

## Pattern of Family Planning in Bani-Talib village in Assiut, Egypt-cross Sectional Study

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### KEYWORDS

Pattern, Family planning, prevalence, barriers, methods, obstacles, unmet needs, Contraceptive use, Egypt

### ABSTRACT

Family planning programs have emerged as one of the most successful public health interventions of the 20th century, significantly improving maternal and child health outcomes. This study aims to evaluate the prevalence and patterns of contraceptive use in Bani-Talib village, Assiut governorate, and to identify barriers to family planning method utilization. Conducted as part of a baseline survey by the Ministry of Health and Population in 2010, this cross-sectional study included all married women aged 15-49 in the village. Data were collected through structured questionnaires addressing demographic information and contraceptive practices. Ethical approval was obtained, and data were analyzed using SPSS.

The mean age of participants was 30.38 years, with an illiteracy rate of 63.8% and only 4.6% employed. The prevalence of contraceptive use was 46%, with 36.9% never having used any method. The most commonly used contraceptive method was the intrauterine device (IUD) at 40.4%, followed by injectables (32%) and oral contraceptive pills (22.1%). Major barriers to contraceptive use included newly married status (34.9%), cost (24.8%), and concerns about infertility (20.2%). The findings revealed no significant differences in contraceptive use related to education, employment status, or number of children, but age was significantly associated with usage patterns.

The results highlight the need for targeted interventions to address barriers to contraceptive use and increase awareness of family planning among men. Future studies should further explore family planning utilization patterns in urban versus rural settings in Egypt. Enhanced training for healthcare providers is also recommended to improve family planning service delivery in rural communities.

## 1. Introduction

Family planning programs are among the most successful public health interventions of the 20th century, based upon the incontrovertible link between improved maternal health and child, family, and community health. The public's health, especially in rural areas of developing countries, is also strongly affected by natural resource quality, availability, and sustainable use (Foster et al., 2008). Annually around 80 million unwanted pregnancies occur worldwide (Alan, 1999). The most of them are due to the non-use or the inconsistent use of contraceptive methods (Kost et al., 2008).

In developed countries, the contraceptive methods are accessible (Kero et al., 2001). A better understanding of reproductive health service use and needs within low income population is crucial for improving services and subsequently for improving health (He H, Østbye T, Daltveit AK).

Family planning in Egypt not only seeks to reduce population size but also introduces rations of individual choice and self regulation. The target of family program in Egypt is primarily the female body, it introduces the women to new ideas and values about home, child welfare, motherhood, and consequently the meaning of family, community and nation (Ali, 2002).

Contraceptive methods can be classified in to either; modern contraceptive methods like oral contraceptives (COCs), implants, injectables, intrauterine device (IUD), and condoms. Or Traditional methods like; Withdrawal, periodic abstinence, long term-abstinence and prolong breast feeding (El-Zanaty et al., 2009). The pattern of contraceptive use varies widely among nations, ranging from approximately 10% to more than 75%. (Wallace/Maxcy, 2008). The trend Contraceptive use has increased in many parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa (El-Zanaty et al., 2009).

Unmet need for contraception can lead to unintended pregnancies, which pose risks for women, their families, and societies, and the particularly harmful consequence of unintended pregnancies is unsafe abortion (Bishwajit et al, 2017).

## 2. Methods

This Cross-sectional design study is part of base line survey 2010 that was conducted by the (MOHP) and family planning sector. The study conducted in Bani Talib village in Alfath district of Assiut governorate. All households of the village were included, and all married females aged (15-49) who approved to participate in the study were included and interviewed using questionnaire that included demographic data: Name, Sex, Age or birth date, Residence, Marital status, Age of wife at the first marriage, Number of children, Education level, Occupation, and degree of consanguinity, and other part of questionnaire of data on the contraceptive use.

Ethical approval from the authority of the Ministry of Health and Population (Family Planning sector) was obtained and the confidentiality of the information in the records was secured throughout the work according to the Helsinki declaration. Also, approval of research ethics committee was obtained.

Data were analyzed using the SPSS program. Qualitative data were presented in frequency and related percentage. Quantitative data were presented in mean and standard deviation. Comparison of qualitative data was done using the chi-square test. Comparison of quantitative data between two groups was done by independent student T test, and by analysis of variance for comparison among more than 2 groups with Post hoc least significant difference. A p value of 0.05 was chosen as level of significance.

