

Journal of Pharmaceutical Sciences and Research

www.jpsr.pharmainfo.in

# Comparative study of Knowledge, Attitude and Practices of family planning among traditional birth attendants, trained and untrained in Wassit governorate

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### Abstract:

**Background:** Traditional birth attendants play a key role in family planning management, especially if they are well-trained about postpartum care which reflect positively on reproductive health.

Aim: To compare the knowledge, attitude and practices of family planning between traditional birth attendants, trained and untrained

**Methodology:** This cross-sectional study was conducted among the traditional birth attendants, (45 trained and 45 untrained) in Wassit government, from 1St February to 1St May 2015, and who accept to participate this study. Data were collected by direct interview with traditional birth attendants using special questionnaire form covering the following aspects; knowledge, attitude and practices of their toward family planning.

**Results**: The higher percentage of traditional birth attendants trained and un trained was in the age groups (>40) years (73.33%) and (66.67%) respectively, the difference between two groups with respect to education level was statistically significant (P-value =0.011). The overall knowledge level was found poor among two groups (71.11%) & (75.56%). only 15.56% of traditional birth attendants trained & 22.22% of traditional birth attendants untrained, had good practice score regarding family planning; Positive attitude towards family planning was observed among (95.56%) of traditional birth attendants trained & (88.89%) of traditional birth attendants untrained **Conclusions:** The knowledge of both TBAs trained and untrained regarding family planning was relatively low. Although most of the TBAs had good attitude& believe about family planning, still the practice score of their was poor.

Keywords: Traditional birth attendants, training, family planning

## Introduction

Iraq is a vast country with the annual growth rate 2.6% in 2012<sup>(1)</sup>. Which is a major medical, social, economic problem<sup>(2)</sup> and a leading cause of maternal and childhood morbidity and mortality <sup>(3,4)</sup>. Moreover, increased fertility rate and closed child spacing have major negative effects on quality of life, due to Lack of education, lack employment opportunities and lack of access to health services<sup>(5)</sup>. The first and effective step to reduce the maternal mortality would be through family planning <sup>(6)</sup>

A planned family is an essential component of reproductive health components<sup>(7)</sup>. That family planning methods contribute to improving the health of mothers and children and the reduction of population growth<sup>(6)</sup>. Family planning allows couples to determine the number of wanted children and adequately space pregnancies <sup>(8)</sup>

The family planning services in Iraq need more efforts to improve it, The I-WISH 2011 indicators have shown that the total use of family planning methods in all Iraq is 39.8%, and the total fertility rate 4.2%, in Wassit governorate the percentage of use of family planning methods reached (28.8%) and needs unmet 25.8%. as well as fertility 4.9% (9).

Traditional birth attendants can play a key role in family planning management <sup>(10)</sup> especially if the TBAs are well-trainED about postpartum care<sup>(11)</sup>. Despite some reservations on the idea of training of TBAs<sup>(12)</sup>. According to the Ministry of planning, 21.5 % of deliveries occur at home<sup>(13)</sup> so trained TBAs can be supports the extension family planning by increasing the number of referrals of women to health centers<sup>(14)</sup>.

The main objective of TBA training were to reduce maternal and child morbidity and mortality which will reflect positively on reproductive health <sup>(15)</sup> and the family planning program supported by TBAs highly depends on their knowledge and attitudes about family planning <sup>(16)</sup> Therefore, this study is planned with the objective to compare the knowledge, attitude and practices of

family planning among traditional birth attendants, trained and untrained

# METHODOLOGY:

Initially, ethical approval (An official permission) from the Wassit Health Directorate were obtained. Verbal consent from the TBAs was obtained also. Interviewer clearly explain the goals and purpose of the study to traditional birth attendants . All the information was kept confidential.

A cross-sectional study was conducted among the traditional birth attendants, trained and untrained in Wassit government, Wasit governorate is located about 180 kilometers north of Baghdad, Iraq's capital. It consists of 6 districts, with a population of 1064950 in 2007(1). In Wassit. There are six hospitals and forty one health centers covered by the family planning services in 2015. The study extended from 1St February to 1St May 2015. The study sample included 90 traditional birth attendants (45 trained and 45 untrained) whose ages were 21 years and above. The questionnaire was designed to encompass two part: the first part covered the socio-demographic characteristics of the of the TBAs regarding: age, residence, marital status ,educational, employment status. The second part inquired into the knowledge (5 questions regarding the traditional birth attendants knowledge) , attitude (8 questions regarding the attitudes about planning and practices (6 questions regarding the practice of family planning). Interviewer were conducted with TBAs in two forms, the first method was face to face and the other, home to home by phone. The inclusion of traditional birth attendants who have accepted to participate in the study.

