

# **FreeMOM<sup>®</sup> TENS EVALUATION RESULTS**

## **September 2005 Report**

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This report covers the period from 1<sup>st</sup> November 2003 to August 2005. There have been 82 hires of the transcutaneous electrical nerve stimulator (TENS) labour device since its introduction. Evaluation of the TENS has been accessed from the women's self-reporting of their experience in using the TENS during labour. There were fifty six responses to the TENS survey. From May 2005 to August 2005 all but one woman's survey was returned.

### **Woman's Satisfaction.**

Women satisfaction was evaluated by asking if they would hire a TENS again in a subsequent pregnancy **91% of the women** who were surveyed expressed satisfaction and stated that they would hire the TENS again in a subsequent pregnancy. Only 1 women in the surveyed group stated that she would not hire the TENS device in a subsequent pregnancy. Four other women stated that they were unsure if they would hire the device in a subsequent pregnancy.

### **Ease of use.**

100% of the women surveyed stated the TENS device was easy to use during their labour.

### **Women's rating of the effectiveness of TENS for Pain relief in labour**

Women were asked to rate the TENS labour device for its effectiveness during their labour (N = 56). They were asked to rate the TENS labour device from very effective though to the TENS being of no use at all in their labour. The results are as follows:

| TENS Evaluation                 | Rating 1.<br>Very effective | Rating 2.<br>Moderately effective | Rating 3.<br>Mildly effective | Rating 4.<br>Inadequate | Rating 5.<br>No use at all |
|---------------------------------|-----------------------------|-----------------------------------|-------------------------------|-------------------------|----------------------------|
| Number of women evaluating TENS | 26<br>48%                   | 18<br>32%                         | 10<br>17%                     | 2<br>3%                 | 0                          |

**Table 1:** The TENS effectiveness as rated by women.

### **A Comparison of Pain relief methods in labour**

Women in the survey were asked to record the pharmacological and non-pharmacological pain relief methods they used in their labours. For the purpose of this evaluation the TENS device alone was compared to the pharmacological methods of pain relief. The results are as follows:

| TENS only          | TENS plus Gas only at Transition (end of 1 <sup>st</sup> stage) | TENS plus GAS      | TENS plus Gas and Pethidine injection |
|--------------------|---|--------------------|---------------------------------------|
| 25 Women<br>37.5 % | 5 Women<br>9%   | 15 Women<br>28.5 % | 16 Women<br>25%                       |

**Table 2.** The percentage of women using TENS alone or TENS & other pharmacological pain relief methods in labour

## **Comparison of TENS labour device with Pharmacological pain relief methods**

The sample size is small however there appears to be a trend of women using less medication in labour when they are using the TENS labour device. Data was compared with - NSW Mothers and Babies, 2003 (p.93). In 2003 15.5 % of women used no pharmacological pain relief during labour compared to 37.5 % of the TENS survey group. The percentage of women using nitrous oxide was significantly reduced. The percentage of women using narcotics was slightly reduced.

| <b>Pain Relief Method</b> | <b>2003– Midwives Data</b> | <b>TENS survey Group</b> |
|---------------------------|----------------------------|--------------------------|
| NIL                       | 15.5 %                     | 37.5 %                   |
| Gas only in transition    | -                          | 9 %                      |
| Nitrous oxide             | 52.5 %                     | 25 %                     |
| Narcotics                 | 30 %                       | 28.5 %                   |

**Table 3.** Comparison of the TENS with pharmacological pain relief methods

### **Percent of Labour spent at Home**

From data collected it was noted that 72% of women using the TENS labour device (induction of labours excluded from data) stayed at home for more than 50% of their labour. The range was from 50% to 85%. This is an interesting and significant result that would benefit from further study.

**I suggest that women using the TENS labour device are more confident and relaxed about the process of labour. This is supported by the positive comments women wrote on their evaluation form.**

In conclusion, the Freedom labour TENS device (offered through a hiring service at Fairfield Hospital), has:-

- (a) demonstrated a high satisfaction,
- (b) a reduction in analgesia used by labouring women, and
- (c) possibly a reduction in hospitalised time during labour.

The TENS offers women a choice in non-pharmacological pain relief methods, especially women who desire a drug free labour.

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