ORIGINAL ARTICLE

A questionnaire survey on patients' attitudes towards epidural analgesia in labour

William WK To 杜榮基

for the **Quality Assurance Subcommittee in Obstetrics and Gynaecology, Hospital Authority, Hong Kong**

Objectives To evaluate patient attitudes about epidural services in labour and correlate them with patient options and actual usage of epidural analgesia.

Design Questionnaire survey.

Setting Eight Hospital Authority obstetrics units.

Participants A cohort of new antenatal patients and a cohort of postnatal in-patients over 1 calendar month.

Main outcome measures Antenatal patient awareness of epidural services and attitudes towards epidural analgesia during labour; the actual usage of such analgesia and the reported experience of postnatal patients.

Results A total of 2109 and 2851 patients completed the antenatal and postnatal survey, respectively. The former revealed that only 47% of patients had been exposed to the concept of epidural analgesia in labour, and only 13% opted for such analgesia. In the postnatal cohort, the overall epidural analgesia rate was 10%, although 19% had actually requested it. Patients who received epidural analgesia in labour were more likely to consider their experience as favourable (85%) compared to those who went through labour without such analgesia (26%) [P<0.001]. There was no significant improvement in knowledge about epidural analgesia among postnatal as compared to antenatal patients. The main reasons generally ascribed by patients for not being able to obtain an epidural service despite it being requested, were related to limited resources.

Conclusion The results showed poor general awareness of pregnant women about the proper role of epidural analgesia in labour, leading to a low patient demand for such services. Despite the low prevailing request rate for epidural analgesia in labour, there appears to be a lack of adequate resources to meet the demand.

Introduction

Pain relief in labour is an important issue in the management of pregnant women during childbirth. The use of epidural analgesia in labour is widespread in modern labour ward practice, and its benefits in terms of pain relief are well-recognised. Nevertheless, the preference of pain management modalities during labour can be expected to differ between countries and cultures. Two previous local surveys of obstetric analgesia services in Hong Kong public hospitals in 1995 and 2001 reported that the local epidural analgesia rate was only 10 to 15%,[1,2] which was lower than the rate reported in many developed countries.[3,4] These surveys attributed the low rate to inadequate service provision and limited medical resources, low patient demand due to limited public awareness as well as to possible cultural factors. While the level of service provision had already improved in the 6 years between the conduct of these two surveys, the second survey[2] revealed that the rate was still relatively low (around 15%). However, neither survey reviewed patient attitudes and thus no inference could be made as to the extent of patient demand. It was therefore unclear as to whether the persistently low epidural analgesia rate in local public hospitals was predominantly due to inadequate service provision, or to low patient demand and awareness. The underlying reasons for low patient demand, should this be the major cause, also need to be evaluated and correlated with patient knowledge of epidural analgesia as an effective means of pain control in labour. Moreover, correlating patient attitudes with actual usage of epidural analgesia and their experience during labour was also

Key words
Analgesia, epidural; Labor, obstetric; Patient satisfaction

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Department of Obstetrics and Gynaecology, United Christian Hospital, Kwun Tong, Hong Kong
WWK To, M Phil, FRCOG

Correspondence to: Dr WWK To
E-mail: towkw@ha.org.hk

important. The current study was therefore initiated by the Quality Assurance Subcommittee in Obstetrics and Gynaecology of the Hospital Authority (HA) of Hong Kong, with the aim of gathering data on patient attitudes and knowledge on epidural services in labour through a questionnaire survey. The information it could yield would be a valuable aid to the planning of service provisions and development.

Methods

The study was designed as a cross-sectional territory-wide survey of both antenatal patients and postnatal patients. Newly booked antenatal patients at all eight major obstetric training units in the HA were recruited over one calendar month (January 2005) for the antenatal survey. All patients delivered within the same calendar month in these eight units were also recruited for a concurrent postnatal survey. Based on the prevailing annual delivery rate of around 35 000 in public hospitals, it was estimated that the number of patients recruited during one calendar month would be more than sufficient to analysis and compare differences in preference and other epidemiological factors. An option to limit patient recruitment to selected hospitals only was rejected, as the social and epidemiological characteristics of patients from different geographical clusters could vary significantly. For example, certain public hospitals have a high proportion of unbooked patients coming in for delivery, without corresponding antenatal care. Conceivably, the preferences and characteristics of booked antenatal and postnatal patients (who did or did not utilise antenatal services) could be significantly different. Thus, comprehensive parallel cross-sectional surveys of both antenatal and postnatal patients were conducted.