The information regarding each case was transferred into code sheets and data were entered into personal computer, and statistical analysis was done using the Minitab (version16). The approach to data consisted of two steps (descriptive and analytic statistic). Chi-squared test using 2x2 contingency table was used. The differences between observations were considered significant at p $\leq$ 0.05.

### RESULTS

The distribution of the studied group by demographic characteristics is shown in table (1). The highest proportion of TBAs trained (73.33%) were age group (>40) years compared to (66.67%) of TBAs untrained in age group (>40) years . The current study showed that the study sample (TBAs trained & untrained) were from various levels of education. Education level of the studies sample was classified into six levels: The highest percentage of TBAs trained were in the level of read and write (37.78%) while the highest percentage of TBAs untrained (28.89 %) were in intermediate level. And the lower percentage of TBAs trained & untrained were in level of institute & higher (4.44%, 6.67%) respectively, the difference between two groups with respect to education level was statistically significant (p=0.024). In regard to the employment status. It was found that 51.11% of TBAs trained and 55.56% TBAs untrained were unemployed. However, no statistical significance have been proved for this point (P=0833). The study shows that highest percentages of TBAs trained (73.33%), and TBAs untrained (68.89%) were married. This difference was not statistically significant (p=816). Regarding residence, majority of the studied sample (80,00%) of TBAs trained and (88.89%) of TBAs untrained from urban area, with not statistically significant (p=0.383). Concerning length of experience of TBAs, The highest proportion of TBAs trained ( 66.67%) were in the length of experience of TBAs (> 15) compared to (35.56) of the TBAs un trained were in the length of experience of TBAs (15-5 years). The association between two groups was highly significant (p=0.002).

# Knowledge towards family planning:

Table 2 shows the knowledge regarding the awareness to family planning, the meaning of family planning, number of family planning methods known, the benefit of family planning, and type of family planning methods known. In regard to awareness

to family planning, that the highest percentage of TBAs trained and TBAs un trained were Awareness to family planning (97.78%). Likewise, the majority, (55.56 %) of TBAs trained and TBAs un trained were replied that birth control is the meaning of family planning While only (24.44 %) of TBAs trained and (15.56 %) of TBAs un trained replied that birth control & spacing child is the meaning of family planning. In respect to the number of family planning methods known, The highest percentage TBAs trained and TBAs un trained knew that the less than 3 of family planning methods (57.78 %, 60.00%) respectively. Considering the benefit of family planning, (31.11%) TBAs trained & (22.22%) of TBAs un trained said that the social benefit of family planning . (26.66%) TBAs trained & (35.55%) of TBAs un trained replied that the economic benefit of family planning regarding the type of family planning methods, only ((22.22%) TBAs trained & (33.33%) of TBAs un trained replied that a breast feeding as one of family planning method, the majority, (68.88%) of TBAs trained replied that a pills. While (60.00 %) of TBAs un trained replied that a pills. (64.44%) of TBAs trained & (73.33%) of TBAs un trained said that the IUD. Forty two TBAs trained & (46.66%) of TBAs un trained replied that the Injectables. (33.33%) of TBAs trained replied that a Withdrawal. While (26.22 %) of TBAs un trained replied that a Withdrawal and (53.33%) TBAs trained & (37.77%) of TBAs un trained said that the condom. However, no statistical significance have been proved for respondents by knowledge on family planning (P > 0.05)

Table 3 show the knowledge score on family planning among TBAs trained and untrained. The overall knowledge level was found poor among (71.11%) of TBAs trained & (75.56%) of TBAs untrained knowledge score was observed as good and acceptable (28.89%) of TBAs trained & (24.44%) of TBAs untrained

Table-1: Socio-demographic characteristics of the study population

Variable	Traine	ed (n=45)	Untraine			
variable	No.	%	No.	%	P value*	
Age						
≤40	12	26.67	15	33.33	0.646	
>40	33	73.33	30	66.67	0.646	
Education level						
Illiterate	3	6.67	4	8.89		
Read and write	17	37.78	5	11.11		
Primary	6	13.33	9	20.00	0.024	
Intermediate	5	11.11	13	28.89	0.024	
Secondary	12	26.67	11	24.44		
Institute & Higher	2	4.44	3	6.67		
Employment status						
Employed	22	48.89	20	44.44	0.922	
unemployed	23	51.11	25	55.56	0.833	
Marital status						
single	0	0	4	8.89		
Married	33	73.33	31	68.89	0.816	
Divorced	4	8.89	2	4.44	0.810	
Widowed	8	17.78	8	17.78		
Place of residence			•		•	
Urban	36	80.00	40	88.89	0.202	
Rural	9	20.00	5	11.11	0.383	
Length of Experience				•		
<5	3	6.67	15	33.33		
5-15	12	26.67	16	35.56	0.002	
>15	30	66.67	14	31.11		

<sup>\*</sup>P-value calculator after inducing( illiterate & read and write into one, and primary, intermediate, secondary and institute & higher education into one) and inducing (widowed, divorced & single into one) and inducing(<5& 5-15) into one.

