**Impact of Protocol of Care on Quality of Nursing Performance at Antenatal Unit**

**Abstract**

**Background**

High quality antenatal care is a fundamental right for women to safeguard their health. Furthermore, obstetric care of high quality continues to be a key requirement for reducing maternal mortality. There is a very urgent need to focus on the antenatal period for both the mother and newborn.

**Aim**: To evaluate the impact of protocol of care on quality of nursing performance in antenatal unit.

**Design**: A pre-post intervention study design was used.

**Setting:** The antenatal unit in obstetrics ward at Benha University Hospital.

Sampling: A total of 40 nurses and purposive sample of 120 pregnant women were recruited in the study) .

**Tools of data collection:** Four types of tools were used for data collections which include *Part 1*: Interviewing questionnaire schedule sheet. *Part a:* Socio demographic data for nurses ,*Part b:* Socio demographic & obstetrical data for women, *Part II:* Questions were used to assess nurse's knowledge about antenatal care 2-An Observation check list was used to assess the quality of nursing performance in antenatal unit based on standardized nursing care model during antenatal period 3-Two points likert scale to monitor women satisfaction with the components of antenatal care received 4- A protocol of care regarding antenatal nursing care to be implemented in the form of teaching and training sessions in order to improve nurses’ performance.

**Results:** Significant differences regarding nurses mean scores of knowledge and performance before, immediately after, and 3 months later after the implementation of the interventions regarding most of the studied items , Also lack of equipment and supplies and prolonged waiting time in antenatal unit.

**Conclusion:** It can be concluded that the majority of nurses lacked the essential knowledge regarding antenatal care and the quality of nursing performance provided for women at the antenatal unit. Also, about two third of women before implementation of the interventions were less satisfied with many of the studied items of the quality of nursing performance .While after conducting of the interventions immediately and follow

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up three months, most of women were generally satisfied with the quality of care provided to them. There were also obvious changes in the infection control precautions regarding performing many of antenatal care procedures.

**Recommendation**: The study recommended assertive and continuous supervision of nurses’ performance must be applied to antenatal units, also in-services training programs and continuing training courses regarding antenatal care for nurses should be applied and provided periodically.

**Key words:** quality of care, antenatal care, Knowledge and practice.

**Introduction:**

Antenatal care is one of the pillars of safe motherhood interventions that is believed to reduce maternal and perinatal mortality if carried out properly (1,2).

The purpose of antenatal care is to assure that every pregnancy culminates in the birth of a healthy baby without any impairment of the mother’s health. It is essentially prophylactic to keep pregnancy within the physiological limits, to detect at an early stage, any developing risk factors, correcting them promptly and preventing from deteriorating (3,4). Health education about pregnancy changes, nutrition, breast care, warning signs, importance of follow up care and allay the fears and anxieties of the pregnant women are also crucial. This is accomplished by systems of record keeping that document information about the pregnant woman’s detailed history, physical examination, investigations and management ( 5,6 ).

Quality means developing aspects regarding the structure, process and outcomes standards that the health care delivery system must meet in rank for its populations to achieve optimum health gains. In addition, quality is defined as a planned, systematic, organization-wide approach to the measurement, assessment and improvement of an organization’s performance, thereby continually improving the quality of patient care and services provided (7,8 ) .

Women satisfaction is a sensitive indicator that respond to changes in health status are detected .The antenatal period provides excellent opportunities to reach pregnant women with quality of care for early detection, diagnosis and treatment of potential life threatening of the mother and fetus as well as with health educational programs ( 9,10 )

The responsibilities of the obstetric nurse in caring for the pregnant woman include; relevant assessment, planning and implementation of care and evaluation of the effectiveness of the care provided. Nurses also should provide optimal and individualized care for pregnant mother according to women’s needs and the effect of pregnancy changes on her health (11,12 ).

**Significance of the study:**

In Egypt, trends in maternal health indicators have improved significantly since 1995. Regular antenatal care has risen from 28 % in 1995 to 66 %

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in 2008. Despite all these developments, there are still many gaps that demand further efforts and remain the main challenge to accomplishing national goals. In this context, it is necessary to mention that the maternal mortality rate at 2008 has been recorded as 82 deaths/100,000 live births (13).

Antenatal care provided was not up to mark of standard care. Measures should be taken to improve the quality of antenatal care through increasing resources, adequate supplies, and assurance of staff on duty and reduce waiting time.

There is no previous study to evaluate the impact of protocol of care on quality of nursing performance in antenatal unit which provide care for approximately 1200 pregnant women / year at Benha university hospital, therefore this study was conducted to upgrading the quality of nursing performance in antenatal unit . In relation to health teaching topics of antenatal care, the majority of nurses lacked the compliance with the quality criteria of health education for health maintenance during pregnancy, and in the mean time they revealed incorrect and incomplete answers of knowledge scores regarding most of the health teaching items (personal hygiene, breast and skin care, rest and sleep, clothing, Immunization, drugs and antenatal exercises. On the other hand, most of women reported that health education classes were not provided by nurses at the antenatal unit. These findings are agree with Shaikh (25) who mentioned that health teaching is an integral part of any maternal /infant programs. So nurse’s work in this area must have good teaching knowledge and skills.

Where Quality standards defined as reflection of the very best in high quality woman care, to help healthcare practitioners and commissioners of care deliver excellent services (8, 26 ). The present study also revealed that most nurses before the implementing of the interventions had poor level of knowledge related to concept of quality, the definition of standards of quality nursing performance during antenatal period and How to assess quality of nursing performance. This was supported by Melkamu (27 ) who emphasized that the poorest quality was always related to lack of knowledge, over load of work on nurses and neglicance of nurses in many aspects. In this context, the fact that inadequate knowledge and performance indicated poor quality of care given. The major requirement for quality service is having effective service personnel in place.

As regards the availability of structural items in antenatal unit, the present study revealed that there were certain inadequacies related to infrastructure facilities and furniture such as deficiency in the availability of equipments, supplies(different sizes of cannulas, catheters, enough linens and disinfectant solutions), some essential drugs ( iron ,folic acid and tonics), lack of teaching materials (teaching posters) , no waiting areas, prolonged waiting times for checkup, and also lack of numbers of adequate seats, where most of women reported that they were tired while standing. Nurses mentioned that all these weaken the nursing performance and they are obliged to spend most of their time attempting to achieve minimum standards of care. The findings of the present study revealed also that their is no separate examination rooms were available for antenatal care, lack of ventilation, cleanliness, no available privacy screens, no enough numbers of adult beds, bed side tables and chairs, lack of number of midwives available in the antenatal unit, were also reported by more than half of women in the present study.

Literature proved that quality infrastructure is a preliminary step for quality nursing care and for the client satisfaction from the clinic service. Because if women are not satisfied by the service rendered to them, and may not come back again for follow up ( 28 ).Moreover, many authors have reported that there is a relationship between quality structure and quality care, so with good structural properties, good care is more likely to occur (29,30 ).

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Concerning the effect of those deficiencies on women, it was found in the present study that the majority of women were not satisfied with many items of the nursing performance such as in the form of lack of explanation of many procedures of woman interaction –(lack of nurse antenatal care, lack of reassurance & psychological care. Many studies revealed that one of the indicators measuring quality of antenatal care is providers’ interpersonal skills as clients treated with respect (31,32). WHO organization reported that communication is one should be of the principles of good care (33 )