#### Research Article

# Effectiveness of Antenatal Classes in Promotion of Peri-Natal Knowledge Among Pregnant Ladies in El Minya & Sohage Governorates

Essam A. El-Gindy, Ayman N. Abdelmegeed, Saad A. El Gelany and Hanan M. Ali Department of Obstetrics & Gynecology, Faculty of Medicine, Minia University.

#### **Abstract**

**Introduction:** Approximately 800 women die every day from preventable causes related to pregnancy and childbirth. 99% of all maternal deaths occur in developing countries. Maternal mortality is higher in women living in rural areas and among poorer communities (WHO, 2014). Skilled care before, during and after childbirth can save the lives of women and newborn babies. Between 1990 and 2010, maternal mortality worldwide dropped by almost 50% (WHO, 2014). Aim of the work: The study was designed to investigate the effect of antenatal classes in promoting perinatal knowledge among pregnant ladies in El Minya & Sohage governorates. Subjects And Methods: 1. Participants: A study was conducted on 182 women from two governorates (89 women from Minia governorate and 93 women from Sohag governorate). Results: This study included 182 women from two governorates (89 women from Minia governorate and 93 women from Sohag governorate). The women were invited to attend antenatal classes. A well-structured questionnaire was completed before and after enrollment to test the degree of awareness of different issues related to perinatal care of the women of the two governorates. **Discussion:** An estimated 287,000 maternal deaths occurred in 2010 worldwide, a decline of 47 % from 1990. Sub-Saharan Africa (with 56 per cent of these deaths) and Southern Asia (29 %) together accounted for 85 per cent of the global burden in 2010, with 245,000 maternal deaths. Summary & Conclusion: This study was conducted on 182 women from two governorates (89 women from Minia governorate & 93 women from Sohag governorate), then we gave them pre-test (course) printed questionnaires which included personal information, some demographic and obstetrical history and some pregnancy related questions in general.

Keywords: Antenatal Classes, maternal mortality, newborn babies

#### Introduction

Approximately 800 women die every day from preventable causes related to pregnancy and childbirth. 99% of all maternal deaths occur in developing countries. Maternal mortality is higher in women living in rural areas and among poorer communities (WHO, 2014). Skilled care before, during and after childbirth can save the lives of women and newborn babies. Between 1990 and 2010, maternal mortality worldwide dropped by almost 50% (WHO, 2014).

Developing countries in 2015 recorded maternal mortality ratio of 240 per 100000 births versus 16 per 100 000 in developed countries. There are large disparities between countries, with few countries

having extremely high maternal mortality ratios of 1000 or more per 100 000 live births. There are also large disparities within countries, between people with high and low income and between people living in rural and urban areas (Yang et al., 2015). Additionally, the risk of maternal mortality is highest for adolescent girls under 15 years old and complications in pregnancy and childbirth are the leading cause of death among adolescent girls in most developing countries (Patton, 2009).

Russell, (2011) reported that women in developing countries have on average many more pregnancies than women in developed countries, and their lifetime risk of death due to pregnancy is higher. Women die as a result of complications during and

following pregnancy and childbirth. Most of these complications develop during pregnancy. Other complications may exist before pregnancy but are worsened during pregnancy. Also, Say et al., (2014) reported that maternal health and newborn health are closely linked. More than three million newborn babies die every year, and an additional 2.6 million babies are stillborn.

#### Aim of the Work

The study was designed to investigate the effect of antenatal classes in promoting perinatal knowledge among pregnant ladies in El Minya & Sohage governorates.

# **Subjects And Methods**

## 1. Participants:

A study was conducted on 182 women from two governorates (89 women from Minia governorate and 93 women from Sohag governorate). The women attending the antenatal care clinics at Minia maternity & Children university hospital were invited to attend antenatal classes, and in Sohag the women attending the antenatal care clinics at Akhmim central hospital were invited to attend antenatal classes. Informed consent was obtained from each participant after full explanation of the purpose of the study.

## 2. Study design:

prospective cohort study

#### 3. Inclusion criteria:

Participants must be from the specific governorate under the study area.

Educated & non-educated women in the age of childbearing period.

