

Manual vacuum aspiration (MVA) – how acceptable is it for patients? Patient satisfaction survey in a large UK unit.

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Background

Hull and East Yorkshire Hospitals NHS Trust offers a comprehensive pregnancy advice service, offering surgical and medical terminations of pregnancy (STOPs and MTOPs) up to 14 weeks gestation locally, with outpatient TOPs carried out under local anaesthetic (LA) up to and including 10 weeks plus 6 days gestational age. The unit is a busy one and, unlike many other Trusts, is capable of providing specialist training in all contemporary methods of uterine evacuation. The service also includes the full range of contraceptives, sexual health risk assessment and screening, counsellors and support workers, and onward referral to other specialist services as required.

Manual vacuum aspiration (MVA) is an alternative to conventional uterine evacuation for the purpose of either surgical termination of pregnancy (STOP) or evacuation of retained products of conception (ERPC). It is performed under local anaesthetic as an outpatient procedure by using a hand-held vacuum syringe (Fig 1.). It has been shown to be both safe and effective in early pregnancy⁽¹⁾. MVA equipment can be purchased and maintained at a lower cost than conventional electric vacuum aspiration equipment, while the procedure itself is of a shorter duration than either STOPs or ERPCs. MVAs require no theatre time and avoid the risks associated with general anaesthesia, subsequently reducing the involvement of anaesthetics departments in gynaecology units.

