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*RESEARCH ARTICLE*

# KAP SURVEY REGARDING REPRODUCTIVE HEALTH IN MISSAN MARSHLANDS 2009.

**Dr. Intsar Jumaa Hasoon[1], Dr. Nawal Kareem[2], Dr. Zamil Aluraibi[3].**

1. Public Health Diploma, Training and Human Development center, Missan DOH.
2. Public Health Diploma, Public Health Department, Missan DOH.
3. DG of Directorate of Planning and Resources Development, Iraq MOH.

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## *Abstract*

**Introduction:**The needs for reproductive health (RH) care are enormous. However improvement of reproductive health care is feasible. A socially integrated and culturally well-accepted approach is essential for any initiative in the reproductive health care sector.The main objective of this KAP study is to better understand the way Marshlands women perceive their reproductive health and reproductive health needs.

**Methods:**A total of 3726 marshland women of reproductive age (15 to 49 years) have been interviewed. They have been selected through systematic sampling of adult women living in 11 sub-districts in Missan Marshlands.

**Results**: about 70 % of interviewed women were illiterate, 41.6% of their husbands illiterate, 10% were single.On average, women lived at 25 minutes walking distance to the nearest health sub-center and30 minute-one hour by car to the nearest district hospital, about (40-50 Km), 45% of women are currently working, 92% of ever-married women had been pregnant before. The average number of previous pregnancies per married woman was 4.3. The average interval between two deliveries is estimated at 1.5 years. Of the total number of reported deliveries, two third (64%) occurred at home and 36% at a health facility, 81% of home deliveries were attended by TBA. About 66% of the women attended antenatal consultations during their last pregnancy and 65.6% of the women reported to have received a tetanus vaccination at least once during their last pregnancy. Half of study group reported obstacle to antenatal care visits.56% of the last deliveries were assisted by skilled health personnel. One quarter of all home deliveries were attended by skilled personnel, mainly midwives.Among the unskilled attendants, female relatives were most popular (48% of all home deliveries). Traditional Birth Attendants assisted in 17.5% of all reported last home deliveries. More than one third of women were currently using FP method, indicating there is still an unmet FP need, 32.3% did not know about any method to delay or avoid pregnancy. Lack of knowledge can therefore be considered as the most important obstacle to FP services.The oral contraceptive pills seemed most popular among interviewed women (74%). Only 16.4% of the interviewed women have knowledge of any STI. Among the STIs

**Corresponding Author:-Dr. Intsar Jumaa Hasoon.**
Address**:-**Public Health Diploma, Training and Human Development center, Missan DOH.

they knew of, HIV / AIDS was the most mentioned (25.8%),25.8% of the women did heard about HIV/AIDS.Nearly 60% of women have vaccinated their children; of those who did not vaccinate their children, 81.9% cited the cause of far distance from PHC services. Vast majority of husbands respected their wives wishes and spent time with them.More than one quarter of women interviewed (27.7%) of women said that their husbands have pushed and shoved them,21.5% mentioned being slapped andtheir arms twisted by their husbands.Most of violated women (85.7%)mentioned that domestic violence began after one year after marriage.

**Conclusion:**most of women lived in marshlands in Missan have little knowledge about their RH.

**Recommendations:** Promotion of education and schooling of girls and women empowerment of women, community health education and a multi-sectoral approach and long-term commitment were recommended



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## Introduction:-

The needs for reproductive health (RH) care are enormous. However improvement of reproductive health care is feasible. A socially integrated and culturally well-accepted approach is essential for any initiative in the reproductive health care sector (1). This survey is representative of 3726 women in the reproduction age living in11 sub-district in Missan marshlands. The survey had gone through a detailed and intensive planning and training.All interview teams were carefully supervised and given continuous support throughout the period of the survey.

The principle objective of the survey is to provide critical information for policy makers and program managers working in health and development (2). This survey is the first survey in Missan governorate to investigate KAP of women in the reproduction age group about RH as well as domestic violence.

The needs within the area of reproductive health care are numerous, yet, improving RH is not an easy goal in Missan marshlands.

Because of the multiple problems, any initiative to improve the RH status of the population will have to be socially integrated and culturally well accepted (2). Understanding how women perceive their reproductive health and rights is an absolute condition for the success of a program considering the promotion of women's health and rights(3).