## 3. Study results

**Table 1: Demographic characteristics of study group at Bani Talib village, 2014.**

	Study Sample
Total number	591
Age (Mean±SD)	30.38± 8.1
Work status (no & %)	
work	27 (4.6)
Not work	564 (95.4)
Education status (no & %)	
Illiterate	377 (63.8)
Read and write	8 (1.4)
primary	21 (3.5)
preparatory	56 (9.5)
secondary	120 (20.3)
university	9 (1.5)

Table (1) shows the characters of study group and it reveals that the mean age of the group was 30.38 with standard deviation 8.101.

**Table 2: Different contraceptive methods used in the study groups at Bani Talib village, 2014.**

Study group	No	Percent
Never used	218	36.9%
Used and stopped	101	17.1%
Currently use	272	46%
Total	591	100%

**Table 3: Different types of contraceptive methods used at Bani Talib village, 2014.**

The contraceptive method	No	Percent
Injection/ 3 months	87	32.0
IUD	110	40.4
Combine pills	60	22.1
Ampillanon capsules	4	1.5

Progesterone only pills	10	3.7
Other methods	1	0.4
Total	272	100.0

Table 3 shows that the most commonly used method of contraception by the group was the Intra Urine Device (IUD) which was 40.4%, and the least used method was ampillanon capsule which accounted only for 1.5%.

**Table 4: Different sources from which the subject gets the methods of contraception used at Bani Talib village, 2012.**

The source	No	Percent
Health care unit	205	75.4%
Pharmacy	28	10.3%
Private clinic	26	9.6%
General hospital	7	2.6%
Others	6	2.2%
Total	272	100.0%

**Table 5: Comparison of general characters in never used, current used and previous used at Babi Talib village**

Group	Never used		Current used		Previous used		P.value
Age (Mean± SD)	26.45 ± 7.31		32.63 ± 7.5		32.8 ± 8.18		0.000*
<b>Working status</b>	<b>No</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>	
Working	6	2.80%	16	5.9%	5	5%	0.252
Not work	212	97.20%	256	94.1%	96	95%	
<b>Educational status</b>							
Illiterate	135	61.90%	175	64.3%	67	66.3%	0.348
Read & write	3	1.40%	5	3.7%	0	0%	
Primary	4	1.80%	10	3.7%	7	6.9%	
Preparatory	24	11%	25	9.2%	7	6.9%	
Secondary	50	22.90%	51	18.8%	19	18.8%	
University	2	0.90%	6	2.2%	1	1%	
<b>No of children_3</b>							
≤3	135	69.1%	194	71.3%	65	64.5%	0.78
> 3	83	30.9%	78	28.7%	36	35.6%	

\*P Value less than 0.001 between never used group and the other 2 groups. No significant difference between currently used and previously used groups.

#### 4. Discussion

In this study the mean age of the study group found to be (30.38± 8.101), our finding is quite similar to other studies from nearby or similar countries. Demographic and Health Survey study that was done in rural part of Sudan (West Darfur) by McGinn et al., (2007) found the mean age of the women was (27.3—28.9) years. Other study in India in urban population of Delhi was found the mean age of (28.76 ± 6.34) years (Seema et al., 2011). In the Khuzestan province of Iran the average age of the 383 women participants (15–49) were (30.2±7.616) years (Masoumeh, 2010) and mean age of the respondents was 33.5±4.1 years in study done in Saudi Arabia by (Mounira, 2010). From those above studies we can estimate that the age of all family planning studies was nearly the same showing that in all Arab and Muslims places the age of mothers searching for family planning services are nearly the same.

In this study the percentage of working women among the study group was only 4.6%. This was in contrast to what was reported in a study in India in which 33.6% of married women were employed. Also the study carried out by Francesca et al., (2010) found that worker women were 22.3% in urban areas and 38.7 % rural areas. The illiteracy rate among the study group was 63.8%. This is quite similar to Egypt Description Information Book (2007) by Abdin AE, Salem S in which the women's illiteracy at the Fayoum governorate level was 66.2%. Our result was very high comparing to 45%, the overall percent of Egyptian women (15--49) illiteracy and 32% of Moroccan women illiteracy that reported by Youssef Courbage in 2009.). Other study for Saudi Arabian women

revealed that most of the participants (89.7%) had received education, 17.1 % had university degree while 10.3 % were non-educated (Mounira Al Sheeha, 2010). Comparing our study result to above studies, that the socio economic status and development of the country may play major role in education level in addition to cultural difference.

