Knowledge Attitudes and Practices of Women in the Reproductive Age from Upper Egypt Towards Reproductive Health, Family Planning and Child Care

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Abstract

Introduction: Marked health inequalities exist in Egypt. Fertility rates are highest in rural Upper Egypt, contraceptive use, Maternal Health Care, Child Nutrition and weaning Practices are poorest in Rural Upper Egypt, due to high unemployment and poverty rates particularly among women. Assiut and Souhag are two of the most disadvantaged governorates in Upper Egypt.

Objectives: To assess the Knowledge, Attitude and Practices of women in the reproductive age from 75 villages in Assiut and Souhag (40 villages in Assiut and 35 villages in Souhag) towards Reproductive Health, Family Planning, Child Care and nutrition.

Methods: This was a cross sectional study involving a random sample of women in the reproductive age from 75 villages in Assiut and Souhag governorates, Egypt.

Results: 80.2% of all interviewed women reported that the appropriate age of marriage for girls was 18 years or more. A total of 229 participants (50.9% of the overall sample) reported that the appropriate number of antenatal care visits to be 4 or more. None of the participants to the survey could identify correctly 4 danger signs of pregnancy. Significantly more 37 participants from Souhag governorate (representing 17.6% of Souhag sample) were able to correctly identify 3 danger signs of puerperium in contrast to none from Assiut Governorate. Only 14.9% of the interviewed sample could report that post-partum contraception could be started within 40 days of labor. An overall of 61.1% of the interviewed sample (275 women) identified the proper inter-pregnancy spacing to be 2 years. an overall of 174 study participants (38.7% of the study sample) reported that they were current users of any kind of contraception. Current contraceptive use in Assiut governorate was significantly higher than Souhag governorate (42.9% and 33.8% respectively) (Chi square= 3.917 and p-value=0.04780 1). Ever use of contraception was reported by 273 study participants (60.7% of the sample). The proportion of participants from Assiut governorate reporting Ever user of contraception (67.1%) was significantly higher than that from Souhag governorate (53.3%). (Chi square=8.8739 and p-value=0.002893).

Conclusion: Health Awareness of women in the reproductive age from Assiut and Souhag governorates in the areas of Reproductive health, Family Planning and Child nutrition and weaning practices is unsatisfactory.

Key Words: Reproductive health – Family planning – Knowledge attitudes and practices – Upper Egypt.

Introduction

THE fertility rates in Egypt have not shown remarkable decline as was expected; with those rates being highest in Upper Egypt, higher in rural than urban areas, and higher among women in the lowest wealth quintile than among women in the highest quintile [1]. One of the determinants of fertility in Egypt is the age at which women get married, and this practice is still common in rural areas due to high illiteracy rates and unawareness of reproductive health [1-4].

Contraceptives use rates are lowest in rural Upper Egypt (48%) and are lower among women in the lowest wealth quintile than among those in the highest quintile and those low rates are usually associated with high rates of unmet needs [1,5,6].

Maternal Health care in Egypt is also still far from being universal and satisfactory, with only 66% of births receiving the minimum number of antenatal care visits (four) recommended by the world Health Organization [7].

Regarding Child Nutrition and weaning practices, although the World Health Organization recommended the practice of exclusive breast feeding during the first six months of infancy and the addition of complementary feeding after six months of age [8], only a minority of babies are exclusively breast fed throughout the first 6 months of life with 70% of babies receiving supplementary feeding by the age of 4-5 months of age [1]. Faulty
weaning practices are usually associated with unprivileged socio-economic conditions and low levels of education of the mother [8-11]. Exclusive breast feeding and the delay of introduction of supplemental feeding are associated with increased effectiveness of lactational amenorrhea as a natural method of contraception for the first 6 months postpartum [12].

The World Health Organization has recognized that member countries health statistics represent averages that mask inequities in access to health services within the population due to factors including education, income level, geographical location, ethnicity and gender [4,13].