Table 2: Distribution of respondents by knowledge on family planning:

Table 2	<del></del>					
Questions	Answers of TBAs	Trained (n=45)		Untrained (n=45)		P value*
Questions	Alisweis of TDAS	No.	%	No.		1 value
Awareness to family planning	Aware 2	44	97.78	44	97.78	
	Not aware 1	1	2.22	1	2.22	
	Birth control	25	55.56	25	55.56	
What is the meaning of family planning	Spacing child	9	20.00	13	28.89	0.429
	Both	11	24.44	7	15.56	
Number of family planning methods	Less than 3	26	57.78	27	60.00	0.920
known	more than 3	19	42.22	18	40.00	0.830
What are the benefit of family planning	economic	12	26.66	16	35.55	
	social	14	31.11	10	22.22	
	political	1	2.22	2	4.44	0.502
	educational	3	6.66	3	6.66	
	healthy	28	62.22	32	71.11	
	IUD	29	64.44	33	73.33	
	Pills	31	68.88	27	60.00	
	Injectables	21	46.66	19	42.22	
	Vaginal suppositories	6	13.33	4	8.88	
Type of family planning methods known	Calendar	9	20	7	15.55	0.761
	Condom	24	53.33	17	37.77	0.761
	Breastfeeding	10	22.22	15	33.33	
	Abstinence	1	2.22	0	0	
	Withdrawal	15	33.33	12	26.66	
	others	1	2.22	0	0	

<sup>\*</sup>P-value calculator after inducing (Birth control & spacing child into one) and inducing (social, economic, political, education into one) and inducing (modern methods [IUD, pills, injectables, vaginal suppositories, condom & others] into one, and traditional methods [Calendar, breastfeeding, abstinence, withdrawal] into one.

Table 3: Total scores of the Knowledge

77 1 1	Untrai	ned (n=45)	Trained (n=45)		
Knowledge score	N0	%	N0	%	
Poor	32	71.11	34	75.56	
Good and acceptable	13	28.89	11	24.44	

Table 4: Distribution of respondents by information related to attitude towards family planning

0 "	4 C. (TD) 4	Trained (n=45)		Untrained (n=45)		D1 *
Questions	Answers of TBAs	No.	%	No.	%	P value*
If not current user of family planning, if intends to use them in future	Yes	20	44.44	34	75.56	
	No	15	33.33	8	17.17	0.005
	Not sure	10	22.22	3	6.67	]
	Yes	25	55.56	23	51.11	
If husband approve family planning	No	14	31.11	10	22.22	0.832
-	Not sure	6	13.33	12	26.67	]
	Yes	41	91.11	39	86.67	
If frequently discuss with husband on family planning	No	3	6.67	3	6.67	0.737
	Not sure	1	2.22	3	6.67	
Are the customs and traditions that encourage family	Yes	18	40.00	24	53.33	
	No	15	33.33	12	26.67	0.291
planning	Not sure	12	26.67	9	20.00	
	Yes	18	40.00	23	51.11	0.397
Are the religion that encourage family planning	No	11	24.44	13	28.89	
	Not sure	16	35.56	9	20.00	
	Yes	32	71.11	30	66.67	
Thinking that benefits of family planning outweigh negative effects	No	8	17.78	5	11.11	0.820
negative enects	Not sure	5	11.11	10	22.22	]
	Yes	43	95.56	39	86.67	
If desire to know more on family planning	No	2	4.44	6	13.33	0.267
	Not sure	0	0	0	0	
	Yes	43	95.56	38	84.44	
If would recommend use of family planning to a friend	No	2	4.44	7	15.56	0.160
	Not sure	0	0	0	0	

<sup>\*</sup>P-value calculator after inducing no& not sure into one.

**Table 5: Total scores of the Attitude** 

Additional and a second	Untrai	ned (n=45)	Trained (n=45)		
Attitude score	N0	%	N0	%	
Poor	2	4.44	5	11.11	
Good and acceptable	43	95.56	40	88.89	

Table 6: Distribution of respondents by information related to practice towards family planning.

