, public employment, or as freelancers. This indicates that most of the husbands are employed in the private sector or public institutions, which allows them to provide for their families without requiring their wives to contribute financially.

In contrast, the majority of wives who are housewives have chosen this role either as a personal preference or at the request of their husbands, who may come from wealthier backgrounds. On the other hand, the women working in the private sector or as freelancers reported doing so not only for financial independence but also to support their husbands, whether to cover rent, pay off debts, assist with purchasing a new home, or save for their children's future education.

Table 4: Current Housing Situation by Place of Residence

Total	Current Housing Situation								
	Other (e.g., Work-related)	Rented	Free Accommodation	Living with Wife's Family	Living with Husband's Family	Private Ownership			
223	2	38	5	8	72	98	Frequency	Urban	Current Housing Situation
%100	0,9	17,0	2,2	3,6	32,3	43,9	%		
58	0	4	5	3	17	29	Frequency	Semi-Urba	

%100	0,0	6,9	8,6	5,2	29,3	50,0	%	**n**	
19	0	4	0	0	6	9	Frequency	**Rural**	
%100	0,0	21,1	0,0	0,0	31,6	47,4	%		
300	2	46	10	11	95	136	Frequency	**Total**	
%100	0,7	15,3	3,3	3,7	31,7	45,3	%		

From this table, we observe that the majority of women live in independent housing owned by their nuclear family (45.3%), particularly in semi-urban (50%) and rural (47.4%) areas. In contrast, 31.7% live with their husband's family, especially those in urban areas (32.3%).
Furthermore, 15.3% live in rented accommodations, with the highest percentages found in urban areas (17%) and rural areas (21.1%). Only 3.7% live with their own family, with a higher concentration in semi-urban areas (5.2%). Additionally, 3.3% reside in free accommodations, primarily in semi-urban areas (8.6%). A very small percentage (0.7%) live in housing arrangements related to work, mainly in urban areas (0.9%).

From these findings, we can conclude that nearly half of the mothers in this study live in independent housing owned by their families, with a significant concentration in semi-urban and rural areas. This trend is likely due to the greater availability of affordable housing in these areas compared to urban locations, where housing costs are notably higher.

The tendency for some families to live with the husband's family may be attributed to limited income or the husband's responsibility for supporting his parents and siblings, particularly in cases where the father is deceased. For those living in rented accommodation, this could reflect either conflicts with the husband's family or the limited space in urban housing, where renting can offer more space at a lower cost. In urban settings, renting is often preferred due to its proximity to work, schools, healthcare facilities, and transportation. Women living with their own family typically do so due to issues with the husband's family or upon the request of the wife's family, often until the husband is able to secure a separate home.

Table 5: The Effect of Women's Educational Level on Their Health

	Answer		**Total**
	Yes	**No**	

Wife's Educational Level	**Primary**	Frequency	15	9	24
		%	62,5	37,5	%100
	Intermediate	Frequency	59	6	65
		%	90,8	9,2	%100
	Secondary	Frequency	96	6	102
		%	94,1	5,9	%100
	University	Frequency	94	15	109
		%	86,2	13,8	%100
Total		Frequency	264	36	300
		%	88,0	12,0	%100
Chi-Square		Degrees of Freedom	Significance Level	Error Level	Decision
19,18		03	0,00	0,05	Significant (Differences Exist)

This table indicates that most participants (88.0%) believe that a woman's educational level impacts her health, particularly those with secondary (94.1%) and intermediate (90.8%) education. In contrast, 12.0% of respondents do not believe that educational level affects health, with those having a primary education (37.5%) and university education (13.8%) making up the largest segments.

From this, we conclude that nearly all the mothers in the study agree that a woman's educational level has a significant influence on her health, especially among those with secondary or intermediate education. The Chi-square value of 19.18, which is significant with 3 degrees of freedom and a significance level of 0.00, further supports this conclusion, indicating that differences in responses regarding the impact of education on health exist, with those having intermediate education showing the strongest belief.

This suggests that educated women are more likely to be proactive about maintaining their health, as they are generally more informed about preventive measures, regularly monitor their health, and follow medical advice. In contrast, those who do not recognize a relationship between education and health tend to rely on traditional health practices, such as herbal remedies, and maintain their health through dietary choices (e.g., consuming vegetables, fibers, etc.) without seeking medical consultations.