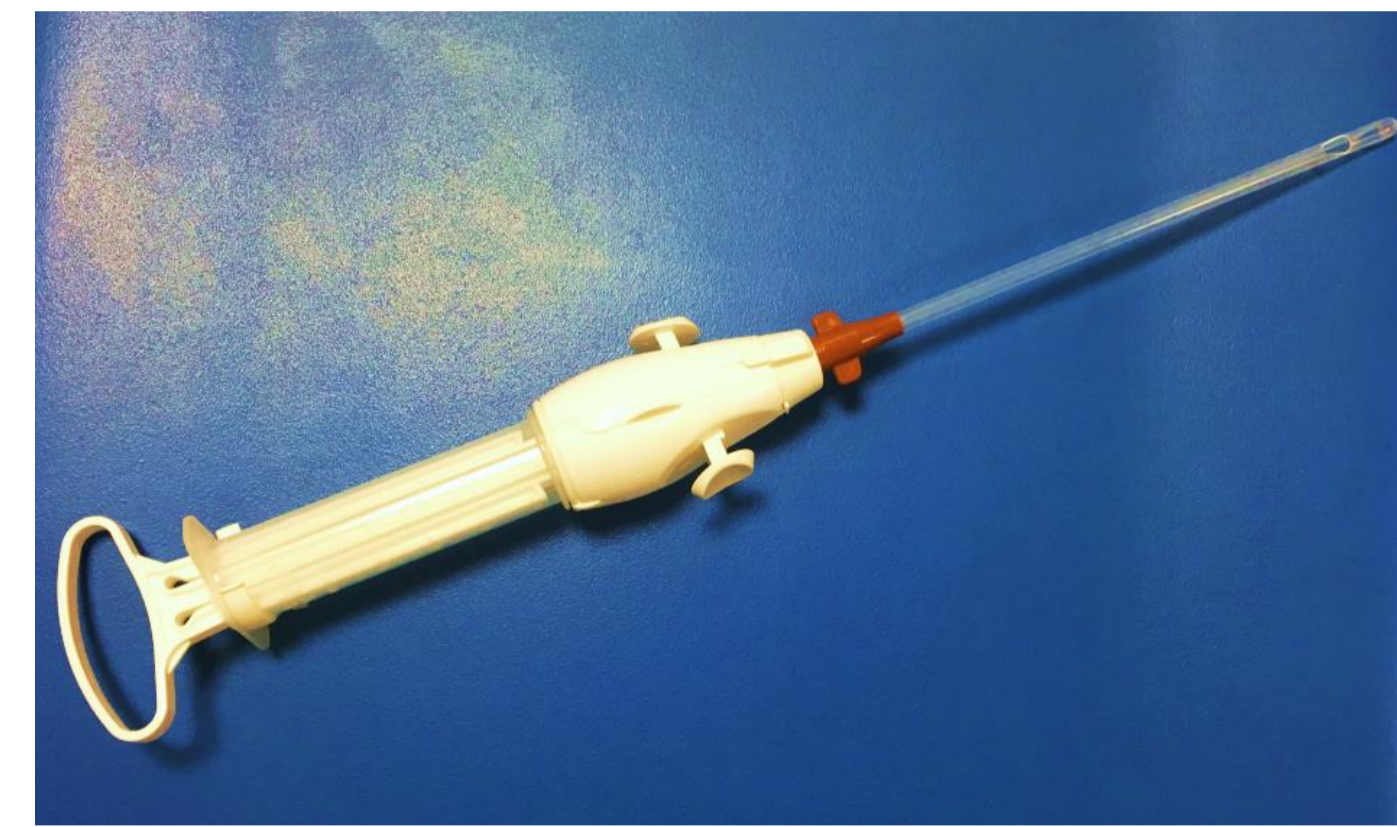


Fig. 1. MVA device with attached cannula

Despite the above benefits of using MVA, the procedure is performed infrequently across the UK, with many units not offering it at all.

Our study was devised in recognition of the reality that many patients opt for conventional aspiration due to the seeming general perception that MVA is a painful experience. Although previous literature has shown no significant difference in the severity of the pain reported between different procedures⁽¹⁾, there is limited readily available data investigating patient satisfaction, their expectations, and their perception of pain when undergoing MVA.

Methods

The anonymised survey was designed to assess the patient experience of MVA and to investigate the patient interactions with the staff. There were 13 multiple-choice questions and an additional box for free comments. All patients undergoing MVAs on Tuesdays and Fridays over the 4-month period from April to August 2016 were invited to take part in the survey. Participants were asked to complete the first half of the survey prior to the procedure and continue with the second half after the procedure was completed, but before leaving the unit. Ninety-seven MVAs were carried out in this timeframe; 52 surveys were returned for analysis, a return rate of 54%.

Results

Overall, the data suggests that MVAs are much better tolerated than expected by the patients opting for the procedure.

The satisfaction rate among the responders was excellent with over 85% of patients being very satisfied with the service (Fig.2), and with 93% indicating that they would recommend the service to friends or family should they need such a procedure. Patients felt involved in decision making (Fig. 3) and thoroughly counselled regarding risks, benefits and side effects of the treatment (Fig. 4).



Fig. 2. How satisfied are you with the overall experience of using the service?

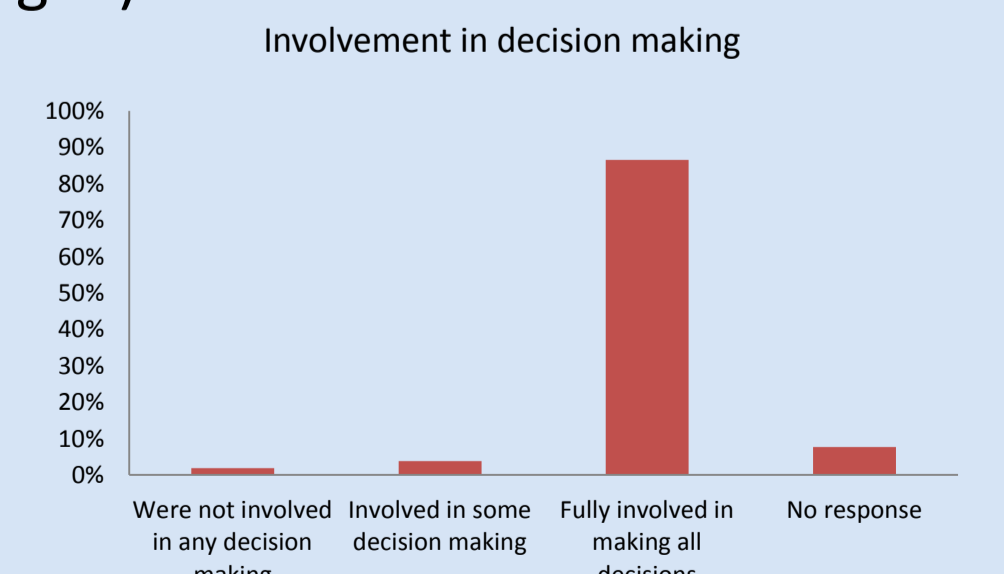


Fig. 3. How involved were you in making important decisions about your care and/or treatment?