In spite of the wealth of information we gained fromthis prospective study, nevertheless we need far better understanding of women's conditions and position in society as well as what women actually need.

We hope this KAP study can contribute to this broader over-all goal of better health for the Marshland population.

**Objectives of the survey**

**The survey was designed to achieve the following Objectives:**

1. To generate information on the knowledge attitude and practice of women in the reproductive age living in the Marshes of Missan about RH issues including services provision(MCH, vaccination, knowledge of HlV/AlDS and other sexual transmittedinfections, family planning and accessibility and utilization of RH services).
2. To provide policy and decision makers with reliable, timely and relevant data for development of RH and population policies
3. To generate data on domestic violence, both emotional and physical.
4. To contribute to better understanding of reproductive health as perceived by the Marshland women and obstacles explaining the use / non-use of reproductive health care services.

## Methodology:-

**Type of survey**

Cross-sectional study with descriptive objectives (community based)

**Selection of the sample**
Marshlands PHCCs have been selected in the 2nd& 4th district inMissan governorate :

1. Uzeir
2. Baidha
3. Abu-khassaf
4. Khair
5. Khumis
6. Abu-ijil
7. Muayal
8. Wadiya
9. Rifa'y
10. Rafey
11. Turaba

Sample size of (4000) womenin reproductive age (15-49) years old were selected(systematic random sampling) to be interview. List of families was done & from this linear systematic sampling was used randomly selected households.

**Table 1:-**distribution of the sample size among the marshland areas

| Marsh land name | Total No. of families | No. of selected families | Average | Random |
|---|---|---|---|---|
| **Uzeir** | **1110** | **577** | **2** | **1** |
| **Baidha** | **282** | **149** | **2** | **2** |
| **Abu-khassaf** | **397** | **209** | **2** | **2** |
| **Abu-ijil** | **316** | **167** | **2** | **2** |
| **Muayal** | **944** | **492** | **2** | **2** |
| **Rafey** | **228** | **124** | **2** | **1** |
| **Khair** | **945** | **492** | **2** | **2** |
| **Khumis** | **1179** | **611** | **2** | **1** |
| **Wadiya** | **427** | **224** | **2** | **1** |
| **Rifay** | **1075** | **558** | **2** | **1** |
| **Turaba** | **761** | **397** | **2** | **1** |
| **total** | **7664** | **4000** | | |

**مخلص نجم عبود احصائي اقدم / مديرية احصاء ميسان**

All selected villages within the Marshlands PHCCs- were located within the rural area of Missangovernorate,with comparable socio-cultural conditions.

Those selected PHCCs(Uzeir – Baidha - Abu-khassaf – Khair – Khumis - Abu-ijil – Muayal – Wadiya - Rifa'y – Rafey-Turaba)received support from Amar-UNFPA in terms of medical supplies,equipment incentives, training and supervision for the staff, etc.

All Marshland areas were located at relatively considerable distance from the district hospitals with obstetrical services 20- 40 Km (between 30 minutes and 1 hour) by car &about 40- 50 Km from the governorate central hospital.

**Time Frame**
The survey was conducted during April to September 2009

**Questionnaires**
The survey utilized questionnaire developed in Arabic by PHdepartment doctors administered to all women aged 15 - 49 years recorded in the house hold list.

**The questionnaire included:-**

1. Respondents'demographic characteristicsincluding place of residence, age, literacy level, marital status,employment status& husband literacy.
2. KAP of women about RH services.
3. Domestic violenceamongcurrently married women were asked in privacy whether they were subjected to physical, emotional or verbal abuses.

**Training and pilottesting**

1. Training of field workers: two training courses were conducted, each lasted 2 days
2. Training of data entry personnel: one training work shop for the data entry clerks was conducted in Missan DOH during May 2009.
3. After the interviewers training course, a pilot test was conducted in all sub districts (marsh lands) in order to assess the survey's instrument and implementation of the field work, this included an assessment of the interviewer's performance & verification of the quality of the questions.

**Surveyimplementation**

The implementation of the survey ( field work ) began on the 1st of April 2009 and completed on the 10th of June 2009 throughout the field work, interviewers were closely supervised by the field Supervisors ( district manager in MCH and PH department) whohelped in solving technical or field problems encountered by the interviewers teams .