Table 6: How the Educational Level of Women Affects Their Health

	In case of "Yes," does it help her:	**Total**

			Acquiring Health Culture	Ease of Dealing with Diseases and Treatment Methods	Receiving Sufficient Information to Maintain Her Health	
Wife's Educational Level	**Primary**	**Frequency**	8	7	8	23
		%	34,8	30,4	34,8	100
	Intermediate	**Frequency**	46	33	11	90
		%	51,1	36,7	12,2	100
	Intermediate	**Frequency**	73	51	30	154
		%	47,4	33,1	19,5	100
	Secondary	**Frequency**	80	44	35	159
		%	50,3	27,7	22,0	100
Total		**Frequency**	207	135	84	426
		%	48.6	31.7	19.7	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**	
8,42		**06**	**0,20**	**0,05**	**Not Significant (No Differences)**	
***Note*: The number of responses is greater than the sample size because some respondents chose more than one answer.**						

This table indicates that the largest percentage of respondents (48.6%) believe that a woman's educational level impacts her health by helping her acquire health knowledge, particularly those with intermediate (51.1%) and university education (50.3%). Meanwhile, 31.7% of respondents believe that education affects women's health by making it easier for them to manage diseases and treatment methods, especially among those with intermediate education (36.7%) and secondary education (33.1%).

Additionally, 19.7% of respondents say that education impacts health by providing enough information to maintain it, particularly those with primary education (34.8%) and university education (22.0%).

From this, we can conclude that there is a variety of responses among participants regarding how educational level influences women's health. These responses range from acquiring health knowledge, managing illnesses and treatment options, to obtaining sufficient information to maintain health, regardless of the respondents' educational levels. This is supported by the Chi-square value of 8.42, which is not significant with 6 degrees of freedom and a significance level of 0.20, meaning there are no significant differences in the responses based on the respondents' educational level.

This suggests that most educated women (with intermediate, secondary, or university education) possess the health knowledge to deal with diseases and treatment methods. These women may also resort to traditional herbal remedies, which are often viewed as effective for treating conditions like fever, jaundice, or high blood pressure.

Table 7: Impact of Media Programs on Maintaining Health According to Educational Level

			Does following media programs help in maintaining your health?		Total
			Yes	No	
Wife's Educational Level	Primary	Frequency	19	5	24
		%	79,2	20,8	100
	Intermediate	Frequency	60	5	65
		%	92,3	7,7	100
	Secondary	Frequency	94	8	102
		%	92,2	7,8	100
	University	Frequency	103	6	109
		%	94,5	5,5	100
Total		Frequency	276	24	300
		%	92,0	8,0	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**
6,30		03	0,09	0,05	**Not Significant (No Differences)**

This table shows that the majority of respondents (92.0%) believe that following media programs helps maintain their health, particularly those with a university education (94.5%), intermediate education (92.3%), and secondary education (92.2%). In contrast, 8.0% of respondents believe that media programs do not help in maintaining their health, with the highest percentage among those with primary education (20.8%). From this, it can be concluded that nearly all the mothers in the study agree that following media programs is beneficial for maintaining their health, regardless of their educational level. This conclusion is supported by the Chi-square value of 6.30, which is not significant with 3 degrees of freedom and a significance level of 0.09, indicating no

differences in the responses regarding the role of media programs in health maintenance based on educational level.

Table 8: Source of Information on Medical Topics Based on Educational Level

			If "Yes", where do you get medical information from?				Total
			Media and Communication Channels	Health Websites	Social Media Sites	Doctors	
Wife's Educational Level	Primary	Frequency	2	6	0	18	26
		%	7,7	23,1	0,0	69,2	100
	Intermediate	Frequency	22	12	14	50	98
		%	22,4	12,2	14,3	51,0	100
	Secondary	Frequency	43	38	27	75	183
		%	23,5	20,8	14,8	41,0	100
	University	Frequency	56	41	31	73	201
		%	27,9	20,4	15,4	36,3	100
Total		Frequency	123	97	72	216	508
		%	24.2	19.1	14.2	42.5	100
Chi-Square Value		**Degrees of Freedom**		**Significance Level**	**Error Level**	**Decision**	
19,16		**09**		**0,02**	**0,05**	**Not Significant (No Differences)**	
***Note: The number of responses is greater than the sample size because some respondents chose more than one answer.**							

This table reveals that the largest proportion of respondents (42.5%) obtain medical information from doctors, particularly those with primary education (69.2%) and intermediate education (51.0%). The second largest group (24.2%) gets their medical information from media and communication channels, especially those with secondary education (27.9%).