Antenatal patients consisted of booked patients at the hospital antenatal clinic during their first medical consultation, or when they were first referred from the Maternal and Child Health Clinics to the hospital clinics. Postnatal recruitment included all patients, irrespective of whether they were booked, or admitted as unbooked emergency cases. The postnatal questionnaire was administered to all these patients in the early postpartum period (during their stay in hospital after delivery).

Slightly different survey questionnaires were administered to the antenatal and postnatal patients. The antenatal questionnaire focused on evaluating attitudes to epidural analgesia as an option for pain control during labour, and awareness of the provision of such services in their local setting. Apart from gathering the same information, the postpartum questionnaire also contained targeted questions on the actual means of pain control during their delivery; and if they had epidural analgesia, their satisfaction with the service offered. Both questionnaires were to be completed by the patients themselves, and traditional and simplified Chinese and English versions were available. Support from the nursing and clerical staff was also available, if patients encountered difficulties or had queries when filling in the questionnaire. All questionnaires bore the patient's basic epidemiological data for later correlation with their pregnancy details. While all eligible patients within the study period were offered the questionnaire, staff distributing the questionnaire stressed that the participation in the survey was entirely voluntary. It was explained that they were free to opt out, particularly if they were illiterate, could not understand the language used, or simply did not want to participate, and that such a decision would have no consequences on their clinical management.

All questionnaires were sent to the principal investigator, irrespective of whether they were completely filled out. Initial sorting excluded questionnaires that were blank, unintelligibly filled in, or when fewer than 80% of the items were answered. The data were entered into separate antenatal and postnatal databases. Apart from assessing the scores and percentages of patient responses to different categories, an attempt was also made to correlate the answers with basic patient epidemiological characteristics. The scores for antenatal and postnatal patients were also compared, using appropriate contingency tables and Chi squared tests.

病人對無痛分娩服務的問卷調查

目的 評估病人對無痛分娩服務的態度，與病人對無痛分娩的抉擇和真正使用的關係。

設計 問卷調查。

安排 香港醫院管理局八所產科部門。

參與者 在一個月內，於產科診所新登記病人及留院產後病人。

主要結果測量 產前病人對無痛分娩服務的認知，及對生產期間使用無痛分娩的態度；產後病人對無痛分娩服務的實際使用率，及對生產過程的感受。

結果 2109名病人完成產前問卷調查，另2851名病人完成產後問卷調查。產前調查發現47%病人曾經對無痛分娩的概念有接觸，但只有13%在調查時決定要求無痛分娩。產後調查發現總無痛分娩使用率為10%，而曾要求無痛分娩的有19%。曾接受無痛分娩的病人，對生產過程表示滿意的比例(85%)，亦比沒有接受無痛分娩病人(26%)顯著為高(P<0.001)。產前病人與產後病人對無痛分娩的知識並無明顯進步。曾要求無痛分娩卻不能接受此服務的病人，普遍相信主要原因為資源有限。

結論 結果顯示，產婦對在生產時無痛分娩的正確功能的認知普遍不足，導致病人對此服務的要求偏低。雖然要求無痛分娩的比率偏低，但醫院的資源明顯不足以應付病人對無痛分娩的需求。

Analysis was performed using the Statistical Package for the Social Sciences (Windows version 13.0; SPSS Inc, Chicago [IL], US) and P values of smaller than 0.05 were considered significant.

Results

Antenatal survey

A total of 2109 patients with adequately completed data were included in the subsequent analysis, which represented 78% of the total of those who were newly booked during the study period. Thirty-five (2%) questionnaires were excluded because of improper or incomplete filling in. The mean age of the sample was 30 (standard deviation [SD], 5) years with a range of 15 to 49 years. Among the participating patients, 86% were entitled Hong Kong residents and 14% were non-entitled. Neither age nor the entitled/non-entitled ratio differed significantly from the patients who did not participate in the survey.

