

Knowledge and Behavior of Tunisian Men Regarding the Couple's Contraception: Clinical Trial

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Abstract

Objective: To assess the knowledge and the circumstances and sources from which men in Tunisia gain knowledge about contraception and their subsequent perceptions of different contraceptive methods.

Methods: A cross-sectional study conducted from January 2021 to December 2021, using a self-administered questionnaire. Tunisian men between 20-55 years were included. We examined participant profile, major sources of knowledge about contraception, perceptions of contraceptive side effects among Tunisian men and the factors influencing the level of knowledge of contraception.

Results: 122 men were questioned. The participants' mean age was 31.3+/-8.7 years (range 20-57). 65.6% of our participants had a tertiary education. For 70.5% of our respondents the contraception was a shared responsibility within the couple. These participants had a higher level of knowledge about contraception compared to those considering it a woman's domain ($p=0.042$). Knowledge of contraception increased with higher level of education ($P<0.001$). The condom was used by 96% of our respondents. 57.4% refused to use withdrawal as a mean of contraception. 44.3% of the participants had limited knowledge, about emergency contraception illustrated by the lack of awareness. 50% had false belief about the contraception and its interference to sexual life. The internet was main source of information and doctors were the most trusted source.

Conclusion: Measures must be taken to remedy to the noted lack of knowledge and false belief through the use of the internet and the healthcare providers as means to achieve this purpose.

Keywords: Contraception; Men; Knowledge; Couple; Tunisia

Introduction

Contraception is defined by the World Health Organization (WHO) as the use of agents, methods or procedures to reduce the risk of conception or avoid it totally [1,2].

In general, family planning units prioritize women-centered care and surveys on contraception are mainly aimed women. However, there is a growing recognition of the importance of the men's personal perspective in the implementation of reproductive health care, decreasing unwanted pregnancy and avoiding the abortion complications.

Given that men, often, have significant influences on a couple's family planning, research suggests that male involvement can increase uptake and guarantee observance of the use of contraceptive methods [3-5]. Unfortunately, few studies are focusing on assessing men beliefs, knowledge, attitudes and uses of modern contraceptives methods in order to identify the personal, cultural and social barriers impeding their support and uptake of family planning services [6-8].

Tunisia was the first country in the Arab and African world which created an official policy in 1964 "The National Institute of Family Planning" whose goal is to reduce the high rate of births.

To our knowledge, until today, no study has been conducted to evaluate Tunisian men attitude toward contraception or to assess their involvement degree in family planning issues.

Thus, the aim of our study is to assess the knowledge and capture the circumstances and sources from which men in Tunisia gain knowledge about contraception and their subsequent perceptions of different contraceptive methods.

Materials and Methods

A descriptive cross-sectional study was performed, including 122 men between 20 and 57 years old from different regions in Tunisia (Mahdia, Monastir, Sousse...).

Our study was spread over a period of one year, from January 2021 to December 2021.

Inclusion criteria were men aged 20 to 57 who accepted to be included in our study. Exclusion criteria were men over 57, under 20 and those who do not wish to participate in our study. A 20-question questionnaire was used for data collection. It was validated by a pre-test with 5 men who did not participate in the study, allowing to estimate the duration of the questionnaire and to observe the reactions and possible misunderstandings of the questions.

The questionnaire was produced in electronic form using Google Forms for internet distribution through social networks (especially Facebook) and it was filled anonymously in Arabic. We examined participant profile, major sources of knowledge about contraception, perceptions of contraceptive side effects among Tunisian men and the factors influencing the level of knowledge of contraception.

Our study does not pose any ethical problem because it does not involve any risk for the participants. Indeed, a moral consent

is obtained from the participants who agreed to answer our questionnaire. During our research, anonymity and confidentiality are preserved.

Results

The average age of the participants was 31.3+/-8.7 years with extremes ranging from 20 to 57 years. 65.6% of our participants had a tertiary education, 21.3% were in training while 71.3% were employees. Half of the respondents were married, 34.4% were single and 13.9% were in a couple (Table 1). More than half of the participants (51.6%) had children and 45.4% wanted to have a child in the near future.

Table 1: Socio-demographic and professional characteristics of participants.