Despite the relatively high levels of economic growth over the past few years, living conditions for the average Egyptian remains poor. Poverty rate reached about 20% with strong regional dimension concentrating in Upper Egypt, both urban (18.6%) and rural, while metropolitan areas are the least poor. Six governorates in Upper Egypt are unlikely to meet the Millennium Development Goal target related to poverty by 2015 [14,15]. In ranking these six governorates, Assiut came out at the top of the list, followed by Beni Suef and Souhag. These governorates’ profiles show that they typically suffer from high levels of unemployment and low educational levels [16]. Those facts certainly throw their shadows on the Health care coverage for people living in rural Upper Egypt areas, particularly women.

The current study was conducted as a part of a large intervention study aiming at raising the awareness of women in the reproductive age in 75 villages from Assiut and Souhag Governorates about Family planning, Child Care and Nutrition.

Aim of the work:

The objective of the study was to assess the Knowledge, Attitude and Practices of women in the reproductive age from 75 villages in Assiut and Souhag towards Family Planning, Child Care and Nutrition.

Subjects and Methods

Study design: This is a cross sectional study involving a random sample of women in the reproductive age from 75 villages in Assiut and Souhag governorates, Egypt (40 villages in Assiut and 35 villages in Souhag).

Sample size considerations: A sample size of 377 was sufficient to detect a 50% practice of Family planning among target beneficiaries with a precision of 5% at a 95% confidence level. The calculation assumes maximum uncertainty and thus ensures the calculation of the maximum sample size. A total of 450 women were recruited to account for possible drop-outs.

Sampling method: Based on the mapping conducted by local community development organizations in the 75 local communities (villages), which resulted in lists of women in the reproductive age in those villages, a random sample of 6 women in the reproductive age was selected from each village using SPSS® statistical software version 20.

Data collection: A specifically designed questionnaire comprising questions about basic socio-demographic data (age, education marital status, number of living children etc..) as well as questions about appropriate age of marriage for women, danger signals of pregnancy and puerperium, appropriate time for post-partum family planning, proper inter pregnancy spacing, ever use and current use of family planning, conditions of exclusive breast feeding, components of a balanced meal, as well as the proper timing of complementary feeding for infants.

The questionnaire was administered to surveyed women through an interview conducted by Volunteers from local Community Development organizations in the intervention villages, who were trained on the conduct of the interview by the investigator through repeated role playing to ensure uniformity in the conduct of the interview and ensure inter-observer reliability. The data collection started in June 2013 and was completed June 2014.

Ethical considerations: Study participants were requested to provide their written consent after the study design and purpose have been explained by the interviewers.

Results

A total of 450 women were interviewed, 240 from Assiut and 210 from Souhag governorates. The age of the studied sample ranged from 18 to 48 years with a mean age of 30 years and a standard deviation of 7.9 years. The rate of illiteracy among the studied sample was 38.4% (173 participants), those who had completed secondary education or held a University degree accounted for 36.2% of the sample (163 participants) while those who could read/write or had primary or preparatory education accounted for 24.9% of the sample (112 participants). Fig. (1) shows the distribution of the sample according to the level of education.
Regarding the Number of Living Children, 21.1% of the participants reported that they were currently having 4 living Children. Those who had 2 or 3 living children represented 38.8% of the sample, and those having 5 or 6 Children represented 30.0% of the sample. Only 10.1% of interviewed women had 7 or more living children. On the other hand, nearly half the interviewed women (49.11%) identified 3 as the desirable number of children. The percentage of the interviewed women who identified 5 or 6 as the desirable number of Children was 20.9%. Only 11.56% of the sample identified 2 as the ideal number of children. Fig. (2) shows the distribution of the sample according to the reported actual and desirable number of children.

When asked about the appropriate age of marriage for females, 80.2% of all interviewed women reported that it was 18 years or more versus only 19.8% of the participants reporting ages less than 18 years to be appropriate for girl's marriage. Out of the women interviewed from Assiut (n=240) 77.9% (187 participants) admitted that it is 18 years or more, compared to 174 participants from Souhag governorate (representing 82.9% of Souhag Sample). The difference between the two governorates was not statistically significant (Chi square=1.723, p-value=0.189).

A total of 229 participants (50.9% of the overall sample) reported that the appropriate number of antenatal care visits to be 4 or more (4) 52.1% of the women interviewed from Assiut governorate (125 women) compared to 49.5% of the women interviewed from Souhag governorate (104 Participants) viewed that the appropriate number of antenatal visits should be 4 or more. The difference between the two governorates was not significant at the 0.05 level.