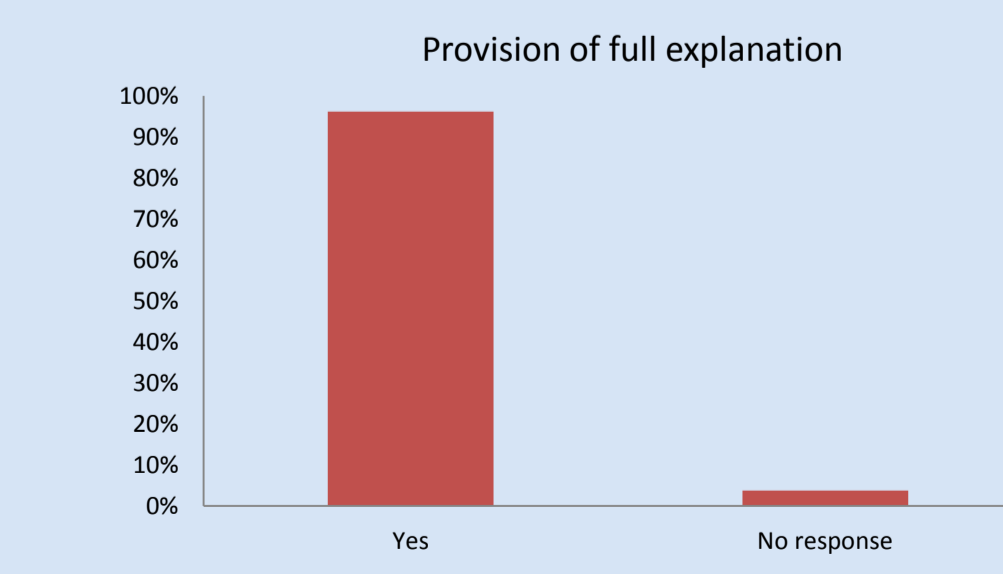


Fig. 4. Were you provided a full and clear explanation on how to manage your conditions/symptoms/pain?

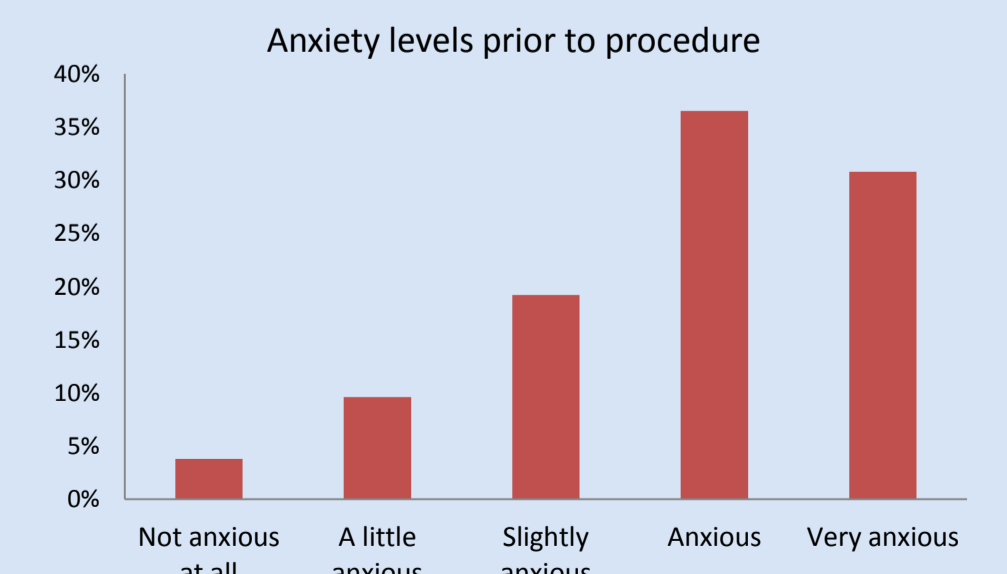


Fig. 5. How anxious are you prior to the procedure?