Variable	Items	Numbers	Percentage
Age	20-25 years old	34	27.90%
	25-35 years old	52	42.60%
	>35 years old	36	29.50%
Marital status	Single	42	34.40%
	Married	61	50.00%
	In a relationship with	17	13.90%
	Divorce	2	1.60%
Study level	Elementary/middle/high school	23	18.90%
	Baccalaureate	19	15.60%
	Graduate studies	80	65.60%
Occupation	Unemployed	9	7.40%
	Student/training	26	21.3%
	Employee	87	71.30%
Child in charge	Yes	59	48.40%
	No	63	51.60%

The occurrence of an unwanted pregnancy was observed in 21.3% of respondents. Our study revealed that only 15.6% of participants discussed contraception with their doctor and 47.5% did not discuss it with their partners. 70.5% of respondents declared that the responsibility for contraception should be shared within the couple, while 26.2% believed that it is rather the woman's responsibility. Only 3.3% of participants considered the man is responsible for contraception. Contraception can interfere with the couple's sex life according

to 45.1% of the participants. It's considered a constraint to sexuality for 27% of them.

The internet was the first source of knowledge for participants about contraception (61.5%), followed by the doctor (25.4%), friends (25.4%) and school (24.6%) (Table 2). The majority of respondents (44, 3%) felt insufficiently informed about contraception. Only 13.9% of our population felt fully informed about this subject.

Table 2: Participants' source of knowledge about contraception.

Source	Number	Percentage
Youth area	9	7.40%
Doctor	31	25.40%
Friends	31	25.40%
Internet	75	61.50%
Midwife	16	13.10%
Family	10	8.20%
News papers	6	4.90%
TV	9	7.40%
Pharmacy	11	9.00%
School	30	24.60%

The male condom is the most known method among men of our population (59.0%), followed by pills (31%) and the IUD (21.3%).

54,1%; 62,3%, 43,4%; 44,3%; 55,7%; 56,6%) (Table 3). Half of respondents had no knowledge about the emergency contraception and only 14.8% used it at least once.

Our study shows a lack of knowledge of other contraceptive such as diaphragm, implant, patch, female condom, injectable progesterone, spermicide, male sterilization (respectively 62,3%;

Table 3: Evaluation of participants' level of knowledge of the different contraceptive methods.

	No info	Insufficiently	Enough	Perfectly
Diaphragm	76 (62.3%)	31 (25.4%)	12 (9.8%)	3 (2.5%)
Implant	66 (54.1%)	28 (23.0%)	21 (17.2%)	7 (5.7%)
Patch	76 (62.3%)	28 (23.0%)	16 (13.1%)	2 (16 %)
Pill	10 (8.2%)	21 (17.2%)	52 (42.6%)	39 (310 %)
Female condom	53 (43.4%)	24 (19.7%)	30 (24.6%)	15 (12.3%)
Male condom	7 (5.7%)	8 (6.6%)	35 (28.7%)	72 (59.0%)
Injectable progesterone	54 (44.3%)	30 (24.6%)	29 (23.8%)	9 (7.4%)
Spermicide	68 (55.7%)	31 (25.4%)	16 (13.1%)	7 (5.7%)
IUD	24 (19.7%)	29 (23.8%)	43 (35.2%)	26 (213 %)
Female sterilization	48 (39.3%)	32 (26.2%)	25 (20.5%)	17 (13.9%)
Male sterilization	69 (56.6%)	21 (17.2%)	18 (14.8%)	14 (11.5%)

The condom was the preferred method of male contraception (37.7%). The majority of respondents disagreed with the use of other methods of male contraception (Injectable progesterone,

the withdrawal method, male sterilization, male hormone pill; respectively 54.9%; 57.4%; 63.1%; 54.9%) (Table 4).

Table 4: Evaluation of participants' perception of male contraceptive methods.

