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# MIDWIVES' APPROACHES TO EARLY PUSHING URGE IN LABOUR

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## ABSTRACT

The objectives of this mixed-methods study were: **a)** to investigate midwives' approaches to early pushing urge; **b)** to explore midwives' perspectives and experiences of helping women cope with EPU. A quantitative observational methodology was adopted to investigate midwives' approaches to early pushing urge in 60 EPU cases. A qualitative phenomenological approach was carried out in order to gain more in-depth understanding of midwives' views and experiences of EPU management strategies. The findings are presented as four main domains: **a)** *midwives' approaches to EPU*; **b)** *drivers guiding midwives' approaches to EPU*; **c)** *influencing factors in helping women cope with EPU*; **d)** *variation of midwives' approaches to EPU over time*.

**KEYWORDS:** early pushing urge; EPU; push; labour; management; approaches.

## KEY POINTS

- Although there is no evidence determining the optimum response to EPU, midwives adopt mainly two approaches in the case of an EPU: *letting the woman do what she feels* and *stop pushing technique*.
- Independently from the undertaken approach, it is recommended that midwives need to work with each individual woman in the context of each labour to determine the best approach in the specific case.
- Midwives should acknowledge that women often strongly struggle to cope with EPU; provide women with explanations and information on EPU; empower mothers; offer individualised woman-centred care and emotional support.
- Factors that may facilitate midwives in helping women cope with EPU are: models of care considering one-to-one care and continuity of carer; supportive working environments promoting normality of labour and birth; observing a number of women experiencing EPU in labour; good team working and peer support.

## INTRODUCTION

Early pushing urge (EPU) is defined as the perception of the irresistible urge to push by the labouring woman before full cervical dilatation, documented by vaginal examination. Although different incidence rates are reported in the literature (from 7.6% to 54%), a significant minority of childbearing women seem to be experiencing the EPU phenomenon during labour (Roberts et al., 1987; Downe, 2008; Borrelli et al., 2013). Midwives are consequently often called to help labouring women cope with this event (Petersen and Besuner, 1997). The EPU has been traditionally considered as a pathological event, with a number of authors highlighting the increased risk of cervical damage and maternal exhaustion (Berkeley and Fairbairn, 1931; Benyon, 1957; Gaskin, 1990). More recently, researchers have reconsidered EPU as a physiological phenomenon when good maternal and fetal conditions are present (Enkin et al., 2000; Downe, 2008; Borrelli et al., 2013). However, the real incidence of EPU, the nature of the phenomenon and the optimum approach to management remain controversial areas. Moreover, despite EPU appearing to be a common event occurring in a number of labouring women, international recommendations (NICE, 2014), national guidelines (SNLG-ISS, 2014) and local protocols seem to be incomplete in this area.

Given the evidence gaps, the objectives of this study were: **a)** to investigate midwives' approaches to early pushing urge; **b)** to explore midwives' perspectives and experiences of helping women cope with EPU. The findings discussed in this paper are part of a larger research project, which investigated the prevalence, characteristics and management of EPU through a prospective observational methodology and explored women's and midwives' experiences of EPU using a phenomenological design. This study aims at informing local midwifery practice and contributing to international debates around the topic.

## **METHODS**

### **Design**

According to the aims of the study, a mixed-method approach was undertaken. A quantitative observational methodology was adopted to investigate midwives' approaches to early pushing urge in 60 EPU cases. A qualitative phenomenological approach was carried out in order to gain a more in-depth understanding of midwives' views and experiences of EPU management strategies.

### **Setting**

The study setting was a large tertiary referral public maternity hospital with approximately 3000 births per year located in Northern Italy. In regard to the intrapartum care provided in the research site, the midwives are responsible for caring for low-risk women with physiological childbirth. Whenever possible, one-to-one in-labour care is guaranteed. According to local guidelines, a vaginal examination is done by the midwife every two hours and recorded on the partogram. There is not a dedicated section in the woman's case history for the recording of the appearance of EPU. In the absence of local guidelines or protocols specifically on EPU, the midwives' practices in response to the phenomenon may vary. Women are routinely admitted to the hospital postnatal ward for 2-3 days following birth.

## **Sample**

For the quantitative observational part of the study, the sample included 60 EPU cases from women who manifested the event in labour at term pregnancy, with single fetus in cephalic presentation. Exclusion criteria were fetal malformations and women under 18. For the qualitative part of the project, a purposeful sampling was used in order to include participant midwives with in-depth knowledge of the phenomenon under research (Carpenter, 2007; Smith et al., 2009). The midwives working in the hospital labour ward for at least 18 months were eligible for the study. The sample included 25 midwives with a mix of clinical expertise, with a range from 18 months to 30 years of experience. All the midwives interviewed had witnessed the phenomenon of early pushing urge in labouring women during their work experience.