Results

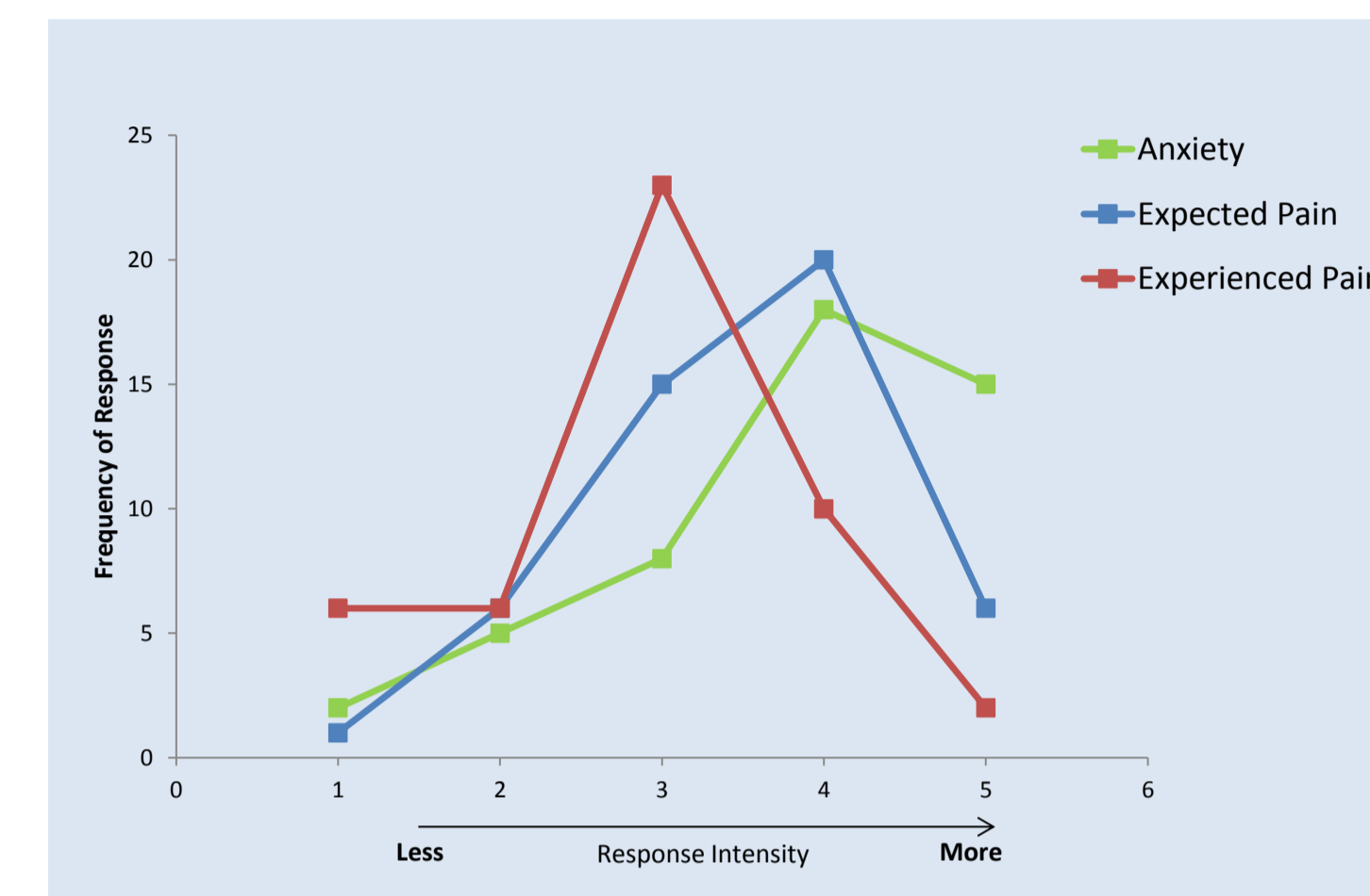


Fig. 6. Anxiety, expected pain, and experienced pain on a five-point scale (1= "Not at all" to 5 "Very") N=48