	Totally agree	Agree	Disagree	Neither agree nor disagree
The male condom is the preferred method	46 (37.7%)	40 (32.8%)	27 (22.1%)	9 (7.4%)
Injectable progesterone is the preferred method	6 (4.9%)	20 (16.4%)	67 (54.9%)	29 (23.8%)
The withdrawal method is the preferable method	7 (5.7%)	23 (18.9%)	70 (57.4%)	22 (18.0%)
Male sterilization is the preferred method	7 (5.7%)	10 (8.2%)	77 (63.1%)	28 (23.0%)
Male hormonal pill is the preferred method	10 (8.2%)	13 (10.7%)	67 (54.9%)	32 (26.2%)
No existing male method is preferable	14 (11.5%)	24 (19.7%)	53 (43.4%)	31 (25.4%)
Another way would be better	16 (13.1%)	25 (20.5%)	32 (26.2%)	49 (40.2%)

Almost a third of participants (30.3%) are currently using contraception (female or male). The male condom was used by almost all of our population. The pill and the IUD are also frequently used (76%, 30% respectively).

Our study reveals a statistically significant relationship between the level of education and the level of knowledge of contraception: 64.2% of participants with a tertiary level of education knew contraception sufficiently/perfectly versus 10.5% of participants with a baccalaureate level and 22.7% of participants with primary or secondary education ($p < 0.001$).

Another statistically significant relationship was highlighted between the level of knowledge and the desire for a child: 55.2% of men who wanted a child knew enough/perfectly about contraception versus 40% of those who did not want a child ($p = 0.032$) (Table 5).

Table 5: Study of the level of knowledge of contraception according to socio-demographic and professional factors.

		No info	Insufficiently	Enough	Perfectly	P
Age	20-25 years old	6%	29%	47%	18%	0.47
	25-35 years old	8%	52%	27%	13%	
	>35 years old	8%	47%	33%	11%	
Marital status	Single	7%	26%	48%	19%	0.213
	Married	10%	54%	25%	11%	
	In a relationship	0%	35%	53%	12%	
	Divorced	0%	50%	50%	0%	
Study level	High school	14%	64%	14%	9%	<0.001
	Baccalaureate	5%	84%	0%	9%	

	Tertiary education	6%	30%	48%	16%	
Occupation	Unemployed	11%	56%	33%	0%	0.194
	Student training	8%	23%	54%	15%	
	Employee	7%	49%	29%	15%	
Child	Yes	10%	51%	27%	12%	0.217
	No	5%	38%	41%	16%	
Desire for child	Yes	9%	36%	45%	10%	0.032
	No	5%	55%	22%	18%	
Unwanted pregnancy	Yes	0%	54%	27%	19%	0.228
	No	9%	42%	36%	13%	

Our study shows that the participants who considered the woman to be solely responsible for contraception had a low level of knowledge of contraception compared to those who considered the couple or the man to be responsible for it ($p=0.042$).

knowledge of contraceptive methods compared to those estimating the opposite ($p=0.041$) (Table 6).

The participants who considered the contraception a discomfort to sexual life esteemed themselves having a good

Table 6: Study of the level of knowledge according to the perception of contraception.

Knowledge of contraception						
		No way	Insufficiently	Enough	Perfectly	P
Contraception discussed with doctor	Yes	0%	32%	42%	26%	0.149
	No	9%	47%	33%	12%	
Contraception discussed with Partner	Yes	5%	45%	33%	17%	0.479
	No	10%	43%	36%	10%	
Perception of contraception's responsibility	Wife	16%	59%	13%	13%	0.042
	The man	0%	25%	50%	25%	
	The couple	5%	40%	42%	14%	
Contraception interference with sex life	Yes	4%	35%	42%	20%	0.041
	No	10%	52%	28%	9%	

The level of knowledge was considered insufficient by 51% ($p=0.026$) and 55% ($p=0.033$) of participants using the internet and friends respectively, as source of knowledge against 42% ($p=0.043$)

of those consulting a doctor considered their knowledge sufficient (Table 7).

Table 7: Study of the level of knowledge according to the sources of knowledge.

		No information	Insufficiently	Enough	Perfectly	P
Internet	Yes	3%	51%	36%	11%	0.026
	No	15%	34%	32%	19%	
Doctor	Yes	6%	26%	42%	26%	0.043
	No	8%	51%	32%	10%	
Friends	Yes	16%	55%	23%	6%	0.033
	No	4%	41%	38%	16%	

Discussion

Almost the third of participants (30.3%) are currently using contraception.