## **Data collection**

For quantitative data collection, the collaboration of midwives working in the hospital labour ward was sought in order to collect data about EPU cases on a data collection sheet. The data collected included demographical information; maternal and fetal/neonatal variables; birth outcomes; intrapartum midwifery practice (including EPU management strategies) and interventions in response to EPU.

For qualitative data collection, face-to-face tape-recorded semi-structured interviews were conducted with the participants. Midwives were interviewed before, during or after the working shift. Interview guides were used in order to cover the main topics to answer the research questions. However, the researcher remained also open to investigate areas that seemed appropriate to the individual concerned (Rose, 1994). Four vignettes reporting clinical cases of EPU were used to facilitate the understanding

of the midwives' practices in response to the phenomenon. These were elaborated from the ones developed by Downe (2008). The vignettes (Figure 1) included different cases of EPU occurring in physiological labours, with variations in women's parity (nulliparous or multiparous) and cervical dilatation at the diagnosis of EPU (5 cm and 9 cm).

**VIGNETTE 1** - Maria is a 30-year-old nulliparous woman with a physiological pregnancy (single fetus in cephalic presentation). Her labour started spontaneously five hours ago. The membranes are broken, the amniotic fluid is clear and the fetus is healthy. One hour ago the dilatation of the cervix was 4 cm, with a fetal occiput in the anterior position. Now she describes an important pushing urge and cervical dilatation is 5 cm.

**VIGNETTE 2** - Laura is a 30-year-old nulliparous woman with a physiological pregnancy (single fetus in cephalic presentation). Her labour started spontaneously five hours ago. The membranes are broken, the amniotic fluid is clear and the fetus is healthy. One hour ago the dilatation of the cervix was 8 cm, with a fetal occiput in the anterior position. Now she describes a strong pushing urge and cervical dilatation is 9 cm.

**VIGNETTE 3** - Sofia is a 30-year-old multiparous woman with a physiological pregnancy (single fetus in cephalic presentation). Her labour started spontaneously five hours ago. The membranes are broken, the amniotic fluid is clear and the fetus is healthy. One hour ago the dilatation of the cervix was 4 cm, with a fetal occiput in the anterior position. Now she refers an important pushing urge and cervical dilatation is 5 cm.

**VIGNETTE 4** - Rebecca is a 30-year-old multiparous woman with a physiological pregnancy (single fetus in cephalic presentation). Her labour started spontaneously five hours ago. The membranes are broken, the amniotic fluid is clear and the fetus is healthy. One hour ago the dilatation of the cervix was 8 cm, with a fetal occiput in the anterior position. Now she describes a strong pushing urge and cervical dilatation is 9 cm.

**Figure 1 - Vignettes**

## Data analysis

A descriptive statistical analysis was performed using Epi-Info 3.5.1 for quantitative data. In this paper, we included only data about midwives' approaches to EPU as other

quantitative data have been discussed in a previously published article (Borrelli et al., 2013). All the interviews were digitally recorded, listened/re-listened to, fully transcribed and analysed using an interpretive phenomenological approach (Smith et al., 2009). A line by line analysis was undertaken to identify emergent concepts. The development of core themes was discussed by all the members of the research group. The data analysis was conducted in Italian in order to maintain language nuances. Only relevant quotes were translated in English for data dissemination. Triangulation of quantitative and qualitative data was performed.

## **Ethical approval**

The study protocol was approved by the local Ethics Committee. All procedures were performed in compliance with relevant laws and institutional guidelines. Potential participants were given the study information sheet which explained the research objectives and what their involvement would implicate. Informed consent was obtained from all participants prior to participation. Confidentiality and anonymity of data were guaranteed. Participants were free to choose not to take part or to withdraw at any time. For quantitative data, women's informed consent was obtained.