PH department team monitored the quality of the completed questionnaires on daily basis The survey implementation lasted 40 days, with each surveyor doing about 10 interviews per day (on average 30 minutes per interview).

**Data processing**

After each field team had completed an interview a series of checks were made for detection of errors;Questionnaires forms were returned to the field for verification if errors were found The questionnaires were forwarded to the data entry team;data entry began while the interviewing team were still in the field. The data were entered into computers using EPI info 2003Statistical analysis was carried out using the SPSS 11 software package.

**Response rate**

Out of 4000 women,3726 aged 15-49 years were interviewed.

The response rate for the survey was 93% which is less than IFHS 2007 response rate of 96.2%

**Table 2:-**distribution of women interviewed by districts and Marshland areas

| Marshland name | District | Women interviewed | % of total |
|---|---|---|---|
| **Uzeir** | **4th** | **574** | **15.4%** |
| **Baidha** | **4th** | **140** | **%3.7** |
| **Abu-khassaf** | **4th** | **104** | **2.7%** |
| **Abu-ijil** | **4th** | **167** | **4.4%** |
| **Muayal** | **4th** | **499** | **13.3%** |
| **Rafey** | **4th** | **114** | **3%** |
| **Turaba** | **4th** | **331** | **8.8%** |
| **Khair** | **2nd** | **492** | **13.2%** |
| **Khumis** | **2nd** | **556** | **14.9%** |
| **Wadiya** | **2nd** | **221** | **5.9%** |
| **Rifa'y** | **2nd** | **528** | **14.1%** |
| **total** | | **3726** | **100%** |

## Results and Discussion:-

### Characteristics of the Surveyed population

### Age category

Women in the reproductive age group (15-49) year old living in the Marshlands were interviewed.

Pie chart (1) shows around 36% of the interviewed women were aged 35-49 years,35% of them were aged 25-34 years while 29% of them were aged15-24 years

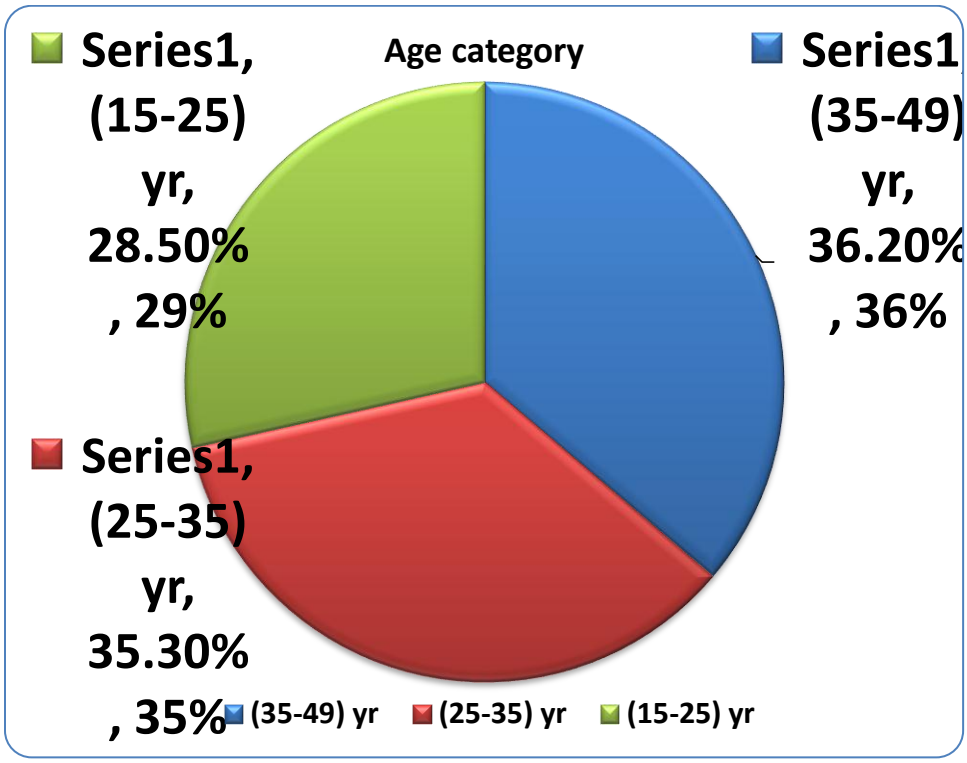


**Figure 1:**-age category of study population

### Women Literacy and Schooling

In line with other recent surveys(IFHS),pie chart(2)shows overall school attendances of the interviewed women was only 29% while71%of them did not attend any school, this percentage is higher than the national percentage obtained in IFHS 2007 (26.8%).

