



بسم الله الرحمن الرحيم

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مسئولية عن محتوى هذه الرسالة.

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**Effect of Educational Program Regarding
Monitoring Fetal Movement on Pregnancy
Outcome**

Thesis

*Submitted for Partial Fulfillment of Master Degree in
Nursing Sciences (Maternity & Gynecological Nursing)*

By

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List of Abbreviations

Item	Full word
RFM	Reduced fetal movements
IUFD	Intra uterine fetal death
FHR	Fetal heart rate
SPSS	Statistical Package for Social Sciences
FMC	Fetal movements count
FM	Fetal movements
FGR	Fetal growth restriction
SGA	Small for gestational age
DFMC	Daily fetal movement count
CLAP	Centre Latin American for Perinatology
CTG	Cardiotocography
MCA	Middle cerebral artery
UA	Umbilical artery
PIs	pulsatility indices
BMI	Body Mass index
MSDP	Maternal smoking during pregnancy
AFI	Amniotic fluid index
WHO	World health organization
UHN	University Health Network
PE	Patient Education
PCP	Primary care provider

Effect of educational program Regarding Monitoring Fetal Movement on pregnancy outcome

Alaa Mohamed Ebrahim Hussein (1) Prof. Dr. Randa Mohamed Ebrahim (2) Dr. Amal Fathy Mohamed (3)

Background: Raising awareness of the importance of fetal movements (FMs) and advising women on the appropriate action to take if they experience reduced FM is important for minimizing or avoiding adverse perinatal outcomes. **Aim:** To assess the effect of an educational program for pregnant women regarding monitoring fetal movement on pregnancy outcome. **Methods:** A quasi-experimental design was conducted at the antenatal outpatient clinics, Assiut General Hospital on 100 pregnant women. **Tools** of data collection; **I:** structured interviewing questionnaire, **II:** self-reported practice. **III:** Likert attitude scale **IV:** follow-up card. **Results:** About 84% of of the studied sample in study group has an efficient knowledge about fetal movement as compared to control group after intervention. 90% of majority of studied sample in the study group had satisfactory self-reporting practices as compared to control group after intervention. 98% of the study group and 12 % in the control group after intervention had a positive attitude regarding monitoring fetal movement. Additionally highly statistical significant relation between total self-reported practice, total attitude and total knowledge in study group. As regard maternal outcomes in study and control group there were statistical significant difference between study and control group regarding hospitalization, cause of hospitalization, mode of delivery, time of delivery, women's blood pressure and pulse rate. Additionally there were highly statistically significant differences between study and control group regarding baby's' outcomes, Apgar score and feeding initiated **Conclusion:** The educational program regarding monitoring fetal movement had a positive effect on pregnancy outcomes. **Recommendations:** Create a burshour that will be provided to all pregnant women during their antenatal visits to raise their knowledge of fetal movement self-monitoring.

Key words: Monitoring fetal movements, educational program, pregnancy outcome

Introduction

Because it is a time of tremendous physical, mental, and social transformation, pregnancy is a vital or difficult phase in a woman's life. Although pregnancy is a physiological process, some disorders can jeopardize maternal or fetal health, putting a pregnant woman or the fetus at a higher risk of morbidity and/or fatality (**Murray et al., 2019**). Reduced fetal activity is the main disorder that cause maternal worries and concern (**Kapaya et al., 2020**).

Fetal movements have been defined as any discrete kick, flutter swish, or roll. This has been utilized as a fetal health indicator. Most mothers can feel fetal movements by the 20th week of pregnancy (**Vinothini, Robin& Joanie, 2020**).

Fetal movements indicate that the fetus is alive and in communication with the pregnant woman. However, maternal perceptions of fetal movements might vary depending on a variety of circumstances such as placental position, decreased amniotic fluid, fetal sleep status, pregnant women smoking status, parity, and body habitus (**Warland and Glover, 2017**).

Pregnant women's perception of fetal movements is a self-screening method for assessing fetal well-being. Studies have shown that reduced fetal movement (RFM) is a risk

factor for several adverse perinatal outcomes. Pregnancies complicated by fetal growth restriction, premature delivery, fetal distress, or stillbirth affect around a quarter of women with RFM. A growing number of studies have found a link between RFM episodes and stillbirths (**Poojari, Kumar & Vasudeva, 2018**).

Every fetus has a different fetal movement pattern, and pregnant women have varied kinds of movements. Therefore, an improved understanding of fetal movement patterns and quality, as perceived by pregnant women, is crucial and can be achieved through providing adequate information (**Bradford & Maude, 2018**). When pregnant women have adequate information about normal fetal movement patterns, they can identify and report any deviations that may occur early (**Bradford & Maude, 2018**). Fetal movement counting is a cost-effective, reassuring, and easily taught skill that, all pregnant women can benefit from training on fetal movement assessment (**Dutton, Densmore & Turner, 2020**).

Expectant pregnant women thus assume more responsibility for their fetal health. Monitoring fetal activity is one of the few ways a woman can keep track of the baby's health, but the information received may have an impact on pregnant women's awareness and perception of the data. Community health nurses, obstetricians, and other health care

providers should routinely provide pregnant women with advice and information about pregnancy-related issues including fetal movements, and this topic should be revised in the third trimester of pregnancy (**Heazell et al., 2017**).

The maternity nurses play a crucial role in fetal monitoring and early detection of high-risk fetuses. Also, they are responsible for protecting the safety of the pregnant women and the fetus (**Lewis, Hill & Chitty, 2016**). The importance of monitoring fetal movements should be discussed at each antenatal appointment from 20 weeks gestation, and pregnant women should be advised to be aware of their fetus's specific pattern of movements. If pregnant women are concerned about RFM, pregnant women should not wait until the next day to have their fetal well-being assessed. It is critical to document all aspects of the assessment and management. It's also crucial to keep track of the advice given on follow-up and when/where to present if another RFM episode is scheduled (**Daly et al., (a) 2018**).

The care of pregnant women is best undertaken with an interprofessional team approach. Healthcare providers of women during pregnancy have the responsibility to screen and monitor the fetus to identify potential problems. This allows the practitioner to provide pregnant women-centered, targeted treatment, and follow-up. Pregnant women should be

educated through the educational programs about the importance of self-monitoring of fetal movements **(Bryant, Jamil& Thistle, 2020)**.

Additionally, when decreased fetal movement is perceived, the team should work together to evaluate the fetus further. Many techniques for monitoring fetal movement are controversial and lack sufficient study to document their efficacy. In theory, detecting risk factors and complications during pregnancy could lower neonatal morbidity and mortality. More study is needed to evaluate current methods and their effectiveness in both detection and long-term effects. Monitoring and then subsequent response with interventions have the potential to improve Pregnant women outcomes **(Bryant, Jamil& Thistle, 2020)**