Following this, 19.1% of respondents turn to health websites for medical advice, with a higher percentage among those with primary education (23.1%) and secondary education (20.8%). Finally, 14.2% rely on social media sites for medical information, with university-educated respondents (15.4%) and secondary-educated respondents (14.8%) being the most frequent users of this source.

From these findings, it can be concluded that nearly half of the mothers in the study rely primarily on doctors for medical information, especially those with primary or

intermediate education. The Chi-square value of 19.16, significant with 9 degrees of freedom and a significance level of 0.02, indicates differences in responses, particularly favoring those with primary or intermediate education in their reliance on doctors. This can be explained by the fact that, regardless of education level, most women prefer to seek medical guidance from professionals to maintain their health and the health of their families, sometimes even sharing this advice with extended family members.

Table 9: Awareness of Family Planning Among Respondents Based on Educational Level

			Have you ever heard of family planning?		Total
			Yes	No	
Wife's Educational Level	Primary	Frequency	20	4	24
		%	83,3	16,7	100
	Intermediate	Frequency	64	1	65
		%	98,5	1,5	100
	Secondary	Frequency	93	9	102
		%	91,2	8,8	100
	University	Frequency	99	10	109
		%	90,8	9,2	100
Total		Frequency	276	24	300
		%	92,0	8,0	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**
6,43		**03**	**0,09**	**0,05**	**Not Significant (No Differences)**

This table shows that most of the respondents (92.0%) are aware of family planning (birth spacing), particularly those with an intermediate educational level (98.5%). In contrast, 8.0% of respondents are unaware of family planning, with the highest percentage found among those with primary education (16.7%) and university education (9.2%).

From these findings, it can be concluded that almost all the mothers in the study are aware of family planning, regardless of their educational level. The Chi-square value of 6.43, which is not significant with 3 degrees of freedom and a significance level of 0.09,

indicates no substantial differences in responses concerning awareness of family planning based on education level. This suggests that women with a reasonable level of education are likely to have encountered information about family planning through educational programs focused on family health and childbirth spaced over time, which contributes to the health and well-being of both the mother and her children.

Table 10: Use of Contraceptive Methods According to Age at Marriage

			When did you start using contraceptives?					Total
			Immediately after marriage	After the first pregnancy	After the second pregnancy	After the third pregnancy	Do not use it	
Age at Marriage	Under 20 years	Frequency	5	28	3	0	1	37
		%	13,5	75,7	8,1	0,0	2,7	100
	From 20 to 24 years	Frequency	8	88	25	5	5	131
		%	6,1	67,2	19,1	3,8	3,8	100
	From 25 to 29 years	Frequency	10	62	16	3	4	95
		%	10,5	65,3	16,8	3,2	4,2	100
	From 30 to 34 years	Frequency	4	21	3	0	4	32
		%	12,5	65,6	9,4	0,0	12,5	100
	From 35 to 39 years	Frequency	1	3	0	0	0	4
		%	25,0	75,0	0,0	0,0	0,0	100
	40 years and older	Frequency	0	1	0	0	0	1
		%	0,0	100	0,0	0,0	0,0	100
Total		Frequency	28	203	47	8	14	300
		%	9,3	67,7	15,7	2,7	4,7	100
Chi-Square Value		**Degrees of Freedom**		**Significance Level**	**Error Level**	**Decision**		
16,13		**20**		**0,70**	**0,05**	**Not Significant (No Differences)**		

This table shows that most respondents (67.7%) report using contraceptives after their first pregnancy, with a notably high percentage among those aged 40 or older (100%) and those under 20 years old (75.7%). In comparison, 15.7% of respondents confirm using contraceptives after their second pregnancy, particularly those in the 20-24 age range (19.1%) and 25-29 age range (16.8%).