It corresponds to the prevalence of the use of contraception estimated in Tunisia by the United Nations in 2020 (between 20 and 40%) [9]. The occurrence of an unwanted pregnancy was 21.3% in our population, lower than the worldwide rate of unintended pregnancies esteemed 44% between 2010-2014 [10].

In our study, 70.5% of respondents declared that the responsibility of contraception should be shared within the couple. These participants have a significantly higher level of knowledge about contraception compared to those who believed the woman to be solely responsible for it ($p=0.042$).

These finding reflects the level of awareness among Tunisian men regarding contraception and family planning.

Actually, in many developing countries, men are still the only main decision-makers on matters such as family planning and contraception use [11].

Yet, male partners support and shared responsibility are proven to positively influence the uptake of family planning services and to promote the use and adherence to modern contraception methods.

The husband's agreement on family planning was considered one of the most significant factors associated with the use of modern contraceptive methods among married women of reproductive age in rural Jordan.

Our study revealed a statistically significant relationship between the level of education and the level of knowledge of contraception ($p<0.001$). The association between the knowledge and use of contraception, and the high educational level has been shown by several studies [12,13]. This may explain the level of contraception awareness among our population since 65.6% of our participants had a tertiary education.

Our study tried to assess the use of male contraception among men of our population. Though, only 4 male contraceptives methods are actually commonly used: Condoms, periodic abstinence, withdrawal... [14].

The use of condom seems popular among Tunisian males; it was used by almost all of our respondents and it was the most preferred method of male contraception (37.7%).

Even though the withdrawal was the third most used method of contraception in northern Africa and western Asia according to data from Union Nations 2020; more than half of our population (57,4%) do not agree to the use of withdrawal as a mean of contraception. This finding underlines a good level of consciousness since the withdrawal is associated with high failure rate (19%).

Regarding vasectomy, it was known by 11% of respondents and only 5,7% agree to its use. A systematic review showed that men around the world are not well informed about this method and they keep having a negative image about it, even when they had access to consistent information from healthcare providers or an acquaintance who was satisfied by vasectomy. In the United States, the prevalence of vasectomy was 9% among men aged 20 to 49 in 2019 [15].

As for the hormonal male contraceptive methods, they still faces problems of adverse effects and there is a need for greater understanding of their action on the reproductive tract and other body systems.

The internet was the first source of knowledge for participants about contraception (61.5%), followed by the doctor (25.4%), friends (25.4%) and school (24.6%).

These findings are similar to the results of a local survey of the population of Tunis on knowledge about familial planning issues, published in 2020, traditional media and social networks were the first cited sources of information, followed by friends and health worker [16].

Still, the majority of men participants in our study (44,3%) felt insufficiently informed about contraception. In fact, the level of knowledge was considered insufficient by 51% ($p=0.026$) of respondents using the internet and 55% ($p=0,033$) of respondents consulting friends. This lack of knowledge is well illustrated by the lack of awareness about emergency contraception among half of our respondents leading to a great limitation in the use of this modern contraceptive method to only 14% of the participants, as well as the false belief that the contraception may be a hindrance to sexual life among 45.1% of the participants and even the respondents who esteemed

themselves having a good knowledge of contraception considered it a discomfort to sexual life ($p=0.041$).

Though, nowadays, social networks are esteemed a valuable mean of diffusing of new concepts regarding family planning and promoting the use of modern contraception methods for it allowed greater privacy and people described being more comfortable talking about family planning issues online vs. in-person [17]. The impact of social networks was assessed through a study that used existing social groups and influential network actors to engage women and men in reflection dialogues about family planning. The social network intervention led to statistically significant increases in couple and network communication on fertility desires. Both women and men showed significant shifts in the acceptability of discussing of family planning issues in public which reduced the social barriers and helped to address the unmet need for family planning among couples [18]. This type of social network discussion can be a solution for the difficulty expressed by 47.5% of men participating in our study in broaching the subject of contraception with their partners.

The doctor is considered a trusted source of knowledge by our respondents since 42% of those consulting a doctor esteemed their knowledge sufficient ($p=0.043$).

These results are consistent with other study, identifying the healthcare workers as the most trusted sources of family planning information.