Only 47% of antenatal patients reported having been exposed to the concept of epidural analgesia in labour. The most common source for such awareness were friends and relatives (46%) [Table 1, Q1]. Two thirds (66%) of the patients were not sure whether or not obstetric epidural analgesic services were available in their hospital, and two thirds (63%) of these were unsure of the details [Q2]. About half (52%) were unsure about the most effective means of pain control. Nevertheless, more patients (16%) named epidural as the best method [Q3]. More than half (59%) were undecided as to whether they would request epidural analgesia at delivery, but more than a quarter (28%) had already decided against it at that juncture, whilst only 13% expressed that they would prefer it [Q4a]. On the other hand, 81% of the latter expressed that the issue of epidural analgesia had been introduced to them formally; only 8% thought they had all the information they needed [Q6a]. When asked about the possible complications of epidural analgesia, the highest concern was about back pain (43%) [Q11]. Only 12% of patients believed that epidural analgesia was used often, and only 3% believed it should be used in the majority of patients [Q12]. When asked whether they believed epidural analgesia should be available to all suitable obstetric patients going through labour, only one third (33%) agreed [Q13]. In addition, 7% believed epidural rates were higher in public hospitals than in private hospitals [Q14].

Postnatal survey

A total of 2851 with adequately completed questionnaires were included in the analysis, which represented 82% of all eligible postnatal patients. In all, 29 (1%) questionnaires were void because they were incomplete or improperly filling out. About one third (33%) of those analysed were from non-entitled patients. The mean age of the cohort was 30 (SD, 5) years with a range of 16 to 48 years. A total of 273 (10%) of these patients had epidural analgesia during their delivery, compared to 9% of the overall postnatal population encountered during the study period. There was no statistically significant difference with respect to the entitled/non-entitled patients ratio, the age spectrum, or the epidural analgesia uptake rate from the overall population. The caesarean section rate in this postnatal cohort was 19% (13% underwent emergency and 6% elective caesarean section), which was significantly lower than the 22% for the overall postnatal population during the study period ($P<0.01$).

Similar to antenatal patients, only 45% of postnatal patients reported that they had been introduced to epidural analgesia in labour, but the most common (42%) source given for such information were antenatal talks in the hospital [Table 1, Q1]. Compared to antenatal patients, a significantly higher proportion (46%) were sure of the availability of epidural services, and more were sure of the availability of a 24-hour service ($P<0.001$) [Q2]. Compared to antenatal patients, slightly more patients believed epidural was the best method of labour pain control, and fewer were unsure of their answers ($P<0.05$) [Q3]. After excluding the 7% who had elective caesarean sections and did not go through labour, the majority of the remainder (75%) did not request for epidural analgesia [Q4b]. Of the 535 (19%) who made a request, only 273 (51%) actually received epidural analgesia [Q6b]. Compared to antenatal patients, fewer (47%) stated natural labour as the reason for not considering epidural analgesia, and fewer were worried about the complications ($P<0.01$) [Q5]. The majority of those that received epidural analgesia regarded the pain control achieved as perfect or satisfactory [Q7], and the insertion of the epidural was considered timely in over two thirds (72%) of the cases [Q8]. For the other half of patients who requested but did not receive epidural analgesia, reasons were perceived to be: the quota being full (43%), the relevant doctor being too occupied (39%), the patient being told she was unsuitable (6%), the service being unavailable (2%), and other miscellaneous explanations (10%) [Q9]. While the experience of labour was considered favourable by only 32% of the overall cohort of postnatal patients [Q10], 85% of those having epidural analgesia considered it to be so as compared to only 26% in the non-epidural analgesia group ($P<0.001$). Moreover, adverse labour experience due to pain was significantly reduced from 40 to 14% (Table 2). Fewer postnatal than antenatal patients were worried about needle injuries, postpartum back pain, or foetal side-effects ($P<0.001$) [Table 1, Q11]. Comparing postpartum patients that had epidural analgesia with those that had not, the former were more worried about postpartum back pain, mobility, and breathing problems ($P<0.001$) [Table 2, Q11]. In addition, the proportion of patients opting for routine use of epidural analgesia for most women was significantly higher in those who had

TABLE 1. Summary of replies to questionnaire by antenatal and postnatal patients*