A smaller percentage (9.3%) began using contraceptives immediately after marriage, especially among those aged 35-39 years (25.0%) and those aged 30-34 years (12.5%). Furthermore, 4.7% of respondents have never used contraceptives since marriage, with the highest percentage among those aged 30-34 years (12.5%). Finally, 2.7% of respondents began using contraceptives after the third pregnancy, particularly among those aged 20-24 years (3.8%) and 25-29 years (3.2%).

From these findings, we can conclude that more than two-thirds of the mothers in the study use contraceptives after their first pregnancy, regardless of their age at marriage. This conclusion is confirmed by the Chi-square value of 16.13, which is not significant with 20 degrees of freedom and a significance level of 0.70, indicating no differences in the responses regarding contraceptive use after the first pregnancy based on age at marriage.

Table 11: Impact of Economic and Social Conditions on the Frequency of Chronic Diseases and Pregnancy Complications According to Educational Level

			In your opinion, do deteriorating economic and social conditions lead to a higher incidence of chronic diseases and increased pregnancy and childbirth complications?		Total
			Yes	No	
Wife's Educational Level	Primary	Frequency	15	9	24
		%	62,5	37,5	100
	Intermediate	Frequency	53	12	65
		%	81,5	18,5	100
	Secondary	Frequency	82	20	102
		%	80,4	19,6	100
	University	Frequency	83	26	109
		%	76,1	23,9	100
Total		Frequency	233	67	300
		%	77,7	22,3	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**
4,32		03	0,22	0,05	**Not Significant (No Differences)**

This table shows that most respondents (77.7%) believe that deteriorating economic and social conditions lead to a higher incidence of chronic diseases and increased pregnancy and childbirth complications. This view is especially common among those with intermediate education (81.5%) and secondary education (80.4%). On the other hand, 22.3% of respondents disagree, particularly those with university education (23.9%).

From this, we can conclude that most mothers in the study believe that economic and social conditions significantly impact the frequency of chronic diseases and pregnancy complications, regardless of their educational level. This is supported by the Chi-square value of 4.32, which is not significant with 3 degrees of freedom and a significance level of 0.22. This indicates no differences in responses regarding the impact of economic and social conditions on health based on educational level.

The analysis shows that the majority of respondents affirm the impact of deteriorating economic and social conditions on chronic diseases and pregnancy complications, with 77.7% agreeing, particularly those with intermediate (81.5%) and secondary education (80.4%). In contrast, 22.3% of respondents believe economic and social deterioration does not affect the frequency of chronic diseases and pregnancy complications, particularly those with primary education (37.5%) and university education (23.9%).

This data further supports the conclusion that over three-quarters of mothers in the study agree on the negative impact of deteriorating economic and social conditions on health, regardless of educational level. The Chi-square value of 4.32, which is not significant, with 3 degrees of freedom and a significance level of 0.22, indicates no significant differences in the responses based on education level regarding this issue.

Table 12: Ranking of Respondents on the Impact of Economic and Social Conditions on Chronic Diseases and Increased Pregnancy and Childbirth Complications

		Rank of Impact								Total	Rank
		Rank 01	Rank 02	Rank 03	Rank 04	Rank 05	Rank 06	Rank 07	Not Ranked		
Decreased Income	**Frequency**	73	59	32	21	14	6	3	92	300	01
	%	24,3	19,7	10,7	7,0	4,7	2,0	1,0	30,7	100	
One Spouse Not Working	**Frequency**	35	23	27	47	31	26	5	106	300	04
	%	11,7	7,7	9,0	15,7	10,3	8,7	1,7	35,3	100	

Illness of One Spouse	**Frequency**	17	25	16	18	44	36	36	108	300	05
	%	5,7	8,3	5,3	6,0	14,7	12,0	12,0	36,0%	100	
Small Housing and Poor Ventilation	**Frequency**	18	16	36	32	33	33	17	115	300	03
	%	6,0	5,3	12,0	10,7	11,0	11,0	5,7	38,3%	100	
Rent Payment	**Frequency**	16	3	14	31	21	24	63	128	300	07
	%	5,3	1,0	4,7	10,3	7,0	8,0	21,0	42,7	100	
High Cost of Living	**Frequency**	52	58	59	22	15	10	6	78	300	02
	%	17,3	19,3	19,7	7,3	5,0	3,3	2,0	26,0	100	
Increasing Children's Needs	**Frequency**	22	40	37	34	28	26	31	82	300	06
	%	7,3	13,3	12,3	11,3	9,3	8,7	10,3	27,3	100	
Total	**Frequency**	233	224	221	205	186	161	161	709	2100	//
	%	11,1	10,7	10,5	9,8	8,9	7,7	7,7	33,8	100,0	