In this study the prevalence of contraceptive use were found to be current users 46%, previous users 17.1% and never used 36.9%. This result quite similar to study of Weinman et al., (2004) in Fayoum governorate, Current users 40.5%, past users 23% and, never 36.5%. The finding is quite similar to the prevalence rate in whole rural Upper Egypt (45.2%) in Egyptian Demographic Survey 2005 (El-Zanaty and Way, 2005). Also the study carried In upper Egypt in 2012, found the use rate of contraception among whole rural was 46% that similar to this study result (Farzaneh et al., 2012).

Discontinuation rate of contraceptive use in Bani Talib, who was using and stopped, in this study was 17.1%. Study by Maharan et al., (2004) in Fayoum reported that the discontinuation of contraceptive use of 23% that was slightly more than ours. In contrast to our result, study by Forzaneh et al in (2012) found the discontinuation of use in Jordan to be 45%.

From the analysis of the study we found that IUD is the most type of method used in Bani Talib village (40.4%), followed by injection/ 3 months and then combined pills (22.1%) and the result quite similar to the result of recent study in Upper Egypt in 2012 in which IUD was the most popular method, used by 36%, followed by the pills (12%) and inject able contraceptives (7%) (Farzaneh et al., 2012). In a study in Saudi Arabia Oral pills were the most commonly used method in which ( 70.2%) of users primarily depending on them, followed by IUD 12.0 % of the users (Mounira, 2010).

Our result shows that 78 % of women obtain their contraceptive methods from the public sources, 10.3% obtain contraceptive method from pharmacies and 9.6% from private services. These results were similar to result of (El-Zanaty and Way, 2005) in which overall, current family planning users were obtaining their methods from a governmental sources (57%) and 43% from a private sectors sources.

This study showed that the reasons for never used contraceptive, 34.9% were due to new marriage, 24.8% because of cost and 20.2% due to infertility. Health concern, absence of the husband, desire to get pregnant and others like fear of complication, lactation and disapproval of husband. Study of rural Nigeria by Olugbenga et al., (2011) found 86.4% of women never used with no reason, 2.6% side-effect, 6.2% husband disapproval and 4.7% because of desire for more children.

The study result of comparing the characters of never used contraception with used, revealed that only significant difference was the mean age of them ( $P < 0.001$ ) and there were insignificants different between groups in other characters studied ( $p > 0.05$ ) for working status ( $P > 0.05$ ), educational status ( $P > 0.05$ ) and number of children above 3 ( $P > 0.05$ ). By comparing three group of women (never used, current used and previous used), it was gave the same result, only significant in mean age of groups.

## 5. Conclusion

Family planning programs are among the most successful public health interventions of the century. There are different methods of contra captives, all save lives of women and child and improve quality of life for all community. Family planning was known by Egyptian since Pharaohs. In 1930 evolution of family planning started, Upper Egyptian women reportedly have low levels of contraceptive use and high rates of discontinuation and an unmet need comparing with other parts of Egypt. This study aimed to determine the prevalence rate of use of different types of, family planning and to identify main obstacles for non use of the family planning methods in Bani Talib village.

This study was part of base line survey 2010 that was conducted by the (MOHP) and family planning sector. All households of Bani Talib village were included, and all married females aged (15-49) who approved to participate in the study were included.

The study revealed that the mean age of study group was ( $30.38 \pm 8.101$ ), 4.6% only working, illiteracy among them was 63.8%. The prevalence of contraceptive use was 46. % ex. users 17.1% and never used were 36.9%. mostly three common method used were IUD (40.4%), followed by injection (32%) and then pills (22.1%). Seventy five percent of the women were obtaining their use in the health unit. The mostly three reasons of discontinuation were desire to get pregnant (42.6%), absent of husband 38.6% and cost of contraceptive

(10.9%) of cases. Analysis of study result was showed that education status of women in Bani Talib village, employment and number of children had no significant effects in their use of contraceptive use; the only significant effect was for the age of the women.

## 6. Recommendations

- Future studies are recommended to explore and compare the pattern of use of family planning in urban and rural areas in Upper Egypt as well in Lower Egypt.
- Designing and implementations of innovative Approaches to tackle the reasons of stopping use or non use of the family planning methods including the availability and cost barriers.
- The necessity of making programs aims to increase male awareness of family planning to decrease discontinuation and never using of contraception due to disapproval of husbands.
- The necessity of training doctors and health personnel who work in the health units in the villages to improve utilization of family planning.

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