## **FINDINGS**

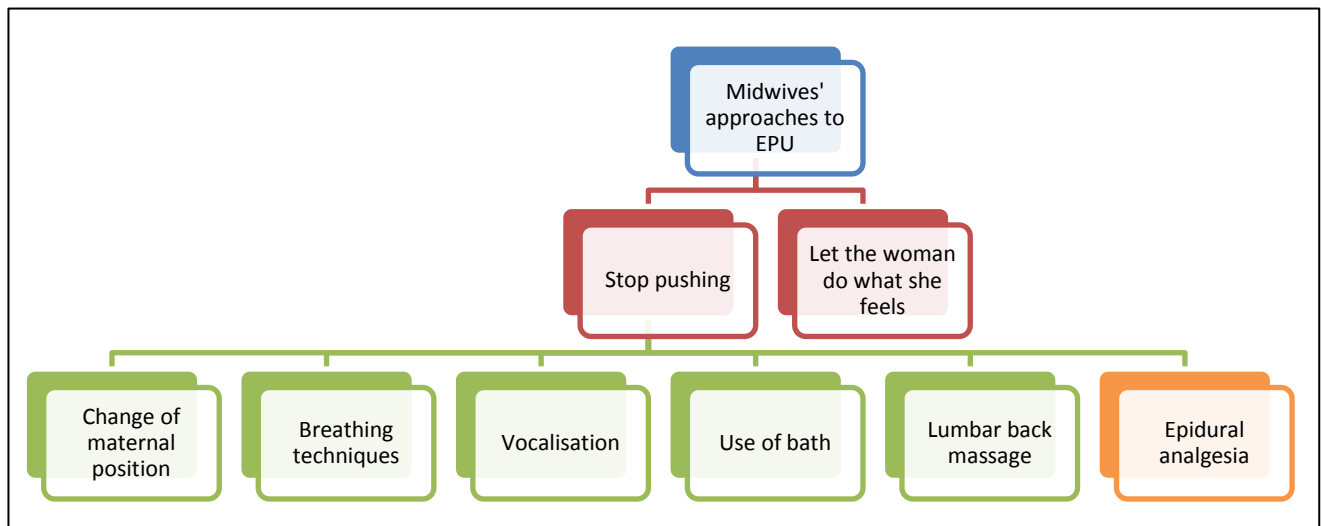
The findings are presented as four main domains. These are: **a)** *midwives' approaches to EPU*; **b)** *drivers guiding midwives' approaches to EPU*; **c)** *influencing factors in helping women cope with EPU*; **d)** *variation of midwives' approaches to EPU over time*.



## Midwives' approaches to EPU

Both quantitative and qualitative data suggested that the midwives adopted mainly two approaches in the case of an EPU. These were *letting the woman do what she feels* and a *stop pushing technique*. Within the 60 EPU cases analysed, the latter was the most used approach by midwives, with a percentage of 87% (n=52/60). A small number of midwives suggested to the woman to go along with the pushes (13%, n=8/60), mainly in the case of an EPU diagnosed at a higher cervical dilatation (8-9 centimetres).

In the case of a stop pushing technique, the midwives advised several alternatives in order to help women cope with EPU, such as change of maternal position (75%, n=45/60); breathing techniques (48%, n=29/60); vocalisation (27%, n=16/60) and use of the bath (15%, n=9/60). Epidural analgesia occurred in 15% (n=9/60) of the cases. In the qualitative interviews, the midwives similarly reported that they usually suggest the followings to help women hold the pushes: change of maternal position; breathing techniques; vocalisation; use of the bath; lumbar back massage and epidural analgesia. Midwives' approaches to EPU are summarised in Figure 2. Both quantitative and qualitative data showed that the midwives often used a combination of techniques, mainly change of maternal position combined with breathing techniques (30%, n=18/60) or vocalisation (15%, n=9/60).



**Figure 2 - Midwives' approaches to EPU**

All the midwives interviewed would suggest a postural change to alleviate the urge to push. Both quantitative and qualitative data refer to only hands and knees, knee-chest and lateral positions:

*'I would help her try to find a position that may alleviate the urge to push, suggesting for example a hands and knees or lateral position' (M7)*

*'I would suggest her to change position. I would advise a knee-chest position, with the pelvis higher than shoulders' (M21)*

Breathing techniques, vocalisation, use of the bath and lumbar back massage were complementary techniques advised by the midwives in combination with a change of maternal position. Two midwives mentioned the epidural analgesia as a 'last resort', when non-pharmacological practices are not giving any relief to the woman:

*'If the woman has a really irresistible urge to push and she doesn't have any relief, even changing posture or using breathing techniques, I would propose an epidural analgesia' (M3)*

*'The last night I was assisting a woman pushing at 5 centimetres and there was no way she was able to hold the pushes. So we proposed an epidural analgesia at the end, which was the only way to deal with the situation'* (M9)

The approach that the interviewed midwives would mainly use with an EPU at a cervical dilatation of 9 cm is to *let the woman do what she feels* for both nulliparous and multiparous mothers:

*'I would let the woman do what she feels. If she is pushing, I would let her listen to her body'* (M11)

*'When I assist a woman with an early pushing urge in a completely physiological situation, it means that there is a reason for that EPU so I usually don't try to stop the pushes. If there are physiological elements, that pushing urge is physiological as well'* (M13)

From quantitative data, the dilatation of the cervix was manually completed by midwives in 6 cases (10%) with EPUs at 8-9 cm. Qualitative data showed controversial opinions in regard to the manual dilatation of the cervix. The majority of the midwives would not use this practice in the presence of good maternal and fetal conditions. Very few interviewed midwives referred to the possibility of dilating the cervix manually to 'give a little help' to the woman.