Chi-Square Value	**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**
437,01	**42**	**0,00**	**0,05**	**Not Significant (No Differences)**

***Note: The number of responses is greater than the sample size because some respondents chose more than one answer.**

This table illustrates that a significant number of respondents believe that deteriorating economic and social conditions play a role in the incidence of chronic diseases and pregnancy complications. The factors contributing to this belief vary in impact. The most commonly identified factor is income reduction, affecting 24.3% of respondents. This is followed by the high cost of living (19.3%) and poor housing conditions, including small living spaces and inadequate ventilation (12.0%). Other factors include the lack of employment for one of the spouses (15.7%), illness of one spouse (14.7%), increased needs of children (8.7%), and the burden of paying rent (21.0%).

From these findings, it can be concluded that deteriorating economic and social conditions do indeed influence the prevalence of chronic diseases and pregnancy complications. The most significant contributing factors are income reduction, high living costs, poor housing conditions, and the unemployment or illness of one spouse. Additionally, the increasing needs of children and rising rent costs for families without their own homes exacerbate these issues. This conclusion is supported by the Chi-square value of 437.01, which is statistically significant with 42 degrees of freedom and a significance level of 0.00, indicating that these economic and social factors do significantly affect the health outcomes of the respondents. Specifically, the most significant effects are related to income reduction and high living costs.

Table 13: Chronic Illness Suffered by Respondents Before Childbirth According to Their Age at Marriage

			Did you suffer from a chronic illness before childbirth?		Total
			Yes	No	
Age at Marriage	Under 20 years	Frequency	8	29	37
		%	21,6%	78,4%	%100
	From 20 to 24 years	Frequency	29	102	131
		%	22,1%	77,9%	%100
	From 25 to 29 years	Frequency	24	71	95
		%	25,3%	74,7%	%100
	From 30 to 34 years	Frequency	9	23	32
		%	28,1%	71,9%	%100
	From 35 to 39 years	Frequency	1	3	4
		%	25,0%	75,0%	%100
	40 years and older	Frequency	1	0	1
		%	%100	0,0%	%100
Total		Frequency	72	228	300
		%	24,0%	76,0%	%100
Chi-Square Value		Degrees of Freedom	Significance Level	Error Level	Decision
3,91		**05**	**0,56**	**0,05**	**Not Significant (No Differences)**

This table highlights that the majority of respondents (76.0%) did not suffer from a chronic illness before childbirth, with higher percentages among those under 20 years old (78.4%) and those aged 20-24 years (77.9%). In contrast, 24.0% of respondents confirmed experiencing a chronic illness prior to childbirth, with the highest incidence among those aged 40 or older (100%). Other age groups showing notable percentages of chronic illness prior to childbirth include those aged 30-34 years (28.1%) and those aged 25-29 years and 35-39 years (25.0%).

The conclusion to be drawn is that more than three-quarters of the mothers in this study did not suffer from chronic illness before childbirth, regardless of their age at marriage. This is confirmed by the Chi-square value of 3.91, which is not significant with 5 degrees of freedom and a significance level of 0.56, indicating that there are no significant differences in the responses regarding the presence of chronic illness before childbirth based on age at marriage.

Table 14: Reasons for Not Seeking Medical Advice Regarding Pregnancy Symptoms Based on Educational Level

			If "No", why did you not seek medical advice for these symptoms?			Total
			Service not available	Cost is high	The husband/wife is busy	
Wife's Educational Level	Primary	Frequency	3	2	0	5
		%	60,0	40,0	0,0	100
	Intermediate	Frequency	5	3	4	12
		%	41,7	25,0	33,3	100
	Secondary	Frequency	6	3	2	11
		%	54,5	27,3	18,2	100
	University	Frequency	5	3	1	9
		%	55,6	33,3	11,1	100
Total		Frequency	19	11	7	37
		%	51,4	29,7	18,9	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**	
3,23		**06**	**0,77**	**0,05**	**Not Significant (No Differences)**	
*Note: The number of responses is smaller than the sample size because only those who did not receive any advice or treatment regarding pregnancy-related symptoms are considered.						

