Comparative Analysis of the Impact of Low Decibel and High Decibel Sound: Waves on Fetal Heart Rate

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Aims & Objectives

To study the effects of high decibel sound-waves and low decibel sound-waves on fetal well beingObjective:

1. To study the effects of high decibel sound waves on fetal heart rate and movements.
2. To study the effects of low decibel sound-waves on fetal heart rate and movements.
3. To do a comparative analysis of the two above mentioned objectives.

Material & Methods

The study will be conducted over a period of two months from July 2012 to end of August 2012 in Jawaharlal Nehru Medical College, Sawangi (Meghe). The proposal has been sent to IEC and has been approved.

Study Design: Interventional

Study Group: 50 pregnant mothers

Inclusion criteria

1. Pregnant females in 3rd trimester without any complications, like-systemic diseases or otherobstetric illnesses
2. Those who would give consent for the study

Exclusion Criteria

1. Pregnant females who are not willing to give consent
2. Pregnant females with any obstetric or systemic illnesses

Methodology

Pregnant women in their third trimester, willing to consent and who fulfill the inclusion criteria will form the substance of our study. Fifty such women would be selected. They will be divided into groups, twenty-five in each, after randomization. Their preliminary information will be entered in the predesigned proforma after careful history and clinical examination. The fetal heart rate would be measured by a standard cardiotopograph machine and the maternal perception of the movements of every fetus will be noted before the intervention. The mothers belonging to both the groups will then be made to listen to music of different decibel. Immediately after the session the fetal heart rate and perceptions of fetal movements by the mother during the session would be measured and would be noted down in the proforma. At the end of the study, various parameters would be studied depending on the objectives, effects of high decibel sound-waves on fetal heart rate and movements, effects of low decibel sound-waves on fetal heart rate and movements and, the comparative analysis of the two above mentioned objective.