		Antenatal, n=2109	Postnatal, n=2851	P value
1	Have you been exposed/introduced to epidural analgesia for pain control in labour in this pregnancy before your delivery?			
	☐ No	1115 (53%)	1538 (54%)	NS
	☐ Yes	994 (47%)	1281 (45%)	
	If Yes,			
	a) From the media or readings	238 (24%)	202 (16%)	NS
	b) From pamphlets/brochures in the antenatal clinic	109 (11%)	320 (25%)	
	c) From antenatal talks in the hospital/Maternal and Child Health Clinics	198 (20%)	537 (42%)	
	d) From friends or relatives	457 (46%)	345 (27%)	
	e) From experience in previous deliveries	131 (13%)	131 (10%)	
2	Do you know whether your hospital offers an obstetric epidural analgesia service?			
	☐ No, no such service	34 (2%)	203 (7%)	<0.001
	☐ I don't know	1383 (66%)	1329 (47%)	
	☐ Yes, service available	692 (33%)	1319 (46%)	
	If Yes,			
	a) Service available 24 hours	101 (15%)	364 (28%)	<0.001
	b) Service available only in office hours	55 (8%)	141 (11%)	
	c) Available on a quota system	100 (14%)	183 (14%)	
	d) Not sure of the details	436 (63%)	631 (48%)	
3	What do you think is the most effective means of pain control in labour?			
	a) No effective method	260 (12%)	560 (20%)	<0.05
	b) Pain-killing muscular injections	112 (5%)	253 (9%)	
	c) Patient-controlled intravenous injections	39 (2%)	64 (2%)	
	d) Pain-killing gas inhalation	235 (11%)	352 (12%)	
	e) Epidural analgesia	339 (16%)	586 (21%)	
	f) Others	23 (1%)	44 (2%)	
	g) Don't know	1101 (52%)	992 (35%)	
4a	In the future, will you request an epidural when in labour?			-
	☐ Yes	271 (13%)	N/A	
	☐ No	600 (28%)		
	☐ Not decided	1238 (59%)		
4b	Did you request an epidural when you were in labour in this current pregnancy?	N/A		-
	☐ Yes		535 (19%)	
	☐ No		2124 (75%)	
	☐ I had a caesarean section without going through labour		192 (7%)	
5	If you are not going to/did not request epidural during your labour, which of the following reasons would have applied?	n=600	n=2124	
	a) I did not need pain control	27 (5%)	117 (6%)	<0.01
	b) I wanted the labour to progress naturally	377 (63%)	995 (47%)	
	c) I did not think it was available/I am not eligible	12 (2%)	139 (7%)	
	d) I delivered too quickly	N/A	85 (4%)	
	e) I was worried about complications of epidural analgesia	172 (29%)	413 (19%)	
	f) I was worried about increased obstetric interventions	25 (4%)	54 (3%)	
	g) Others	36 (6%)	188 (9%)	
6a	If you plan to request epidural analgesia when in labour, would you want the issue to be introduced to you formally during your antenatal visits?	n=271	N/A	-
	☐ Yes	220 (81%)		
	If Yes, a) By means of a pamphlet that I can read	76 (28%)		
	b) By means of a video that I can watch	49 (18%)		
	c) During antenatal talks by the nursing staff	48 (18%)		
	d) During the doctors' consultation	71 (26%)		
	e) In a special session by the anaesthetist	41 (15%)		
	☐ No introduction needed – I understand already	23 (8%)		
6b	If you did request epidural analgesia in labour, did you actually undergo the procedure?	N/A	n=535	-
	☐ Yes		273 (51%)	
	☐ No		262 (49%)	
7	How satisfied were you with the epidural procedure and its effects on your labour pains?	N/A	n=273	-
	a) Perfect. I did not have any pain at all		53 (19%)	
	b) Very satisfied. Helped relieve most of my pains		75 (27%)	
	c) Satisfied. The epidural relieved major pains, but I still experienced minor pains		106 (39%)	
	d) The epidural helped a bit only		32 (12%)	
	e) The epidural did not help at all		7 (3%)	
8	Was the insertion of the epidural analgesia timely?	N/A	n=273	-
	a) It was inserted at exactly the time I wanted		197 (72%)	
	b) It was inserted only after I had a lot of pain		72 (26%)	
	c) It was inserted too late when I was about to deliver		4 (1%)	