According to this table, the most common reason respondents did not seek medical advice regarding pregnancy symptoms was the unavailability of the service, reported by 51.4% of participants. This reason was particularly prevalent among those with primary education (60.0%) and university education (55.6%). Meanwhile, 29.7% of respondents stated that the high cost of medical services deterred them, especially those with primary education (40.0%) and university education (33.3%). Another 18.9% cited the spouse being busy as the reason, with the highest percentage among those with intermediate education (33.3%).

From this, we can conclude that over half of the mothers in the study indicated that the unavailability of medical services was the main reason for not seeking medical advice, regardless of their educational level. This conclusion is supported by the Chi-square value of 3.23, which is not significant with 6 degrees of freedom and a significance level of 0.77. This indicates that there are no significant differences in the responses regarding the

unavailability of services as a reason for not seeking medical advice across different educational levels.

Table 15: Opinion on Whether Maternal and Infant Mortality is Due to Insufficient Healthcare for Mothers According to Educational Level

			Do you think maternal and infant mortality is due to insufficient healthcare for mothers?		Total
			Yes	No	
Wife's Educational Level	Primary	Frequency	22	2	24
		%	91,7	8,3	100
	Intermediate	Frequency	63	2	65
		%	96,9	3,1	100
	Secondary	Frequency	96	6	102
		%	94,1	5,9	100
	University	Frequency	101	8	109
		%	92,7	7,3	100
Total		Frequency	282	18	300
		%	94,0	6,0	100
Chi-Square Value		**Degrees of Freedom**	**Significance Level**	**Error Level**	**Decision**
1,56		**03**	**0,66**	**0,05**	**Not Significant (No Differences)**

This table shows that most of the respondents believe that maternal and infant mortality is due to insufficient healthcare for mothers, with 94.0%, particularly those with intermediate education (96.9%) and secondary education (94.1%). In contrast, 6.0% of the respondents disagreed, with the highest percentage among those with a primary education (8.3%) and university education (7.3%).

From this, we can conclude that nearly all the mothers in the study agree that maternal and infant mortality is related to insufficient healthcare, regardless of their educational level. This conclusion is confirmed by the Chi-square value of 1.56, which is not significant with 3 degrees of freedom and a significance level of 0.66, indicating that there are no differences in the responses regarding maternal and infant mortality being linked to insufficient healthcare for mothers based on their educational level.

Table 16: Period When Respondents Started Receiving Healthcare During Their Last Pregnancy According to the Number of Children

			Period When Healthcare Began During Last Pregnancy			Total
			First 3 months	Second 3 months	**Last 3 months**	
Number of Children	**One Child**	**Frequency**	41	6	0	47
		%	87,2	12,8	0,0	100
	Two Children	**Frequency**	69	19	2	90
		%	76,7	21,1	2,2	100
	Three Children	**Frequency**	65	20	0	85
		%	76,5	23,5	0,0	100
	Four or More Children	**Frequency**	38	13	0	51
		%	74,5	25,5	0,0	100
Total		**Frequency**	213	58	2	273
		%	78,0	21,2	0,7	100
Chi-Square Value		**Degrees of Freedom**		**Significance Level**	**Error Level**	**Decision**
6,93		**06**		**0,32**	**0,05**	**Not Significant (No Differences)**
*Note: The number of responses is smaller than the sample size because it only includes those who presented themselves for pregnancy check-ups.						

This table shows that most of the respondents began receiving healthcare during the first three months of their last pregnancy, with 78.0%, especially those with one child (87.2%). In contrast, 21.2% of respondents reported that they began receiving healthcare during the second three months, particularly those with four or more children (25.5%) and those with three children (23.5%). A small percentage, 0.7%, indicated that they began receiving healthcare during the last three months, with those having two children being the most common (2.2%).

Based on these findings, it can be concluded that more than three-quarters of the mothers in this study began receiving healthcare during the first three months, regardless of the number of their children. This conclusion is supported by the Chi-square value of 6.93, which is not significant at 6 degrees of freedom and a significance level of 0.32, meaning there are no differences in responses regarding when healthcare began during the last pregnancy according to the number of children.