Women aged from 15 to 45 years' old and mentally and emotionally stable pregnant women.

#### 4. Exclusion criteria:

- **1.** Women that aged less than 18 years old & more than 45 years old.
- 2. Women refused to participate in the study.

#### Results

This study included 182 women from two governorates (89 women from Minia governorate and 93 women from Sohag governorate). The women were invited to attend antenatal classes. A well-structured questionnaire was completed before and after enrollment to test the degree of awareness of different issues related to perinatal care of the women of the two governorates.

# The results will be presented as follows:

Table (1) represent demographic and Obstetrical history data of all participants.

Table (1): Demographic and Obstetrical history data of all participants.

Variable	Minia (n=89)	Sohag (n=93)	P. value (Sig.)
Occupation			
Housewife	71 (79.8%)	74 (79.6%)	$0.973^{NS}$
Employed	18 (20.2%)	19 (20.4%)	
Mode of delivery			
No	21 (23.6%)	7 (7.5%)	0.003**
SVD	40 (44.9%)	62 (66.7%	0.003**
CS	24 (27%)	21 (22.6%)	$0.493^{NS}$
Both	4 (4.5%)	3 (3.2%)	$0.656^{NS}$
Previous abortion			
Rang	(0-11)	(0-5)	$0.613^{NS}$
Mean ± SD	$1.04 \pm 1.99$	$0.64 \pm 0.97$	

Chi square test for qualitative data between the two groups.

Mann Whitney test for non-parametric quantitative data between the two groups.

\*\* Significant difference at p. value ( $P \le 0.01$ ).

NS Not significant.

Table (1) presented some demographic data and Obstetrical history data of all studied cases, there were no significant differences between Minia and Sohag women as regard occupation and history of previous abortion but it was obvious that ladies of Sohag governorate had Higher significant ( $P \le 0.01$ ) prevalence of vaginal delivery than Minia ladies.

#### Discussion

An estimated 287,000 maternal deaths occurred in 2010 worldwide, a decline of 47 % from 1990. Sub-Saharan Africa (with 56 per cent of these deaths) and Southern Asia (29 %) together accounted for 85 per cent of the global burden in 2010, with 245,000 maternal deaths. The number of maternal deaths per 100,000 live births-the maternal mortality ratio, or MMR-was also down, from 440 in 1990 to 240 in 2010, for the developing regions as a whole. But the MMR in developing regions was still 15 times higher than in the developed regions. At the high end, sub-Saharan Africa had an MMR of 100,000. At the other end of the scale in developing regions, Eastern Asia had the lowest level, 37 deaths per 100,000 live births.

These results agreed with (Mehdizadeh et al., 2005 and Soto et al., 2006) who studied the effect of antenatal classes on the knowledge of ladies for different previous topics. They found that the total knowledge of the participants differed significantly after courses attendance than before. Simillar results were obtained by (Fabian & Waldenstrom, 2005) and (Green & Baston, 2007). It seems, therefore, that antenatal education is effective in improving aspects of childbirth in only certain contexts, and it is possible that cultural factors (Rassin & Silner, 2009).

#### **Summary & Conclusion**

This study was conducted on 182 women from two governorates (89 women from Minia governorate & 93 women from Sohag governorate), then we gave them pre-test (course) printed questionnaires which included personal information, some demographic and obstetrical history and some pregnancy related questions in general.

Then the participants attended the course which included seven lectures:

- 1. Pain relief during pregnancy & postoperative period
- 2. Better birth initiatives.
- 3. High risk pregnancy.
- 4. Breast feeding
- 5. Bleeding during pregnancy
- 6. Places & stages of labor
- 7- Exercise & nutrition during pregnancy. At the end of the course each participant received another post-test printed questionnaire which included the questions that help

to evaluate the earned knowledge of the participants from the course attendance.

After scoring them we find that our results showed that there were no significant differences between the two groups (Minia and Sohag) as regard the knowledge about risk indicators during pregnancy, but the two groups showed high knowledge trend was noticed when we asked them about how do you differentiate between the amniotic fluid and the urine, signs of pregnancy toxemia and the importance of breastfeeding.

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