Table ( 3 ) showsslight increase in nonattendanceamong the older age group, increasing from 18% to 23.5%to29.1% among the age groups 15-24 , 25-34&35-49 years respectively .this finding is similar to the findingof MICS-3 2006& IFHS 2007 (4)(5).These findings are shown in the pie chart(2)in which 20% of women have completed primary school,5% have completed intermediate school, and only 4% have completed secondary school.

The literacy rates of (29%) was quite lower than the national figureof(73.2%) reported in(IFHS2007) (5).

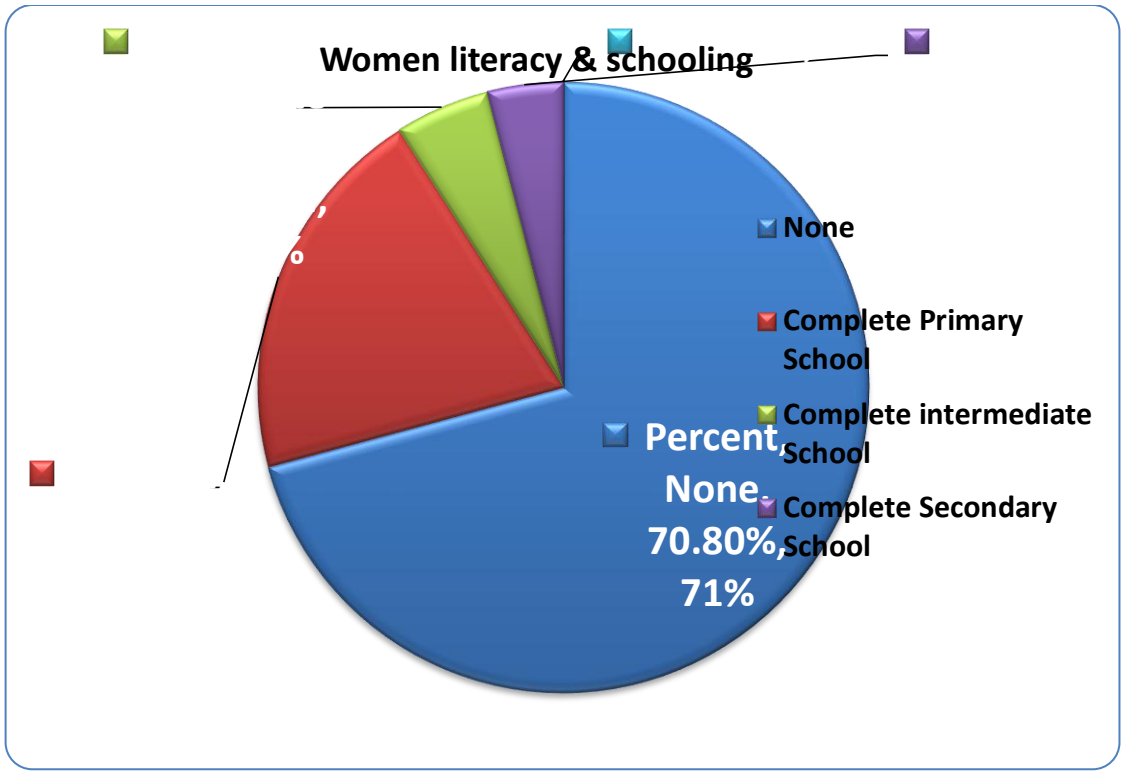


**Figure 2:-**Women literacy and schooling level

**Table 3:-**Distribution of literacy level by age group

| School level | 15-24yr | 25-34yr | 35-49yr | Total |
|---|---|---|---|---|
| Illiterate | %18 | %23.5 | %29.1 | 70.8% |
| Complete Primary School | %6 | %8.3 | %5.8 | %20.2 |
| Complete intermediate School | %2 | %1.8 | %1 | %5 |
| Complete Secondary School | %2 | %1.3 | %1 | % 4 |
| | | | | %100 |

**Literacy level and Schooling of husbands**

Table (4)clearly shows the gender disparity in educational attainment. The percentage of females who have never attended school is higher than the percentage for males (70.8% & 41.6% respectively), 58.4% of married women declared that their husbands were attend regular school. 41.6 % of the husbands appeared to be illiterate.