None of the participants to the survey could identify correctly 4 danger signs of pregnancy. Significantly more 37 participants from Souhag Governorate (representing 17.6% of Souhag sample) were able to correctly identify 3 danger signs of puerperium in contrast to none from Assiut governorate. This difference was statistically significant (p-value <0.00001).

Only 14.9% of the interviewed sample could report that post-partum contraception could be started within 40 days of labor. There was no statistically significant difference between the percent of Assiut and Souhag samples giving the right answer (15.0% and 14.8% respectively).

An overall of 61.1% of the interviewed sample (275 women) identified the proper inter-pregnancy spacing to be 2 years. Fewer participants (112 representing 24.9% of the sample) reported an appropriate inter-pregnancy spacing of less than two years and an even fewer percent (14%) viewed that the appropriate inter-pregnancy spacing should be more than two years. There was no statistically significant difference between the proportion of Assiut and Souhag samples that correctly identified the appropriate inter-pregnancy spacing (58.6% and 61.1% respectively).

Only one study participant from Souhag Governorate (0.2% of the overall sample) could correctly identify the conditions of exclusive breast feeding.
An overall of 188 study participants (41.8% of the overall sample) reported that the appropriate age to start the introduction of complementary feeding to infants was 6 months. A significantly larger proportion of participants from Souhag than from Assiut governorates (48.6% and 35.8% respectively) correctly identified the appropriate age introducing supplementary feeding (Chi square = 7.4712 and \( p \)-value = 0.0063). More than half the participants in the study thought that supplementary feeding should be introduced to the infant's diet before the age of 6 months.

Only a minority of study participants (3.8%) could correctly identify the 4 components of a balanced meal for a child (Carbohydrates, fats, proteins, vitamins and minerals).

Regarding the practices of the interviewed sample pertinent to the use of contraception, an overall of 174 study participants (38.7% of the study sample) reported that they were current users of any kind of contraception at the time of the interview. Current contraceptive use in Assiut Governorate was significantly higher than Souhag governorate (42.9% and 33.8% respectively) (Chi square = 3.917 and \( p \)-value = 0.047801). Ever use of contraception was reported by 273 study participants (60.7% of the sample). The proportion of participants from Assiut governorate reporting Ever user of contraception (67.1%) was significantly higher than that from Souhag governorate (53.3%). (Chi square = 8.8739 and \( p \)-value = 0.002893). Fig. (3) shows the distribution of the study sample according to ever use and current use of contraception.

Only a minority of study participants (3.8%) could correctly identify the 4 components of a balanced meal for a child (Carbohydrates, fats, proteins, vitamins and minerals).

Table (1): Summary of findings distributed by governorate.

<table>
<thead>
<tr>
<th>Assessed parameter</th>
<th>Assiut (n=240)</th>
<th>Souhag (n=210)</th>
<th>Total</th>
<th>Chi square</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Marriage 18 or more</td>
<td>187 77.9%</td>
<td>174 82.9%</td>
<td>361 80.2%</td>
<td>1.723</td>
<td>0.189308</td>
</tr>
<tr>
<td>Antenatal Care visits 4 or more</td>
<td>125 52.1%</td>
<td>104 49.5%</td>
<td>229 50.9%</td>
<td>0.2936</td>
<td>0.587932</td>
</tr>
<tr>
<td>Danger Sign of Pregnancy</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
<td>0 0.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danger Sign of Puerperium</td>
<td>0 0.0%</td>
<td>37 17.6%</td>
<td>37 8.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing of post-partum FP (within 40 days)</td>
<td>36 15.0%</td>
<td>31 14.8%</td>
<td>67 14.9%</td>
<td>0.005</td>
<td>0.94357</td>
</tr>
<tr>
<td>Inter-pregnancy Spacing (2 years)</td>
<td>152 63.3%</td>
<td>123 58.6%</td>
<td>275 61.1%</td>
<td>1.0686</td>
<td>0.301252</td>
</tr>
<tr>
<td>Exclusive BF (conditions Correctly Identified)</td>
<td>0 0.0%</td>
<td>0.5%</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complementary Feeding should start after 6 months of age</td>
<td>86 35.8%</td>
<td>102 48.6%</td>
<td>188 41.8%</td>
<td>7.4712</td>
<td>0.006269</td>
</tr>
<tr>
<td>Components of balanced meal correctly identified</td>
<td>11 4.6%</td>
<td>6 2.9%</td>
<td>17 3.8%</td>
<td>0.9181</td>
<td>0.337978</td>
</tr>
</tbody>
</table>

**Discussion**

The aim of the study was to assess the knowledge and practices of women in the reproductive age from 75 villages in Assiut and Souhag Governorates regarding Reproductive health, Family planning, and Child care to plan for a suitable community based health awareness program to women in those villages.