In the local survey of the population of Tunisia on knowledge and attitudes regarding familial planning published in 2020, more than 70% of participants preferred health workers as primary sources of information. It then becomes important to promote their role in messages' transmission, especially when we find only 15.6% of participants discussing contraception issues with their doctors.

Conclusions

Our study highlights Tunisian men's involvement in contraception through their willingness to participate in family planning with their partner and the use of the known and available male contraception methods. Still, measures must be taken to remedy to the lack of knowledge expressed by our respondents. We propose the use of the internet and the healthcare providers as means to achieve this purpose.

Conflict of Interest

The authors have no conflicts of interest.

References

1. Soufir JC, Mieusset R (2012) Guide pratique d'une contraception masculine hormonale ou thermique. *Basic Clin Androl* 22:211-215
2. Short Communication (2013) La contraception masculine. *Rev Francoph Lab* 2013:19
3. Kriel Y, Milford C, Cordero J, Suleman F, Beksinska M, et al. (2019) Male partner influence on family planning and contraceptive use: Perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. *Reprod Health* 16:89
4. Shahjahan M, Mumu SJ, Afroz A, Chowdhury HA, Kabir R, et al. (2013) Determinants of male participation in reproductive healthcare services: A cross-sectional study. *Reprod Health* 10:27
5. Komasa M, Yuasa M, Shirayama Y, Sato M, Komasa M, et al. (2020) Demand for family planning satisfied with modern methods and its associated factors among married women of reproductive age in rural Jordan: A cross-sectional study. *PLoS One* 15:e0230421
6. Kabagenyi A, Jennings L, Reid A, Nalwadda G, Ntozi J, et al. (2014) Barriers to male involvement in contraceptive uptake and reproductive health services: A qualitative study of men and women's perceptions in two rural districts in Uganda. *Reprod Health* 11:21
7. Hoga LA, Rodolpho JR, Sato PM, Nunes MC, Borges AL (2014) Adult men's beliefs, values, attitudes and experiences regarding contraceptives: A systematic review of qualitative studies. *J Clin Nurs* 23:927-939
8. Sait M, Aljarbou A, Almannie R, Binsaleh S (2021) Knowledge, attitudes, and perception patterns of contraception methods: Cross-sectional study among Saudi males. *Urol Ann* 13:243-253
9. United Nations (2020) World fertility and family planning 2020: Highlights (ST/ESA/SER. A/440). Department of Economic and Social Affairs, United Nations, USA
10. Bearak J, Popinchalk A, Alkema L, Sedgh G (2018) Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: Estimates from a Bayesian hierarchical model. *Lancet Glob Health* 6:e380-e389
11. Alomair N, Alageel S, Davies N, Bailey JV (2020) Factors influencing sexual and reproductive health of Muslim women: A systematic review. *Reprod Health* 17:1-5
12. Arbab AA, Bener A, Abdulmalik M (2011) Prevalence, awareness and determinants of contraceptive use in Qatari women. *East Mediterr Health J* 17:11-18
13. Spinelli A, Talamanca IF, Lauria L (2000) Patterns of contraceptive use in 5 European countries. European Study Group on Infertility and Subfecundity. *Am J Public Health* 90:1403
14. Frankiewicz M, Połom W, Matuszewski M (2017) Can the evolution of male contraception lead to a revolution? Review of the current state of knowledge. *Cent European J Urol* 71:108-113
15. National Survey of Family Growth (2024) 2017-2019 NSFG: Public-use data files, codebooks, and documentation. National Center for Health Statistics
16. Hassine LB (2020) Enquête auprès de la population du Grand Tunis sur les connaissances et les attitudes en matière de santé sexuelle et reproductive ainsi que sur la réception des messages de prévention. *Communication* 37
17. Zinke-Allmang A, Hassan R, Bhatia A, Gorur K, Shipow A, et al. (2022) Use of digital media for family planning information by women and their social networks in Kenya: A qualitative study in peri-urban Nairobi. *Front Sociol* 7:886548
18. Kim TY, Igras S, Barker KM, Diakité M, Lundgren RI (2022) The power of women's and men's Social Networks to catalyze normative and behavioural change: Evaluation of an intervention addressing Unmet need for Family Planning in Benin. *BMC Public Health* 22:672