From the 58.4% of husbands who did attend school, almost 42.4 % continued primary school, 9.4% continued intermediate school & only 6.5% continued secondary school & that was higher than that found among women.

The literacy among the husbands of the interviewed women was(58.4%) which is about twice the percentage that wasfound for women(29.2%)

As for the women, the literacy rate of the husbands(58.4%) was lower than the national estimates for the whole of Iraq(85.4%) (IFHS 2007) (5).

**Table 4:-**percentage of schooling level of husbands

| Schooling level | Percent |
|---|---|

| | |
|---|---|
| None | 41.6% |
| Primary School | 42.4% |
| Intermediate school | 9.5 % |
| Secondary School | 6.5% |
| TOTAL | 100% |

**Marital status among women**
Out of the 3726 women between 15 and 49 years old, 90% were currently married.

**Employment ofwomen**
About (55%) of interviewed women currently not working. This is much lower than the figure of 89.8% reported in MICS-3(COSIT and UNICEF2007). 57% of women were working outside the house while 43% were working inside house (sewing, bakers, and trade).

**Obstetrical indicators**
**Pregnancies**
92% of currently married women had previous pregnancies while 8% of them had never been pregnant. Out of the women who had never get pregnant 25% of them tried to be pregnant but they failed.27.8% of women had been tried for one year, 29.5% of them for two years, 21.8% for three years & only small proportion tried for more than three years.

**Gravidity and parity**
Chart (3) shows that 37.3% of the women who had been pregnant before had been pregnant at least 6 times. 25.7% of women had more than 7 children, 13.2% of them had 4 children, and 13% had 5 children.

The mean number of children ever born was 4.3 which was the same as that reported in (IFHS 2007) 4.04 (5).

