

# Does training in psychoprophylaxis during pregnancy help women to cope with pain in labour?

Gillian Fletcher, an NCT antenatal teacher and tutor, and Gill Gyte, an NCT antenatal teacher, review a recent research paper on whether psychoprophylaxis training is effective.

A recent Scandinavian study<sup>1</sup> concluded that, 'Natural childbirth preparation including psychoprophylaxis training does not reduce the need for epidural analgesia nor did it improve the birth experience or affect parental stress...'. Psychoprophylaxis is defined in various ways, including an approach to birth preparation involving learning a positive attitude towards labour contractions and structured levels of breathing. However, it was not defined in this study.

We have looked at this paper, using the Oxford CASP critical appraisal skills questions,<sup>2</sup> in NCT workshops and on NCT's Journal Club teleconferences. We looked at the research from two main perspectives:

- Was the study conducted well enough that we can believe the findings about the new type of natural childbirth antenatal education, which they described as psychoprophylaxis, compared with normal antenatal education classes in their setting?
- Can we extrapolate their findings more widely, particularly to NCT antenatal classes?

## Critique and findings

Overall, we felt that the study was reasonably well undertaken for a complex intervention study. It was a randomised controlled trial of around 1000 women having a first baby. Groups were evenly matched in most baseline characteristics, although there appeared to be more women with a positive attitude to psychoprophylaxis in the standard group (the control group), and we are not told whether this difference was significant or not. There was about 10% loss to follow-up, which was similar for both groups, and therefore acceptable. However, 45% of women allocated to the standard care group attended psychoprophylaxis classes (either because they got the wrong

intervention or they chose to attend classes outside the study), and 37% said they used it during labour. A major problem with this study is that such a large percentage of women did not use the care they were allocated to receive.

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This makes it difficult to interpret the findings. The secondary analysis, excluding these women, can be ignored as the groups being compared were no longer randomised groups. In addition, the high epidural rate found in both groups (52%) indicates that other influences may also be involved that may have had a greater impact than any potential benefit from the psychoprophylaxis classes (see below).

## No measurable differences

The study found no difference in epidural rates (52% in both groups) and no difference in women's experiences of childbirth or parental stress. So, we felt we could say reasonably confidently that:

- the new form of antenatal classes made no difference to outcomes compared with the standard classes in the setting where the study took place (although the high use of psychoprophylaxis in the control group may have masked a possible effect)
- these findings could not be applied to NCT antenatal classes because NCT antenatal teachers provide antenatal education using a different model.

There was limited information about the classes in the study. However, the

description indicated no preparation for parenthood (except breastfeeding). Also, psychoprophylaxis was not defined in the study so it is unclear what specific intervention was used. The paper states, 'the attitude of the educator in the new antenatal classes group...was encouraged to be in favour of natural birth...'. It could be argued that the midwife needs to be committed to the values of normal birth for such interventions to be successful and a half-hearted attitude is unlikely to work. We also felt two workshops were probably insufficient to train midwives in new ways of providing antenatal education, especially when the average length of time using other methods was 11 years. In a recent study investigating the format and content of information about interventions given to women during antenatal classes in the UK, the authors draw comparisons between the 2.5 year long Diploma of Adult Education training that NCT teachers have and the lack of national standardised training in antenatal education that UK midwives receive.<sup>3</sup>

## High epidural rates

We were concerned about the high epidural rates in both arms of the trial. Reported rates of 'epidural or similar' use are lower in England, varying from 17.1%<sup>4</sup> to 29%<sup>5</sup> for samples including both primiparous and multiparous women, and 40.1% for primiparous women.<sup>4</sup> There was no information about the philosophies of care in the Scandinavian hospital setting where women gave birth. If hospital culture encouraged women to have an epidural if they were in pain, then it seems highly unlikely that antenatal education would make any impact. We suggest that what is taught in antenatal classes needs to be reinforced by midwives attending women in labour, so that women do not lose confidence in their ability to work with the pain of labour. In the UK,

support for normal birth in hospital is arguably greater than in Scandinavia, as the epidural rate is lower. However, much more could be done. Recent research suggests use of water or a birthing pool is limited and some women are not encouraged to move around at all.<sup>6,7</sup>

## Conclusion

Overall, more detail about the complex interventions being compared and the context in which women were giving birth is required to properly understand the finding of this study. The wording used in the abstract is misleading. To be more accurate, the tested model of childbirth preparation did not impact on outcomes in the specific cultural setting in which it was tested. The findings cannot be extrapolated to NCT antenatal classes.

### References:

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## Birth Ideas Workshop

In 2005, midwife Julie Foster highlighted the significant drop in epidural use at Birmingham Women's hospital among women who had attended a Birth Ideas Workshops (BIW) (13% vs. 60% of non-attenders).<sup>8</sup> The workshops, held over two hours, involved a small group of expectant parents trying out active birth positions in a hospital delivery room. The key focus of the BIW was to empower women and their partners to have confidence in the normal birth process and their ability to work with the pain, the philosophy underpinning NCT classes. Being able to move around and choose how one can work with the pain of labour, rather than becoming a passive recipient of care, can influence how a woman feels about her labour. Leap has argued that, 'Feeling emotionally supported and in control affects women's satisfaction more than the experience of pain itself.'<sup>7</sup>

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