Regarding the Number of Living Children, study participants who reported having 2 or 3 living children represented 38.8% of the sample, and those reporting having 4 Children representing 21.1% of the sample. This finding is in accordance with the data published in the Egypt Demographic and Health Survey 2008, which clarified that the total fertility rate in Rural Upper Egypt was highest reaching 3.6 [1]. On the other hand, nearly half the interviewed women (49.11%) reported that the desirable number of children was 3, and this again was in contrast with the results reported by the EDHS 2008 stating that only 26.9% of the surveyed women reported that the ideal number of children was 3 [1].
Regarding antenatal Care visits, a total of 229 participants (50.9% of the overall sample) reported that the appropriate number of antenatal care visits to be 4 or more (the minimum number recommended by the World Health Organization being 4 visits). Only 37 women from Souhag governorate (17.6% of all women interviewed from Souhag and 8.2% of the whole sample) could correctly identify Danger Signs of pregnancy and none of the interviewed women could correctly identify Danger Signs of Puerperium. Those findings reflect a poor knowledge about Maternal Health and suggest a huge gap in knowledge about reproductive health. Those findings are contradicted by the findings of the EDHS 2008 reporting that 49.2% of surveyed women received 4 antenatal care visits. The poor knowledge about danger signals of pregnancy and puerperium however, can be explained by another finding in the EDHS 2008 reporting that only 26.8% of the surveyed women who received any kind of antenatal care have been told about the danger signals that merit attention and seeking help. This implies that the quality of antenatal care received by the small proportion of women in rural upper Egypt is poor and unsatisfactory. On the other hand, in his study conducted in 2002, Kishk stated that the attitude of rural women towards Ante-natal Care was less favorable than urban women.

Only one study participant from Souhag governorate (0.2% of the overall sample) could correctly identify the conditions of exclusive breast feeding. More than half the interviewed sample (58.2%) reported that the correct timing for introducing Supplemental feeding to the infant was below 6 months of age. Those findings were in accordance with the findings published in EDHS 2008 stating that 70% of babies receive supplemental feeding by the age of 4-5 months and that the prevalence of exclusive breast feeding in Rural Upper Egypt was 2.6% [1]. Those unsatisfactory figures can be explained by the low socio-economic status and the low educational levels of women in the 2 Upper Egypt governorates.

With only 3.8% of the interviewed women being able to identify the 4 components of a balanced meal for a child (Carbohydrates, fats, proteins, vitamins and minerals), it is expected that the prevalence of malnutrition among under five children would be relatively high in the study sites.

An overall of 174 study participants (38.7% of the study sample) reported that they were current users of any kind of contraception at the time of the interview. Those findings were contradictory to those published by the EDHS 2008, which stated that the current use of contraception at the time of the survey in rural Upper Egypt was 48.4% [1]. The finding of the current study suggest that the governorates sampled should be a priority area for work in raising awareness about Family Planning to raise the demand and provide the services. With the finding that Current contraceptive use in Souhag was significantly lower that Assiut governorate (33.8% and 42.9% respectively) suggests that Souhag might be one of the hot spots for Family Planning in Egypt that merits urgent care. The EDHS 2008 also highlighted that the current use of contraception in Souhag Governorate was lower than Assiut Governorate (36.6% and 47.4% respectively).

Conclusion:

Health Awareness of women in the reproductive age from Assiut and Souhag governorates in the areas of Reproductive health, Family Planning and Child nutrition and weaning practices is unsatisfactory.

Recommendations:

An awareness program needs to be established in the two governorates to address the areas of need and gaps in knowledge as a step towards promoting the adoption of healthy practices which will reflect as improved maternal and child health.

References