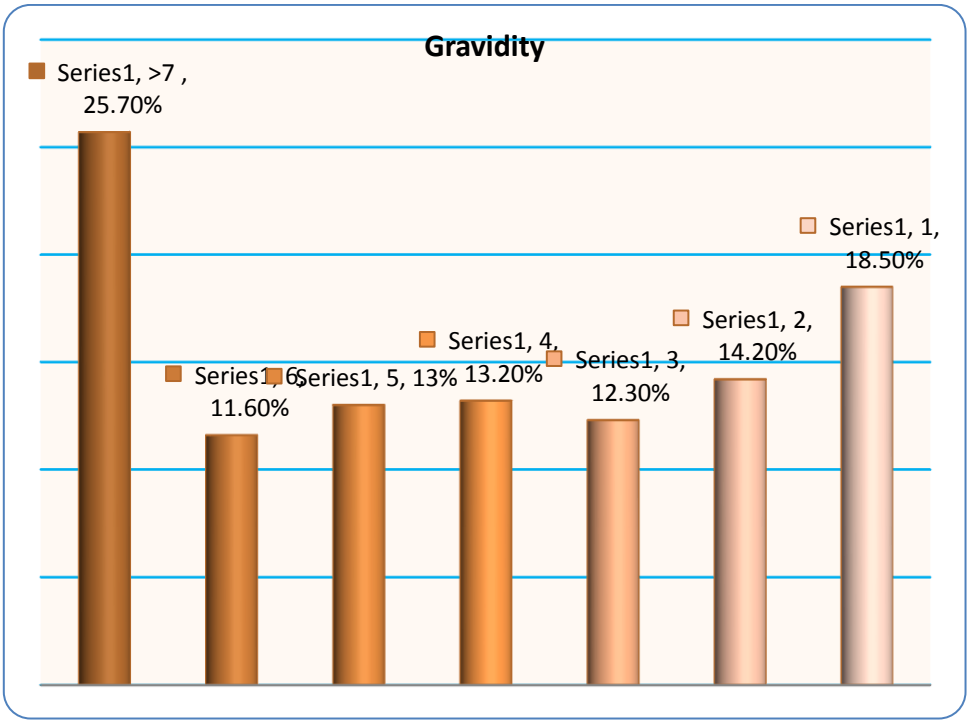


**Figure 3:-**Description of gravidity among study populaion

**Interval between deliveries**
About half of the marriedwomen 47.8% reported an interval of one year between two deliveries, 49.8% reported an interval of two years. While2.4% of them mentioned an interval more than two years between two deliveries.

The average interval between two deliveries had been estimated at 1.5 years.

**Home deliveries versus institutional deliveries**

The utilization of health services; whether public or private, formal or informal, depends on many factors. They include socio-demographic aspects, social structures , level of education, cultural beliefs and practices ,gender discrimination , economic and political system ,environmental conditions ,disease pattern and the health care system itself (2)(4). A main driver for health seeking behavior is the organization of the health care system (1).

Women were asked about the place of delivery.36% of thewomen delivered at hospital while64%delivered at home.

Table (5) shows the level of education influences the place of delivery. Home deliveries is higher among woman who wereilliterate (68.2%) in comparison to woman with primary, intermediate, and secondary education, where hospital deliveries are (63.8%,58%,60% respectively).

Table (6)indicate that the highest percentage of hospital deliveries 41% was among age group (25-34) years whilethat of home deliveries 46% was among age group(35-49 )years.

**Table 5:-**place of delivery by schooling level

| Place of delivery | illiterate | Primary school | Intermediate school | Secondary school |
|---|---|---|---|---|
| home | 68.2% | 36.2% | 42% | 40% |
| hospital | 31.8% | 63.8% | 58% | 60% |

**Table 6:-**place of delivery by age group

| Place of delivery | 15-24 yr | 25-34 yr | 35-49 yr |
|---|---|---|---|
| home | %16.7 | %37.2 | %46 |
| hospital | %24.3 | %41 | %34.6 |
| others | %50 | %16.6 | %33.3 |

**Skilled attendance during delivery**

Hygienic conditions and proper medical assistance during delivery can reduce the risk of complications and infection for both the mother and baby (6).

For those who had home deliveries were attended by traditional Birth attendance in81% of the instances, trained midwives attended 15% of the deliveries & only 4% were attended by nurses. These figures differ from that estimated by (IFHS 2007), 79.7% by skilled attendance, and 18.4% by TBAs.

Table (7) shows that Deliveries among illiteratewomen were attended more by TBAs (64.3%) compared to (35.7%) by trained midwife or nurse.

**Table 7:-**distribution of home deliveries by schooling level

| Birth attendance at home delivery | Illiterate | Primary school | Intermediate school | Secondary school | Others |
|---|---|---|---|---|---|
| TBA | 64.3% | 46.5% | 51.3% | 62.5% | 27.2% |
| midwife | 15.3% | 14.5% | 4.0% | 0 | 9.0% |
| nurse | 20.4% | 38.9% | 44.5% | 37.5% | 72.7% |

**Breastfeeding knowledge & practice**

Breastfeeding protectsthe baby against infection. Knowledge of bothparents of advantages of breast feeding is important to choose the best method of feeding the newborn baby. Advantages of breast feeding for the mother and the baby are multiple; B.F. protects the mother‘s health in several ways, as well as benefiting the whole family, emotionally & economically.

It contains exactly the nutrients that a baby needs for normal growth(7,8).

Raising awareness of the benefit of BF in the community is an important step to ensure better health for mothers & babies (4).91 % of the women breast fed their babies when they were asked whether they had breast fed their children or not while only 9% of the women practiced artificial feeding for their children.61.9% of women breast fed their babies continued to do so for 1-2 years, while 32.3% continued for 6-12 months .Only 5.8% breastfed their babies for less than 6 months. 69% of interviewed women said that breast feeding is good for mothers & 85.2% of them said that breast feeding benefited their children.

**Antenatal Care**

85.2% of the interviewed women have heard about antenatal care unit in the health facility.66% of women have attended the antenatal care unit during their last pregnancy, this figure is similar to that reported in developing countries (65%)(9).