Table 6: Distribution of respondents by information related to practice—towards family planning.								
		Unt	raine d	Traine d		Ì		
Questions	Answers of TBAs	(n=45)		(n=45)		P -value		
		No.	%	No.	%			
If ever used family planning	Yes	26	57.78	27	60.00	0.5		
	No	19	42.22	18	40.00	0.5		
If augrently using family planning	Yes	16	35.56	18	40.00	0.414		
If currently using family planning	No	29	64.44	27	60.00	0.414		
	Calendar	3	6.66	3	6.66			
	Injectables	2	4.44	2	4.44			
	Pills	2	4.44	6	13.33			
	Withdrawal	1	2.22	1	2.22			
Method(s) ever used	Breastfeeding	0	0	3	6.66	0.383*		
	IUD	5	11.11	4	8.88			
	Vaginal suppositories	0	0	1	2.22			
	Condom	2	4.44	1	2.22			
	Others	2	4.44	0	0			
Duration of use	≥3	8	50.00	14	77.78	0.09		
Duration of use	<3	8	50.00	4	22.22	0.09		
If ever experienced side effect	Yes	14	87.50	13	72.22	0.252		
	No	2	12.50	5	27.78	0.232		
If ever shifted from one method of family	Yes	11	68.75	15	83.33	0.275		
planning to another	No	5	31.25	3	16.67	0.213		

<sup>\*</sup> P-value calculator after inducing modern (IUD , pills, injectables, vaginal suppositories, condom & others into one, and tradition (Calendar, Breastfeeding, Abstinence, Withdrawal into one.

**Table 7: Total scores of the Practice** 

Practice score		trained n=45)	Trained (n=45)		
	N0	%	N0	%	
Poor	38	84.44	35	77.78	
Good and acceptable	7	15.56	10	22.22	

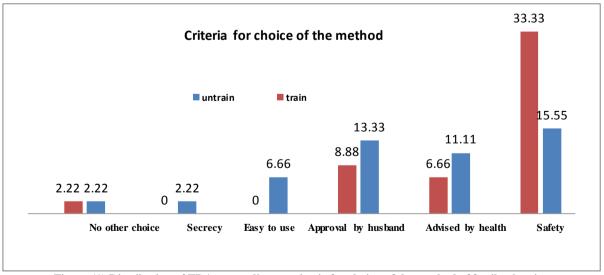


Figure (1) Distribution of TBAs according to criteria for choice of the method of family planning

### Attitude towards family planning:

Table 4 shows the answers of the interviewees of Attitude regarding family planning. The majority of participants among TBAs trained & TBAs un trained , (44.44%), (75.56%) respectively agree to use family planning in future . While (33.33%) of TBAs trained & (17.17%) of TBAs un trained disagree. Among (55.56%) of TBAs trained & (51.11%) of TBAs untrained agree that their husband approve family planning, While (31.11%) of TBAs trained & (22.22%) of TBAs untrained disagree.

High percentage (91.11%) of TBAs trained & (86.67%) of TBAs untrained that discuss with husband on family planning , While low percentage (6.67%) of TBAs trained & TBAs untrained that not discuss with husband on family planning . Out of 45 TBAs trained, (40.00%) agree that the customs and traditions that encourage family planning & (33.33%) disagree. While (53.33%) of TBAs un trained agree the customs and traditions that encourage family planning, (26.67%) disagree.

Regarding the religion that encourage family planning, (40.00%) of TBAs trained & (51.11%) of TBAs un trained agree, while (24.44%) of TBAs trained (28.89%) of TBAs un trained disagree. The majority of participants among TBAs among trained & un trained, (71.11%) (66.67%) respectively, thinking that benefits of family planning outweigh negative effects. While (17.78%) of TBAs trained & (11.11%) of TBAs trained don't think.

Very few TBAs among trained & un trained, (4.44%) & (13.33%) respectively think that desire to know more on family planning. While (95.56 %) of TBAs trained & (86.67%) of TBAs trained don't think . ninety five TBAs trained & (84.44%) of TBAs un trained that will recommend use of family planning to a friend, while (4.44%) of TBAs trained (15.55%) of TBAs un trained will not recommend use of family planning to a friend. However, no statistical significance have been proved for respondents by information related to attitude towards family planning (P >0.05) except attitude regarding intends to use them in future, which found statistical significance (p=0.005).

Table 5 shows the attitude score on family planning among TBAs trained and untrained. Positive attitude towards family planning was observed among (95.56%) of TBAs trained & (88.89%) of TBAs untrained, while very low percent (4.44%) of TBAs trained & (11.11%) of TBAs untrained shown poor attitude.

