

157: THE EFFECT OF PEER REVIEW ON CLINICAL PRACTICE OF MIDWIVES IN THE NETHERLANDS

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Objective:

To assess the effect of peer review on clinical practice of midwives in the Netherlands.

Methods:

A randomised pretest-posttest design was used. To group 1 the topics vaginal repair and amniotomy were assigned, to group 2 the topics airway suction and measuring blood pressure. These two research groups formed each other's control groups. Measurement took place at baseline and one year after starting peer review. Questionnaires were used to collect data on clinical practice. As a method for peer review, the groups passed through the quality cycle (selecting objectives; observing his/her own clinical practice and collecting data; comparing the collected data with the objectives [with the help of workbooks, especially developed for the peer review]; determining what they want to change and how they can achieve that; evaluating; starting this 'quality cycle' again with the second allocated topic).

Participants: 255 midwives (28 groups) practicing in primary and secondary care, taking part in peer review between 1998 and 2000. Additional pretest and posttest data were received from 156 practicing midwives.

Results:

We found a *significant improvement* in adhering to the recommendations with respect to airway suction and measuring blood pressure on the same arm and measuring diastolic blood pressure with Korotkoff 5 (adherence to the recommendation in intervention group with respect to airway suction from 73% in pretest to 96% in posttest, in control group from 67% and 71%; measuring blood pressure on same arm intervention group from 67 to 76%, control group from 81 to 71%; Korotkoff 5 : intervention group from 21 to 54%, control group from 28 to 37%).

No significant improvement was found with regard to suture material (intervention group from 94 to 96% and control group from 91 to 94%) and to measuring blood pressure in the right position of the pregnant woman (intervention group from 100 to 97%, control group from 98 to 96%). We did not find a significant improvement in suturing technique either. Both control and intervention group improved a little, but there was no significant difference between them (intervention group from 65 to 73%, control group from 48 to 58%).

With respect to amniotomy, we also did not find an improvement. The control group also declined. Intervention group from 74 to 72%, control group from 72 to 60%.

With regard to some of the topics we found an improvement, with others no improvement or a decline.

With respect to suture material and measuring blood pressure in the right position, probably an improvement was not possible, because the pretest was almost optimal. There was a question of a 'ceiling effect'. Regarding perineal repair, a new skill is required for the recommended technique. Possibly, many midwives do not have this skill. For learning new suturing techniques, naturally peer review is not sufficient, and needs education and training. With respect to amniotomy, an explanation could be that this recommendation has no perceptible advantages for the midwife. On the contrary, amniotomy shortens labour significantly and has few clear disadvantages. Shortening labour can be a weighty argument for amniotomy, now that midwives experience a high workload. Therefore, perhaps some midwives decided just to rupture the membranes more often after reading the workbook.

Conclusions:

Peer review in midwifery has a positive effect on changing clinical practice when improvement is possible and when no new skills (as in learning a new suturing technique) have to be learnt. Peer review is not sufficient to learn new skills.