**Author**: Azza Baramoud Nashed.

**Title**: Relaxation exercises versus sub maximal exercise program in reducing blood pressure in pre-eclamptic patients.

**Dept.**: Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.

**Supervisors**
1. Fahima Metwally Okeel.

**Degree**: Doctoral.

**Year**: 2000.

**Abstract**:
The purpose of this study was to determine the effectiveness of relaxation training versus sub maximal exercises in reducing blood pressure for pre-eclamptic patients. Forty-five mild pre-eclamptic patients their ages ranged from 22-36 years participated in the study. They were divided randomly into three groups equal in number (A, B and C). Each one contained fifteen patients. Group A had been treated medically with "methyldopa", group B had been treated with "methyldopa" and relaxation exercises, while group C had been treated with "methyldopa" and sub maximal exercises. The treatment period continued for six weeks daily. The results showed that relaxation in form of breathing control was found to be more effective than submaximal exercises in treating mild pre-eclampsia.

**Key words**
1. Relaxation exercises.
2. Sub maximal exercise.
3. Reducing blood pressure.
5. Pre-eclamptic patients.

**Arabic Title Page**
تمارين الاسترخاء مقابل التمرينات الأقل شدة لتخفيض ضغط الدم المرتفع لمرضى تسمم الحمل.

**Library register number**: 714-715.
The aim of this work was to study the effect of weight bearing versus non weight bearing exercises on shifting the cardiac axis during the normal pregnancy. In this study 60 pregnant women in the second and third trimesters participated in the weight bearing and non weight bearing exercises and evaluation of the fetal cardiac axis change by using Ultra sonography immediately after the first session and at the end of exercise program. Results were highly significant, suggestive but not conclusive about a role of maternal exercise in improving fetal oxygenation and shifting his cardiac axis toward the normal direction. This work also presented recommendation for experimental, environmental, clinical and follow up study in agreement with the literature suggesting fetoprotective measure against laevorotation (Left axis deviation).

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<th>Key words</th>
<th>1. Weight bearing.</th>
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<td>2. Non weight bearing exercises.</td>
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<td>3. Fetal cardiac axis.</td>
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<td>4. Cardiac axis-fetal.</td>
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