**Tetanus vaccination**

75.5% of interviewed women knew about tetanus toxoid, 66% of them have received tetanus toxoid vaccination during their pregnancies.

Chart (4) shows that 7.6%of the women have been vaccinated at least once in their lifetime. Still 35.8% of the women had received only 2 doses & 31.2% of them had received 3 doses.

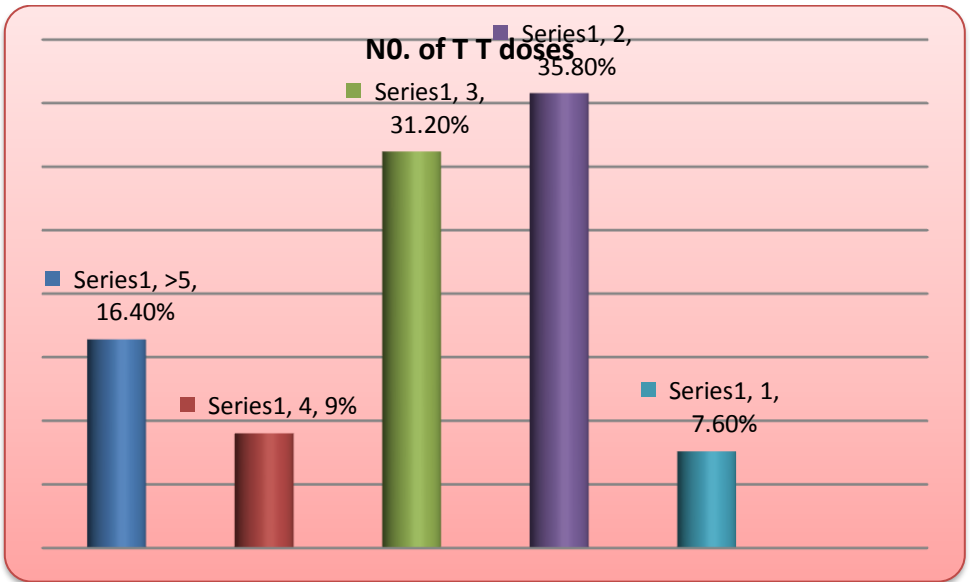


**Figure 4:-**Number of TT doses

**Reasons / obstacles to antenatal care & vaccination**

The acceptability of antenatal care services was apparently not so good and accessibility seemed to be a major problem (1). The main reason the women expressed for not going to the antenatal care unit is presented in the table (8).Out of 34.4% of non-vaccinated, 49.7% of them the cause was the far distance of the health facility (lack of accessibility to ANC),10% of them were not satisfied with the ANC services & vaccination in the PHC, 6.5% were husband refusal while only 3.8% due to security causes

**Table 8:-**percentage of obstacles to antenatal care

| Causes for not visiting ANC Unit | percent |
|---|---|
| Accessibility | 49.7% |
| Not satisfy | 10% |
| security | 3.8% |

| | |
|---|---|
| Husband /family did not allow | 6.5% |
| other | 30% |
| TOTAL | 100% |

**Family planning**

**Knowledge of any family planning method**

Family Planning provides information for women, men, and adolescents of existing services, as well as education to prevent unintended pregnancies (1) (8). By encouraging individuals to make choices regarding the spacing and number of their children. Family planning plays an integral role in efforts to reduce maternal and child mortality and morbidity and to improve women's health. Prevention of unintended pregnancies has a significant and positive impact on the physical, emotional, financial, and social well-being of parents and their children (4) (8).

In our study, 43.8% of women in the reproductive age said that they have heard about FP clinic, 48% of them have visited FP clinics, 67.7% of women in the reproductive age knew about F.P methods, 34% of them used family planning methods some time during their reproductive life, 43.8% of women in the reproductive age said that they were heard about FP clinic, 48% of married women were visit FP clinic, 67.7% of women in the reproductive age know about F.P methods,34% of them use family planning methods throughout her life.

**Preferred method**

Women were asked which methods they prefer: 74% ofthem preferredthe contraceptive pills, 14.4% of them prefer injectable methods & only 9.8% prefer IUCD. Contraceptive pills were the most preferred method among the women interviewed.