# Practice towards family planning:

Table (6) was edited to verify the of practice toward family planning. The frequency of TBAs trained who did not use family planning (57.78%) as compared with those who have used family planning (42.22%). While in the TBAs un trained, the highest proportion of those who did not use was (60.00%) and the frequency those who have used family planning was (40.00%)

Likewise, the majority, (64.44 %) of TBAs trained and (60.00) of TBAs un trained aren't currently using family planning., while only (35.56%) of TBAs trained and (40.00%) of TBAs un trained are currently using family planning.

In respect to the type of family planning that the TBAs used, the highest percentage of TBAs trained was among those who had used IUD (11.11%) and Calendar (6.66%), while only (4.44%) were used Injectables, pills, condom and others. On the other hand, the highest percentage of TBAs un trained was among those who had used pills (13.33%) and IUD (8.88%), while only (6.66%) were used Breastfeeding and calendar. Concerning duration of use family planning method, the percentage was fifty-fifty for duration (≥3) years and & duration (<3) years in TBAs trained, while in TBAs un trained, the high percentage was among those who had used family planning method for a duration (≥3) years (77.78%).

**Conclusion:** According to the results of the study conclude that statistical significance was found between the two groups regarding their education and statistically significant association

It was shown that the highest proportion of TBAs trained Those who suffer from the sides effect of the use of family planning methods (87.50%) as compared with those who did not suffer from the sides effect of the use of family planning methods (12.50%). While in the TBAs un trained, the highest proportion of Those who suffered from the sides effect of the use of family planning methods was 72.22% and the frequency those who did not suffered from the sides effect of the use of family planning method was (27.78%).

Regarding if ever shifted from one method of family planning to another, (31.25%) of TBAs trained answers (No), (68.75%) answer (Yes). While only (16.67%) of TBAs un trained replied (No), (83.33%) replied (Yes). However, no statistical significance have been proved for information related to practice towards family planning (P >0.05).

Table 7 show the total scores of the practice; only (15.56%) of TBAs trained& (22.22%) of TBAs untrained, had good scores; Most of the TBAs trained (84.44%) & TBAs untrained (22.22%) had poor scores. Figure (1) shows that the criteria for choice of the method of family planning.

### DISCUSSION:

Socio-demographic factors have an impact effective in the practice of family planning (17), Regarding the age, the results of this study demonstrated that 73.33% of TBAs trained and 66.67% of TBAs untrained were in the age group >40 years. This fact agreed with the finding of Satishchandra D. M et al, 2013 in India (18). The difference between TBAs trained and untrained with respect to education level was statistically significant (p-value= 0.011). Such result was not consistent with the findings of Peter C. Miller et al ,2012 in Pakistan, who found in their study that did not differ significantly according education level<sup>(19)</sup>. This may be due to difference in the education level of TBAs among Iraq and other countries. The result of the present study showed that the difference between TBAs trained and untrained with respect to length of experience (P-value = 0.000), which it agreed with that stated by Olumide Abiodun et al 2015 in Nigeria, that a significant difference in practice as TBAs between trained and untrained (p-value<0.00) $^{(20)}$ . Furthermore, the results of this study disagrees with that reported by Satishchandra D. M et al, 2013 India, who found that most of the study groups had more than 5 years of practice as TBAs<sup>(18)</sup>. Regarding knowledge score was observed as poor (71.11%) of TBAs trained & (75.56%) of TBAs untrained, this finding was opposite to the study of Satishchandra D. M et al, 2013 India, who found was a difference in the knowledge towards family planning between the TBAs trained (55%) and TBAs untrained 20% (18). Overall knowledge was poor which could be related to that lack of education leads to unawareness of FP. The result of the present study showed that the highest percentage (95.56%) of TBAs trained & (88.89%) of TBAs untrained had a good and acceptable attitude score towards family planning. This result was similar to the study that was done in India by Chaturvedi SK, Dudani IU, who found 57.89% had a good attitude score towards family planning (21). It is worth mentioning that (84.44%) of TBAs trained & (77.78%) of TBAs untrained had a poor score practice regarding family planning. Such result went with the findings of another study done by Satishchandra D. M et al, 2013 in India, who found that the practice regarding family planning between trained (40%) and untrained TBAs (0%)<sup>(18)</sup>. This conclusion may be explained by lack education and social barriers to the family planning among the study population

was proved for length of experience of TBAs. in addition, the knowledge of both TBAs trained and untrained regarding family planning was low, with relatively high level of knowledge in train

compared to none. Although most of the TBAs had good attitude& believe about family planning, still the practice score of their was poor.

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