TABLE 1 (Continued)

9	If you requested but did not receive an epidural, what was the reason? a) The service was not available when I requested it b) The quota for the service was full c) The epidural doctor was too busy to come d) The doctor/nurse said it was not suitable for me e) Others	N/A	n=262 5 (2%) 113 (43%) 102 (39%) 17 (6%) 25 (10%)	-
10	How do you find the experience of your labour and delivery? a) Good b) Bad because ☐ It was too painful ☐ I was anxious about the baby's/my condition ☐ I was too exhausted to push ☐ I cannot feel the urge to push ☐ Others	N/A	n=2689 856 (32%) 1020 (38%) 544 (20%) 414 (15%) 70 (3%) 5 (0.2%)	-
11	Which of the following do you think are possible complications of epidural analgesia? ☐ Breathing difficulties ☐ The needle may injure important organs in my back ☐ The drugs used can have harmful effects on the foetus ☐ I will not be mobile even over 1 day after the delivery ☐ Postpartum back pain	 121 (6%) 643 (30%) 619 (29%) 282 (13%) 901 (43%)	 123 (4%) 576 (20%) 553 (19%) 270 (9%) 1105 (39%)	 <0.001
12	How commonly do you think epidural analgesia is used in women during their labour? a) Rarely b) Occasionally, for specific indications c) Often d) For most women e) Not sure	 165 (8%) 417 (20%) 263 (12%) 55 (3%) 1209 (57%)	 361 (13%) 478 (17%) 336 (12%) 138 (5%) 1538 (54%)	 NS
13	Do you think epidural analgesia should be available to all suitable obstetric patients going through labour? a) Yes b) No c) Don't know	 695 (33%) 311 (15%) 1103 (52%)	 940 (33%) 475 (17%) 1436 (50%)	 NS
14	Do you think that the percentage of obstetric patients that uses epidural analgesia for pain control is higher in HA hospitals than in private hospitals? a) Yes b) No c) Don't know	 157 (7%) 398 (19%) 1554 (74%)	 345 (12%) 443 (16%) 2063 (72%)	 <0.001

* **Multiple answers allowed in Questions 1, 5, 6a, 10, and 11; N/A denotes not applicable, and NS not significant**

undergone the procedure (41%) than those who had not (4%) [P<0.001] (Table 2, Q12). The proportion of patients who agreed that epidural analgesia should be routinely available was also significantly higher in the epidural analgesia group (57% vs 28%; P<0.001) [Table 2, Q13]. Comparing the mode of delivery, the epidural analgesia group had a significantly higher incidence of emergency caesarean section (28%) and instrumental deliveries (11%) when compared to the non-epidural analgesia patients as well as the entire postpartum cohort (P<0.001) [Table 3].

For both antenatal and the postnatal scores, the proportion of answers from entitled patients and non-entitled patients showed no significant differences. Multiple comparisons of the data from the eight individual units showed remarkably uniform results across different hospitals/clusters, and consistent statistically significant differences were demonstrated.

Discussion

We showed that a large proportion of patients, both antenatal and postnatal, were not certain as to whether epidural analgesia should be routinely used intrapartum, nor could they decide whether epidural services should be routinely offered. A large proportion had no idea as to whether epidural analgesia rates were higher in private as compared to HA hospitals. These findings reflect poor patient awareness of the proper role of epidural analgesia in intrapartum pain management. Despite this low request rate for epidural analgesia in labour, there was an obvious lack of adequate resources to meet the demand.

While the efficacy of epidural analgesia in intrapartum pain management has been well-established,[5] literature describing the overall patterns of intrapartum pain management and women's satisfaction with obstetric pain management remains limited.[6] Local data on the overall patterns of obstetric pain management were lacking and limited to surveys concerning service provision rather than genuine patient demand.[1,2] The epidural analgesia rate in this survey was only 10%, which was significantly lower than the median figure of 15% reported by anaesthetic departments in Hong Kong public hospitals in the 2001 survey,[2] and the rate for all deliveries in the study period was even lower (9%).