**Women's Knowledge on HIV / AIDS**

Knowledge of both man and woman about STIs symptoms is important pre request to seek treatment for the infection and to minimize cross infection (4). Raising awareness of STI symptoms in the community is an important step in the prevention of the disease (4).

Women were asked if they had ever heard of an illness called HIV/AIDS & if they had heard of any other infections transmitted through sexual contact (STI).

Overall, 25.8% of the women answered that they have heard about HIV/ AIDS.74.2% did not hear about HIV/ AIDS, only 16.4% of women said that they had heard of any other infections that could be transmitted through sexual contact.

**Children vaccinations**

About 60% of women vaccinate their children while 40 % of them not. The reasons the women relate for non-vaccination was 81.9% were due to the far distance of the PHC centers, 3.4% were due to security, while 1.6% were due to unavailability of vaccine.When asking women about the age of the child she must start vaccination, 72% of women answer after delivery, 11.3% of them after one month, and 82.3% of the women were advised by their husband to vaccinate their children.Women were asked about the importance of children vaccinations, 95.3% of women knew of the importance of vaccinations; the source of information was from the PHC staff in 82.3%, and in 10.5% from mass media. 78%of women kept the vaccination card of their children.

**Domestic violence**

In recent years there has been an increasing concern about violence against women in general and domestic violence in particular in both developed and developing countries ( WHO 2009 ) (10, 11).

During the interviews when asking about violence it was possible to obtain privacy in 100% of the interviews conducted.

**Controlling behavior**

Married woman were first asked general questions about the nature of their relationship with their husbands, including questions regarding how frequently he spends time with her, whether he consults her on household matters, whether he is affectionate, andwhether he respects her wishes.

The results of controlling behavior by husband showed that 29.4 % of women reporting that their husbands limit contact with her friends & family. 92.7% of women mentioned that their husbands respect their wishes, and 97.4% of them reported that their husbands spend time with them frequently; while only 59.2% of them said that their husband consult them on household matters; more than half of the women interviewed 55.3% reported that their husbands were affectionate.

**Physical violence**
Overall, more than one quarter of the women 27.7% experienced physical violence (push, shoving), 21.5% of them have been slapped and their arms twisted by their husbands 9.2 % were punched , 3.6% were kicked or dragged, 2.2% were threatened with knife & 1% were attacked by knife.

These are slightly higher than the national estimation in IFHS 2007(21.2%, 16.6%.5.6%, 4.2%, 0.4%, 0.2% respectively).Two percent of women suffered from physical violence during pregnancy.Women with a higher educational level are less likely to experience domestic violence which is similar to findings in IFHS 2007. Women were asked about the time after marriage when domestic violence began, Chart (19) shows that in 85.7% of the occasions it started after one year of marriage, in 26.8% after two years and in 8.4% after three years.

## Conclusion:-
most of women lived in marshlands in Missan have little knowledge about their RH.

**Recommendation:**
Reproductive health should be seen in a broader perspective than only from a health care provider point of view. Equally important is the question “What do Marshlands women really want?”

Even if it is very important and crucial to increase the quantity as well as the quality of reproductive health services, there are three other major fields of action for the improvement of reproductive health in Missan marshlands

**Promotion of education& schooling of girls / women**
Women education about birth spacing, family planning methods, delivery byskilled birth attendants and access to primary schooling for every girl is and should be a priority in the general reconstruction efforts of Missan marshlands

**Empowerment of women**
One should be careful with the direct promotion of women’s rights. The women’s interpretation of their role and rights are completely different in Marshlands than in urban area.
E.g. Women in Marshlands can only seek health care after male permission.

The best way to achieve empowerment is probably through promotion of education for women, linked with improved access to employment.

**Community health education**
Not only women but also the whole society – especially the elderly, religious and other leaders - should be involved in health education programs&illiteracy elimination.

Explanation on the risks of multiple pregnancies in a short period of time and the use of family planning methods to space pregnancies is really important. It might have a substantial impact on maternal mortality.

**A multi-sectoral approach and long-term commitment**
It is needed in order to improve reproductive health in marshlands. Community education and primary schooling are two key elements in this process.

## Acknowledgement:-
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