



#695 Strength Training in the third trimester of pregnancy

A qualitative survey of health care experts

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Hypothesis / aims of study

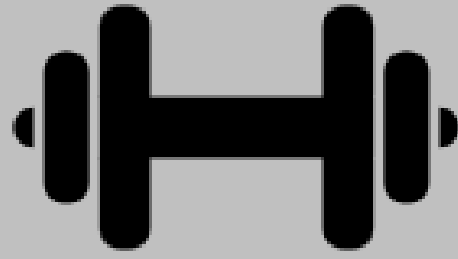
In the past Strength Training (ST) during pregnancy, especially in late pregnancy, has been considered controversial. It was assumed that it has negative effects on the expectant mother as well as the child, but lately positive aspects of ST has been shown (1) (2) (3).
The aim of this study was to investigate, whether and to what extent healthcare experts in Austria recommend ST in the third trimester of pregnancy, what benefits it can offer pre-, peri- and postnatally in terms of the health of the expectant mother, and what risks need to be considered.

Study design, materials and methods

In this qualitative study five healthcare experts (gynecologist, midwife, physiotherapists, sports scientist), treating at least ten pregnant women per year, were interviewed.
The appointments were arranged via email and written consent forms were obtained prior the online meeting. The interviews were conducted via Microsoft Teams, using a structured interview guide. The collected data were first transcribed, then paraphrased, and finally categorized and classified into four categories via deductive category formation. Mayring’s content analysis method was used for the analysis of the data.



It is recommended to perform high-quality, controlled Strength Training on the core muscles and pelvic floor muscles until childbirth.



Categories	Results
professional experiences of experts	Childbirth preparation, postpartum (pp) recovery classes, personal experiences
benefits and risks of ST in 3 rd trimester	<div><div>+: Increased body awareness, better permpartum physical performance, faster pp recovery of pelvic floor</div><div>-: bleeding, development of DRA, development of UI, labor contractions, ..</div></div>
thoughts of pregnant women concering ST in pregnancy	Controversial- interest mainly among already active women
expert recommandation concerning ST	<div><div>• ST is possible and advisable</div><div>• quality of performance</div><div>• 2-3 times per week focusing pelvic floor and core muscles, UE for lifting weight, LE Extensors</div><div>• functional body weight exercises (add weight up to 10kg, resistance bands)</div><div>• exeptions (bodybuilding, cross fit) one- to one and a stable core</div><div>• other training aspects: endurance training (walking, Nordic walking), flexibility , coordination</div><div>• contraindication: extreme training without experience, breath holding, heavy weights with trunk instability, training to exhaustion, crunches</div></div>

Interpretation

There is a recommendation of the implementation of ST in the 3rd trimester of pregnancy, regarding the health benefits for expectant mothers while considering some important aspects. Several countries, such as Norway, Denmark, Australia, and Canada, have developed guidelines for the safe practice of controlled weightlifting during pregnancy. The training during pregnancy should also focus on balance and aerobic endurance. Typically, a weekly exercise duration of 150 minutes is recommended.
Despite of there is no guideline for ST during pregnancy in Austria the considerations of the health care experts in this study mainly correspond to the literature. The contraindications (vaginal bleeding, onset of labor contractions, amniotic fluid leakage, dyspnea, headaches, dizziness, chest or leg pain, or swelling (3)). were not completely mentioned by the participants.

- limitations:

- the term ‚ST‘ covers a broad area and experts as well as the general population have many different conceptions of this term

- Most studies combine training programs of aerobic and strength exercises, the number of randomized controlled trials regarding sports, especially in the third trimester, is still very low

- In this work, mainly the experiences of the experts were relied upon, it does not show any effects of training during late pregnancy on the health of the fetus or newborn

- ideas for future studies: verify the developed approaches through further research, developing clear training plans

„...they feel very well after the training, although it's exhausting and challenging..“ (IP3, 182-185)

„...women who perform strength training during pregnancy have better physical performance postpartum....“ (IP5, 65-67)

References

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