TABLE 2. Replies from postpartum patients who did or did not receive epidural analgesia

		All postpartum patients, n=2851	Epidural, n=273	Non-epidural, n=2578*
10	Experience of labour and delivery for those going through labour	n=2689	n=273	n=2416
	a) Good	856 (32%)	178 (65%)†	636 (26%)†
	b) Bad because			
	☐ It was too painful	1020 (38%)	38 (14%)	961 (40%)
	☐ I was anxious about the baby's/my condition	544 (20%)	41 (15%)	481 (20%)
	☐ I was too exhausted to push	414 (15%)	21 (8%)	390 (16%)
	☐ I cannot feel the urge to push	70 (3%)	7 (3%)	63 (3%)
	☐ Others	5 (0.2%)	0	5 (0.2%)
11	Possible complications of epidural analgesia			
	☐ Breathing difficulties	123 (4%)	17 (6%)†	93 (4%)†
	☐ The needle may injure important organs in my back	576 (20%)	51 (19%)	473 (18%)
	☐ The drugs used can have harmful effects on the foetus	553 (19%)	28 (10%)	503 (20%)
	☐ I will not be mobile even over 1 day after the delivery	270 (9%)	36 (13%)	214 (8%)
	☐ Postpartum back pain	1105 (39%)	132 (48%)	891 (35%)
12	Commonness of epidural analgesia during labour			
	a) Rarely	361 (13%)	20 (7%)†	328 (13%)†
	b) Occasionally, for specific indications	478 (17%)	47 (17%)	404 (16%)
	c) Often	336 (12%)	74 (27%)	28 (1%)
	d) For most women	138 (5%)	37 (14%)	89 (3%)
	e) Not sure	1538 (54%)	95 (35%)	1367 (53%)
13	Do you think epidural analgesia should be available to all suitable obstetric patients going through labour?			
	a) Yes	940 (33%)	156 (57%)†	720 (28%)†
	b) No	475 (17%)	41 (15%)	410 (16%)
	c) Don't know	1436 (50%)	76 (28%)	1286 (50%)
14	Do you think that the percentage of obstetric patients that uses epidural analgesia for pain control is higher in HA hospitals than in private hospitals?			
	a) Yes	345 (12%)	56 (21%)†	260 (10%)†
	b) No	443 (16%)	42 (15%)	373 (14%)
	c) Don't know	2063 (72%)	175 (64%)	1783 (69%)

* **Excludes patients with elective caesarean section who did not go through labour**

† **P<0.001 by appropriate contingency tables comparing epidural group to all postpartum group and epidural group to non-epidural group**

TABLE 3. Mode of delivery

	All postpartum patients, n=2851	Epidural analgesia, n=273	Non-epidural analgesia, n=2416*
Normal vaginal delivery	2157 (76%)	166 (61%)†	1991 (82%)†
Instrumental delivery	165 (6%)	31 (11%)	134 (6%)
Total caesarean section			
Emergency caesarean section	367 (13%)	76 (28%)	291 (12%)
Elective caesarean section	162 (6%)	-	-

* **Excludes patients with elective caesarean section who did not go through labour**

† **P<0.001 by appropriate contingency tables comparing epidural group to all postpartum group and epidural group to non-epidural group**

Clearly the epidural analgesia rate in Hong Kong public hospitals was significantly lower than the rate reported in the West (around 20% to almost 50%).[3,4] Moreover, the epidural analgesia rate at a private maternity hospital in Hong Kong could be as high as 80%.[2] Such major differences in rates have been explained by a lack of resources (including manpower) rather than lack of expertise,[1,2] although a lack of patient education and awareness and low patient demand could also be significant contributory factors. Our findings seem to confirm all these possibilities.

This survey successfully captured around 80% of all eligible antenatal and postnatal patients. While detailed analysis between patients that did and did not participate in the survey was not feasible, comparison of overall epidemiological parameters such as mean age and entitled/non-entitled status did not show any gross differences. It therefore seems reasonable to assume that the cohort surveyed was typical of our overall patient population.