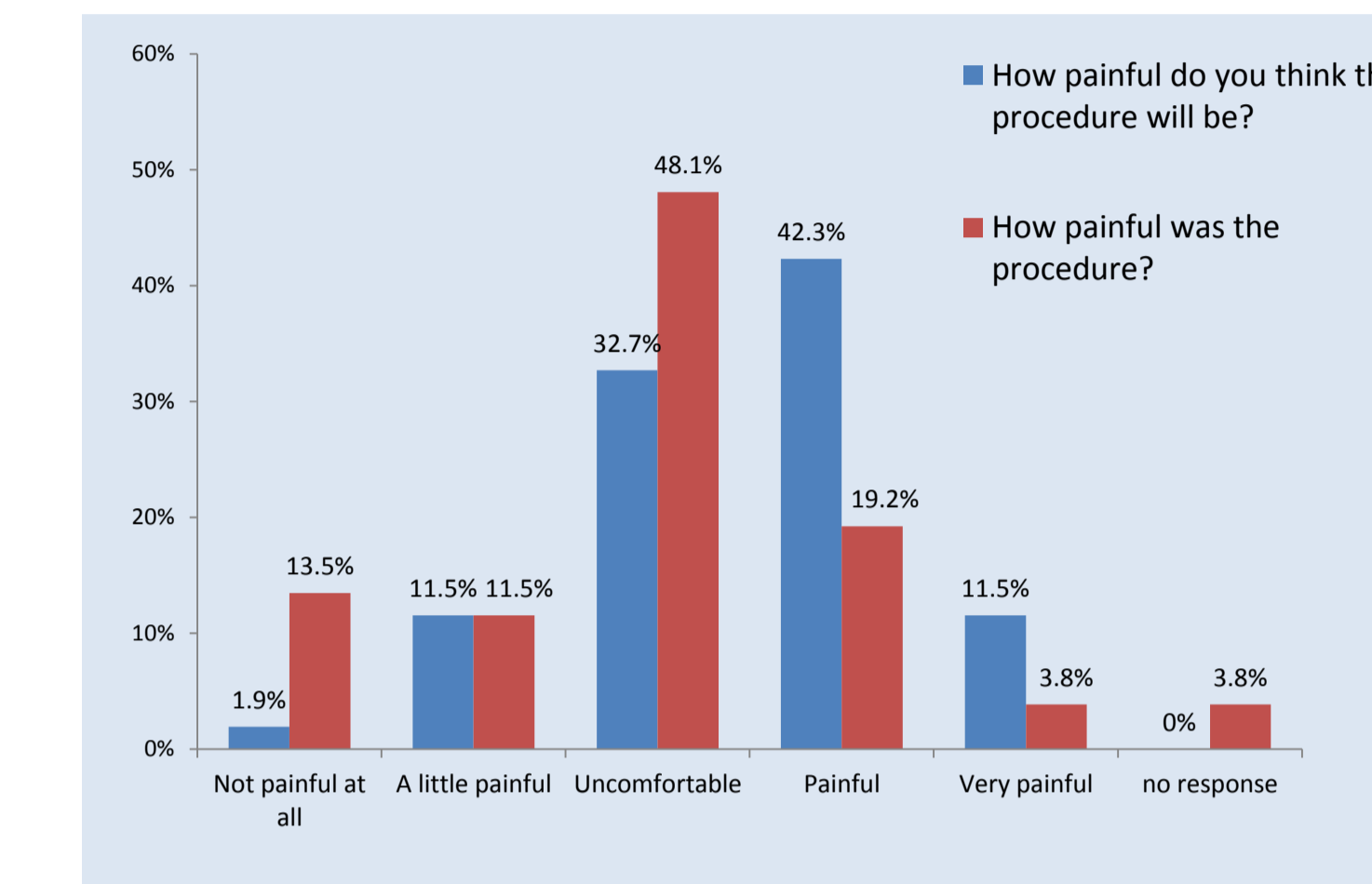


Fig. 7. Pain scores pre and post procedure

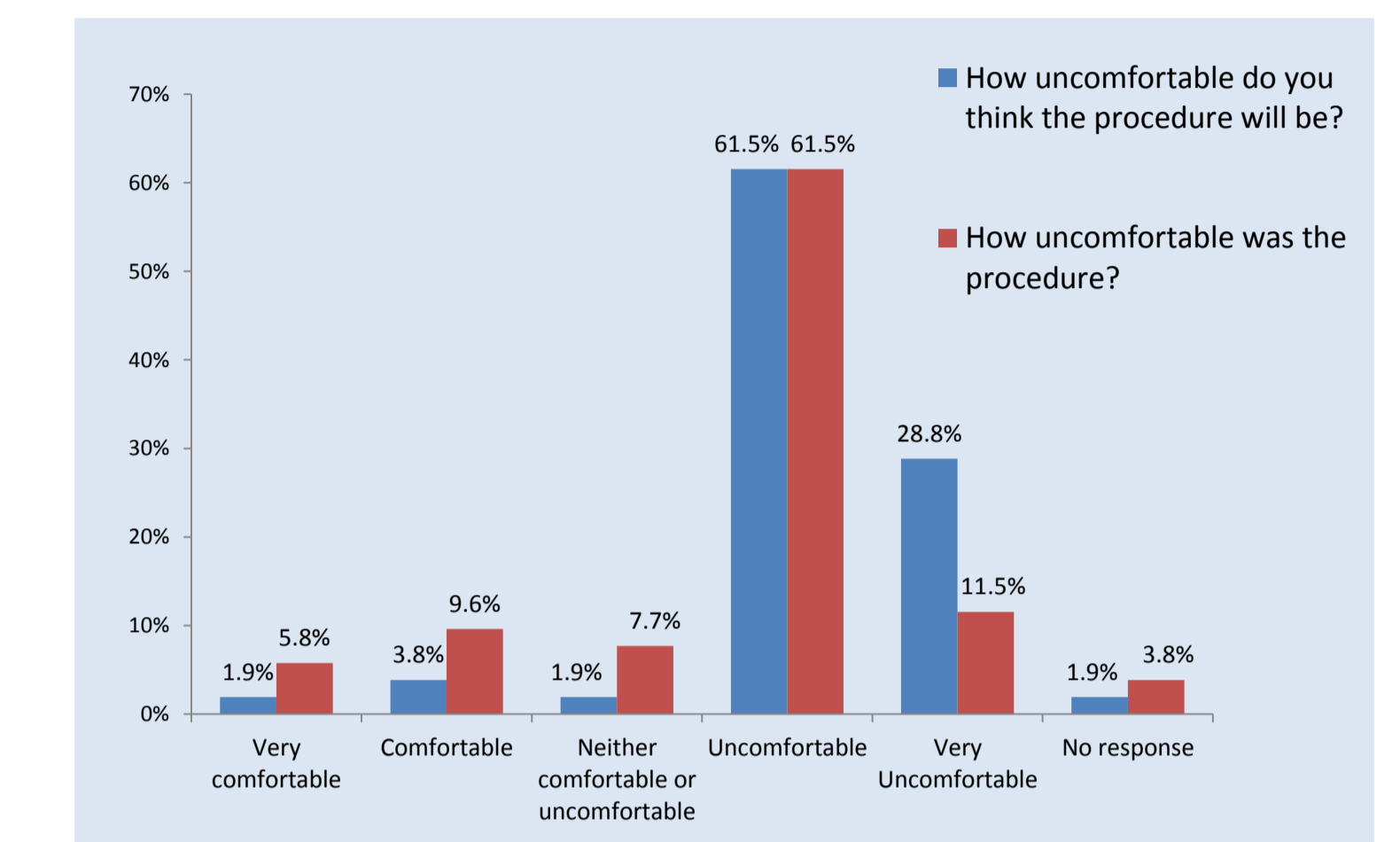


Fig. 8. Discomfort scores pre and post procedure

As could be expected, the anxiety levels in patients planning to undergo MVA were high, with the majority of patients (67.3%), feeling either anxious or very anxious prior to the procedure (Fig. 5). The anxiety levels seem to correlate with the levels of expected pain rather than the experienced pain; the more anxious individual the higher the level of anticipated pain (Fig. 6.)

The figures above highlight that MVAs are significantly less painful than predicted by the patients. Over 73% of women found the procedure to be either not painful, a little painful, or uncomfortable only. Analysis of pain scores (Fig.7) indicates that 42.3% of respondents anticipated the MVA would be 'painful' and 11.5% expected it to be 'very painful'. These figures were greatly reduced to 19.2% and 3.8% respectively as recorded by post-procedure pain score. Similarly, patients felt that procedure was much less uncomfortable than expected (Fig. 8.)

Conclusions

As illustrated by this study, MVA is a very well-tolerated procedure with overall low pain scores. Nearly three quarters of the women taking part in our survey indicated that the procedure was only uncomfortable, a little painful, or not painful at all. The satisfaction rates were excellent, with a majority of women being very satisfied with the treatment, and willing to recommend the service to friends and family members.

The findings of this study could be useful in the counselling of patients and aid them in the decision-making process when selecting a TOP or ERPC method. The results add to the growing data in this field, and may have the additional benefit of reassuring both staff and patients of the tolerability of the MVA procedure.

We would recommend the MVA as an efficient, safe, and cost-effective alternative to conventional suction evacuation. MVA, being an outpatient procedure, can decrease not only patient waiting times and patient recovery, but can also reduce overall costs. MVA devices can be purchased and maintained for less investment than conventional electric vacuum aspiration equipment, and the procedure does not require theatre provision or significant anaesthetic intervention. As such, MVA can be used successfully in well-developed and resource rich countries as well as those where resources pose a significant problem to healthcare delivery.

References

1. Kulier R, Cheng L, Fekih A, Hofmeyr GJ, Campana A. Surgical methods for first trimester termination of pregnancy. (2001) Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD002900.