



**ORIGINAL RESEARCH PAPER**

**Surgery**

**AWARENESS OF PRENATAL FETAL ECHOCARDIOGRAM IN NURSING STUDENTS**

**KEY WORDS:** Awareness, heart disease, fetal echocardiography

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**ABSTRACT**

**Introduction:** Nurses play an important role in promoting public health. Traditionally, the focus of health promotion by nurses has been on disease prevention and changing the behaviour of individuals with respect to their health.

**Aim:** To assess the awareness of prenatal fetal echocardiogram in the nursing students

**Methods:** Structured questionnaire was provided to the students. These questions were used to access the basic knowledge of Fetal echo awareness.

**Results:** In our study 30 final year bachelor degree nursing students were included. Female participants are more in this study 28 (93%), 2 male students were participated. Among 16 students are from rural area, 4 students (25%) were aware about fetal echocardiogram and 14 from urban area, 2 students (14%) were aware about fetal echocardiogram. Among 30 students, 7 students (23%) are aware about fetal echocardiogram performed in second trimester (18-24 weeks).

**Conclusion:** The awareness of fetal echocardiography, an important tool in reducing the incidence of complex CHD, thereby impacting public health, is alarmingly low in the population studied. Appropriate action to increase awareness of fetal echocardiography needs to be looked into.

**Introduction:**

Congenital heart disease a leading cause of infant mortality with an estimated heart disease incidence of about 4–8 per 1,000 live births. Nonetheless, structural cardiac defects are among the most frequently missed abnormalities by prenatal ultrasound. Fetal cardiac screening is designed to maximize the detection of structural anomalies within the constraints of an indicated prenatal ultrasound study. The procedure identifies a high-risk group for karyotyping and provides useful information about obstetrical management related to delivery site or multidisciplinary care. Detection rates can be diminished by maternal obesity, lower transducer frequency, abdominal scars, early gestational age, oligohydramnios, and prone fetal position.

Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may help coordinate the patient care performed by other members of an interdisciplinary health care team such as therapists, medical practitioners and dietitians. Nurses play an important role in promoting public health. Traditionally, the focus of health promotion by nurses has been on disease prevention and changing the behaviour of individuals with respect to their health.'

**Aim:**

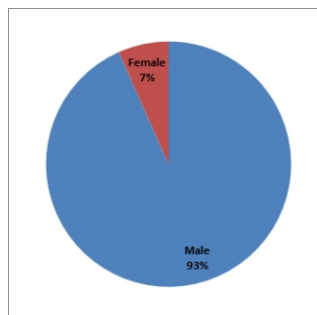
To assess the awareness of prenatal fetal echocardiogram in the nursing students

**Materials and Methods:**

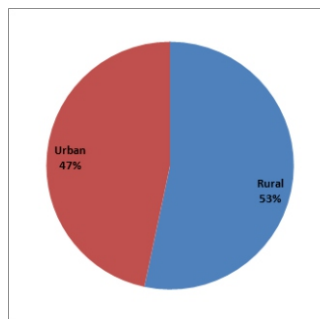
This prospective observational study was conducted in final year bachelor degree nursing college students. Structured questionnaire was provided to the students. These questions were used to access the basic knowledge of Fetal echo awareness. Data were collected and analyzed using Microsoft Office Excel.

**Results:**

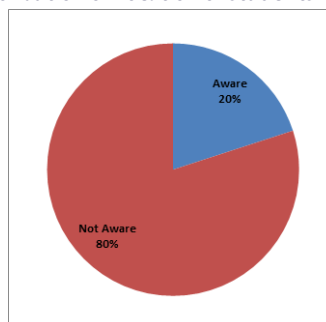
In our study 30 final year bachelor degree nursing students were included. Female participants are more in this study 28 (93%), 2 male students were participated. Among 16 students are from rural area, 4 students (25%) were aware about fetal echocardiogram and 14 from urban area, 2 students (14%) were aware about fetal echocardiogram. Among 30 students, 7 students (23%) are aware about fetal echocardiogram performed in second trimester (18-24 weeks).



**Figure 1 Distribution of Gender**



**Figure 2 Distribution of Location of students**



**Figure 3 Awareness about Fetal Echocardiogram**

**Discussion:**

Our study showed a low level of awareness in a final year nursing

students. Although this may not truly reflect the nursing community level of awareness, it is unlikely that community awareness is any higher given the fact that the students in the college were already more aware of cardiac issues than the general community. Although our study did not look in to the reasons for poor awareness, we could speculate into the possible causes behind the dismal awareness in our country. Financial constraints may result in suboptimal utilization of whatever resources are available in our country. There could be deficiencies even amongst the health professionals including lack of clarity about the role of fetal echocardiography and when and where to refer pregnant mothers. Due to wide mismatch between the number of patients and available medical personnel in our country, not much time is spent counseling the parents about the need of the test when an opportunity is available. Besides, there are limited number of training programmes focused on fetal echocardiography for nurses, radiologists and obstetricians to increase the suspicion of CHD during their routine obstetric scans. And finally, when CHD is not considered a priority by the most Indian governments and health care faculty, it is not surprising that the public awareness of its "early detection and reduction in prevalence" is lacking.

**Conclusion:**

To increase the awareness of antenatal diagnosis of CHD, one of the most important steps would be to increase the awareness in the general population using various communication channels like media and by displaying posters / handing brochures to public.

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