Conclusion

Sociodemographic factors play a crucial role in determining reproductive health and maternal health. Through the field study conducted in Setif city, after presenting and

analyzing its data in light of the hypotheses, this study has led to several findings, which can be summarized as follows:

- Educational level impacts maternal health, educated women can, to some extent, maintain their health due to their continuous awareness of ways to protect themselves, regular monitoring of their health, following preventive measures, and adhering to medical advice. This contrasts with those who deny the relationship between educational level and the wife's health, as they rely on traditional knowledge of herbal remedies and maintaining their health without visiting a doctor, consuming a healthy diet (vegetables, fibers, etc.).
- Women with good education levels have better health awareness, most women with a good level of education have health literacy that enables them to deal with diseases and their treatments effectively.
- Many women seek medical advice, most women consult doctors to obtain medical information to help them maintain their health, the health of their children, and their families, sometimes offering advice to relatives and extended family members.
- Low socioeconomic status increases health risks, women with lower economic and social status are more likely to suffer from chronic diseases, which significantly increases the risks and complications of pregnancy, particularly due to low income, high living costs, inadequate housing, poor ventilation, unemployment, or the illness of one of the spouses, combined with rising needs for children and high rent costs for families without owned homes.
- Lack of healthcare contributes to higher maternal and infant mortality rates, the lack of healthcare for mothers is a significant contributor to pregnancy and childbirth complications, leading to higher maternal and infant mortality rates. More than half of the mothers in the study highlighted that the main reason they did not seek medical advice regarding pregnancy symptoms was due to the unavailability of healthcare services, regardless of their educational level.

Therefore, it can be concluded that social, economic, and cultural factors significantly influence maternal reproductive health. There is an urgent need to improve maternal health through collective efforts between the government and society, aiming to improve social and economic conditions, as well as to promote health awareness, ensuring better health outcomes for mothers.

References:

1. Abdelrahman Mohammed et al. (2013). *Comprehensive Dictionary for Translating Terms in Sociology and Social Psychology* (First Edition). Dar Al-Wafa for Printing and Publishing.
2. Bahaa El-Din Ibrahim Salama. (1997). *Health and Health Education*. Dar Al-Fikr Al-Arabi, Cairo, Egypt.
3. Dalila Azizi & Salima Belkhiri. (2022). *The Reality of Reproductive Health for Women in Algerian Society*. *Journal of Social and Human Sciences*, Volume 15, Issue 02, pp. 237-252.
4. Houari Rahal & Redouane Mesli. (2020). *The Reality of Reproductive Healthcare in Algeria According to the MICS4-2012 Survey Data*. *Journal of Social and Human Sciences*, Volume 21, Issue 02, pp. 279-300.
5. Issa Dallenda. (2004). *Changes in Reproductive Behavior in Algeria*. Doctoral Thesis, University of Oran 2, Algeria.
6. Khaled Sidik Khodja. (2020). *Fertility in Algeria: Between Decline and Rise - An Analytical Study*. *Cultural Dialogue Journal*, Volume 10, Issue 1.
7. Khalil Abdelhadi Al-Badou. (2009). *Population Sociology* (First Edition). Dar Hamed for Publishing and Distribution.
8. Mahmoud Hassan Abdel-Mahyi. *Public Health Between Social and Cultural Dimensions*. Dar Al-Ma'arifa Al-Jami'iya, Alexandria.
9. Mohammed Hassan Al-Zoghbi. (2000). *Summary in Public Health* (First Edition). General Security Printing Press, Amman, Jordan.
10. Nawel Lachichi & Amal Hachem. (2023). *Spatial Disparities in the Distribution of Reproductive Health Services in Algeria in 2018*. *Dimensions Journal*, Volume 10, Issue 01, pp. 479-494.
11. Pressat, R. (1979). *Dictionnaire de démographie*, PVF.
12. Samir Diyab Sbeitan. (2012). *Human Geography* (First Edition). Amman: Al-Janadriya Publishing and Distribution.
13. Zakaria Tahoune. (2010). *Population Trends: Where to? (Social, Security, Environmental, and Religious Perspectives)*. Cairo: Arab Bureau for Research and Environment.