Independently from the undertaken approach, some participants highlighted the importance of emotional support in assisting mothers that experience EPU. The midwives recognised their essential role in providing explanations and information on what is happening to the woman's body:

*'I know it's difficult not to push if she has the urge to do so. I would try to explain to her the reasons for why it's better not to push, without making her feeling guilty'*

(M18)

One participant highlighted the importance of empowering the woman that is experiencing the EPU, starting from acknowledging that she is struggling to cope with the situation:

*'It's important to have a trusting relationship with a woman that follows your suggestions. You should instil in her the feeling that you know she is struggling, but it's also something she can cope with and we can work together towards a normal birth'* (M21)

### **Drivers guiding midwives' approaches to EPU**

Midwifery practices in response to EPU appeared to be mainly guided by the following drivers: *dilatation; parity; fear of cervical damage; maternal exhaustion; presence of physiological signs; respecting physiological times.*

Both *dilatation* and *parity* were referred to by participants as two of the main determinants in their decision-making process. The participants seemed to be more willing to use a *stop pushing* approach in the case of nulliparous women with a lower cervical dilatation; conversely, they usually *let the woman do what she feels* in the case of multiparous women with a nearly complete dilatation of the cervix.

*'I would ask the woman not to push because cervical dilatation is not full and therefore it's not the right moment to push yet'* (M9)

*'I wouldn't let her push anyway, but if she is a multiparous mother it could be a precipitous labour and after 30 minutes she may be fully dilated. My approach*

*would not change, but I would be more worried with a nulliparous woman because she might not be able to manage to cope with this situation for a period of time of 5 hours or so' (M17)*

The midwives' suggestion to hold pushes decreased in the case of a nearly full cervical dilatation. Few midwives would still use this approach with an EPU diagnosed at 9 cm, in the absence of clinical signs confirming the onset of the second stage. However, in this case they would feel less worried if the woman pushed because of the expected imminent birth:

*'I would still use a stop pushing approach if I can't see clinical signs telling me that cervical dilatation is complete, like an extending perineum...'* (M7)

*'I would try to give her time to reach the complete dilatation, but if she can't hold I would tell her to do what she feels'* (M21)

The choice of suggesting alternatives to avoid the pushes appeared to be often guided by the *fear of cervical damage* such as tears, oedema and thickness, which may result in a prolonged or arrested labour:

*'We know from the literature that if a woman pushes when the cervix is not fully dilated, we might have consequences on the cervix (M2)*

*'The cervix would thicken and this would not allow the labour progression. This might cause a prolonged or arrested labour'* (M14)

Another important factor which was taken into consideration by some midwives in advising alternatives to avoid pushing was the *maternal exhaustion* to the detriment of the expulsive phase:

*'The woman should avoid pushing ineffectively. Ineffective pushes are detrimental because she wastes her energies'* (M7)

*'If the cervix is 5 centimetres dilated, I don't want her to be exhausted at the moment of the expulsive stage' (M21)*

Midwives that would *let the woman do what she feels* stressed the importance of the *presence of physiological signs* such as good progression of labour, soft cervix and normal fetal parameters (e.g. presenting part, heart-beat, development and weight).

The idea of *respecting physiological times* appeared to be a constant guide for the midwives' decision-making, irrespective of parity and dilatation at the appearance of EPU:

*'I think it's important to respect physiological times, trying to avoid those precipitous descents that are harmful to both the mother and the baby' (M10)*

### **Influencing factors in helping women cope with EPU**

The influencing factors in helping labouring women cope with EPU reported by the participants were: *woman's personality; woman-midwife trusting relationship; team working; knowledge of the physiology of childbirth.*

The interviewees referred to the *woman's personality* and the *woman-midwife relationship* as two of the main influencing aspects. The midwives raised the importance of being able to establish a trusting relationship with each mother, providing an individualised and woman-centred care:

*'If you need to manage an early pushing urge at 5 centimetres, the success lies in the relationship you established with her... which influences how much she trusts you and how much you are allowed to guide her' (M19)*

*'Sometimes you find women that absolutely don't listen to you and refuse to change position, whereas sometimes they completely listen to you. The single person plays an essential role in it' (M20)*

Another important factor reported by the midwives was good *team working* which facilitate a constant and constructive dialogue among colleagues. The participants perceived as helpful working in an environment that supports physiology of birth and recognises the midwife's competencies and responsibilities. The midwives argued for the need of having an in-depth *knowledge of the physiology of childbirth* in order to be able to respect physiological times of labour and birth. In the case of newly-qualified midwives, our data showed that they might need support and reassurance from more experienced colleagues:

*'The environment in which you work is really important. If physiology [of childbirth] is your responsibility, you are given more freedom in your decision-making. And I feel that having the opportunity to ask for your colleagues' advice is essential as well' (M23)*

One midwife raised the significance of being up-to-date with scientific literature in order to refer to evidence-based practice in their decision-making process:

*'This year we have been learning together to respect physiological times, debating with colleagues on the basis of what we read and catch from others, for example considering studies conducted by English midwives' (M6)*

## **Variation of midwives' approaches to EPU over time**

The majority of the participants reported that their approach to EPU evolved within the course of their professional career. In particular, the midwives felt they have acquired increased *professional competence, self-confidence* and *awareness of physiology of childbirth*. They also mentioned their increased ability to establish a *stronger woman-midwife relationship*:

*'Yes, my approach has surely changed due to my experience. Now I feel more confident in my everyday practice and I am aware that EPU might occur sometimes'* (M7)

*'I feel that I gained more ability in guiding women and in establishing a stronger relationship with them. Being able to know which are the right words and how and when to talk to the couple... this helps a lot'* (M25)

The *personal experience of birth* caused some changes in the midwives' approach to EPU as well. In particular, they argued that their lived experiences of giving birth gave them an understanding of how difficult it can be to hold back pushes, especially in the presence of an irresistible urge to push:

*'It all changed when I gave birth to my baby. I think that when the baby's head is pushing, it's absolutely impossible to stop it and I experienced this during my labour. Therefore, while before I was more like 'Don't push! Ah-ah-ah', now if a woman wants to push, I let her push and that's it'* (M20)

Only three participants (who had been working in the labour suite for a couple of years) referred that their response to the phenomenon did not change over time. They argued that, since their placements within the university midwifery programme, they have always been encouraged to respect the physiology of labour in the presence of EPU:



*'Not much has changed because I grew up in a reality in which we dealt with EPU in this way, also in terms of university training' (M23)*

## **CONCLUSION**

This paper provides original insights into the midwives' approaches to EPU, including their perceptions and experiences of helping women cope with EPU.

According to both the existing literature (Enkin et al., 2000; Downe, 2003; Borrelli et al., 2013) and our findings, midwives might suggest techniques to alleviate the urge to push and to help the woman cope with it, such as change of maternal position, breathing techniques, vocalisation, lumbar back massage and use of bath. Epidural analgesia could be proposed by midwives when the woman is strongly struggling to cope with EPU after alternative non-pharmacological techniques are suggested. However, there is no available evidence supporting that early pushes are harmful in physiological conditions and no data are available in the literature about the incidence of cervical damage occurring in the case of EPU. Moreover, the midwives referred to the presence of physiological signs when helping women cope with EPU. This supports the idea of recent researchers about the physiology of EPU in the presence of good maternal and fetal conditions (Enkin et al., 2000; Downe, 2008; Borrelli et al., 2013). In light of this, the question that arises is whether midwives should let the woman do what she feels and go along with the pushes. This remains an open question as there is not enough evidence to determine the optimum response to EPU. Independently from the undertaken approach, it is recommended that midwives need to work with each individual woman in the context of each labour to determine the best approach in the specific case (Downe, 2008). Midwives should acknowledge that

women often strongly struggle to cope with EPU; provide women with explanations and information on EPU; empower mothers; offer individualised woman-centred care and emotional support.

Factors that may facilitate midwives in helping women cope with EPU are: models of care considering one-to-one care and continuity of carer stimulating the establishment of a trusting woman-midwife relationship; supportive working environments promoting normality of labour and birth; observing a number of women experiencing EPU in labour; good team working and peer support.

The optimum approach to EPU needs to be further studied and a work of larger-scale, including several contexts, should be considered. In particular, the association between midwives' approaches at different cervical dilatation and maternal/neonatal outcomes should be investigated.

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