Our results showed that over half of the patients had not been introduced to epidural analgesia at the time of their first medical consultation, and a significant proportion was unaware of the most effective means

of pain control in labour. Nor was the availability of epidural services in their hospitals appreciated. Not surprisingly, only around 13% wanted to request epidural analgesia for labour at the time of our survey, illustrating the poor general knowledge of antenatal patients about this service. However, when postpartum patients were compared to antenatal patients, only a marginally greater proportion showed awareness (indicating poor uptake of any education). Nevertheless, more of the postnatal group believed that epidural analgesia was the most effective means of birth pain control and more had actually requested it. Compared with a recent survey of Australian postnatal patients, in which 53% felt they were well-informed about intrapartum pain management options,[6] our postnatal patients were poorly informed. Thus, our data support the proposition that low demand for epidural analgesia was due to poor general knowledge and low awareness in both antenatal and postnatal patients.

The low awareness of epidural analgesia as demonstrated in the postnatal survey could be attributed to the high percentage of non-entitled patients delivering in public hospitals, many of whom were late in booking their delivery. Yet, comparison of entitled and non-entitled patients yielded no significant differences between the two categories. Moreover, in both antenatal and postnatal patients, a significant proportion was aware of epidural pain control only from informal channels, reflecting a dire need for more formal channels for introducing the concept. In a small-scale survey, it was shown that among women who chose epidural analgesia in labour, 95% had received information about the procedure prior to labour.[7] Better dissemination of knowledge of epidural analgesia by formal channels during the antenatal counselling could well increase the proportion of women opting for and enjoying epidural analgesia in labour.

According to our postnatal survey results, the use of epidural analgesia was associated with significantly less pain, a better overall experience of labour, and that the majority who opted for the procedure were satisfied with it, which concurs with experience from elsewhere.[4,5] Abundant literature and local data about possible complications from epidural analgesia indicate that current standards are high and that major complications are rare.[1] The role of epidural analgesia as the most effective and safe option for labour pain management, should therefore be emphasised when counselling our antenatal patients.

Our survey showed that postpartum back pain was the complication of highest concern to both antenatal and postpartum patients. According to previous local data, the incidence of early postpartum back pain after epidural was 13%.[1] Such pain has been attributed to postural stress during labour becoming exacerbated by epidural analgesia.[8] However, recent data, including randomised control trials, failed to support such an association between epidural analgesia and long-term back pain,[9,10] nor did observational data in local patients.[11] The lack of evidence to associate long-term back pain with epidural analgesia should be disseminated to patients, with a view to alleviating unnecessary fears and increasing patient uptake of this option for labour pain management.

The postnatal survey also showed a much higher rate of emergency caesarean sections and instrumental delivery in patients receiving epidural analgesia than those who did not, which could be interpreted as a possible adverse effect. However, due to the very limited availability of epidural analgesia in most obstetric departments in HA hospitals, patients with higher risks for interventions (such as those having induced or augmented labour) were very likely specifically selected for this option, while those at low risk would be excluded. Thus, the high figures for caesareans and instrumentation could be reflecting a current patient selection bias due to limited resources. It has nevertheless been suggested that epidural analgesia for pain relief may be associated with a genuine small increase in the need for operative delivery[12,13] and this issue should therefore be raised when counselling patients.

Despite 19% of the postnatal patients claiming they had requested epidural analgesia at some stage of their labour, it was only administered in around half of them. The purported reason patients gave was a full quota or the anaesthetist being occupied. Thus, even at the present low rates of epidural analgesia requests, resource limitation of anaesthetic departments was already perceived as a problem. A local survey on the provision of epidural services in public hospitals reported that only six of eight HA units offered a 24-hour service, and in the latter, only three had a dedicated anaesthetist providing obstetric anaesthesia and analgesia during after-office hours.[2] The main reason for the limited service provision was ascribed to inadequate human resources for labour analgesia and anaesthestic services. Thus, even if efforts to increase patient antenatal awareness and knowledge of epidural analgesia increased the proportion of requests, such efforts would be futile if HA hospitals are unable to solve the manpower/resource issue.

In summary, this survey showed that there was poor general awareness of the proper role of epidural analgesia in intrapartum pain management, leading to low patient demand for such services. Despite this low request rate, there was apparently a lack of adequate resources to meet current demands. The persistently low epidural analgesia rate during labour in our public hospitals could thus be ascribed to a combination of poor patient awareness and demand, and inadequate provision of resources.

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