

Etiquette during spinal anaesthesia for caesarean section: The mother's expectations

J Anwari, K Anwari

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Abstract

A prospective survey is conducted to assess the mother's expectations of etiquette during elective caesarean section done under spinal anaesthesia. Spinal anaesthesia and caesarean section were done as per standard technique in 120 mothers who fulfilled the inclusion criteria. After the operation, the mothers were requested to fill a form regarding various aspects of mannerism in the operating theatre. This was answered using a five point Likert scale. On a separate form, markers for the display of etiquette during per-operative periods were recorded by an observer. Results of the former questionnaire indicated that the expectations of $\geq 80\%$ of mothers were exceeded. Ninety percent of the observed etiquette was scored as acceptable and amongst this, 14% was considered excellent. Patient submissiveness and care-provider dominance may have largely influenced such a high score. However, the conceptualization of mannerism during the intra-anaesthesia/operative events may not have been fully comprehended by both patient and anaesthetist.

INTRODUCTION

Patient perception is an important component of the evaluation of quality, especially the non technical aspects of anaesthesia care [1]. This perception about care providers, place and procedure depends on what the patient hears, sees and feels in the peri-operative environment. Subsequently, the patient's satisfaction with peri-operative care depends upon a balance between expectation and perception. For most of the patients, the peri-operative period is tense and unfamiliar. Good etiquette during this period allows the patient to relax by creating an environment of respect and care, hence enhancing patient satisfaction. I performed a prospective survey of which the primary objective was to assess the mother's expectations on etiquette offered to them during elective caesarean section done under spinal anaesthesia. A secondary objective was to observe the etiquette displayed to them.

METHOD

This study was conducted at Riyadh military hospital between the period April 2008 and March 2009. The study was approved by the hospital research and ethical committee. The study included women who belonged to the American Society Anesthesiologist classification of I-II. The women were required to have had a singleton pregnancy of

≥ 36 weeks, carrying normal fetus and placenta. Furthermore, it was a prerequisite that they were able to read and write Arabic, had agreed to have CS under spinal anaesthesia and were willing to participate in the survey. Patients excluded from the surveys were those who were ASA ≥ 3 , had contraindication to spinal anaesthesia, were illiterate or those who had decided to have epidural or combined spinal epidural anaesthesia. In addition, patients with a level of block below breast level or those who felt more than mild discomfort, nausea or vomiting or shortness of breath were excluded from the study.

The study was based upon the generation of two forms. The first form was an envelope-sealed questionnaire (Mother's expectation form: appendix-1) which the ward nurse both delivered to and collected from the patient. The questionnaire looked at four key aspects of mannerism, attention, respect, communication and behaviour. Mothers were asked to express their expectation about the attentiveness of the anaesthetist and theatre staff. In addition, they were asked to comment upon how adequately their body was covered, how comfortable they felt especially when positioned during spinal injection and surgical procedure and whether they were generally looked after by the anaesthetist. Their perception on manner in the operating

theatre was expressed through a five-point Likert scale. Next day on the post operative visit, the anaesthetist received the completed form from the ward nurse.

The second form (Etiquette observation form: appendix-2) was filled by a senior anaesthetist in the theatre who observed the events from the moment the patient entered the operating room until they reached the recovery room. Anaesthetists and other theatre staff were blinded. While performing spinal anaesthesia, the observer looked for the following markers of (proper/good) etiquette: (a) decent body exposure, (b) comfortable positioning, (c) (good) verbal communication, (d) theatre environment (including whether there were unnecessary people in the theatre and the nature of their activities), (e) checking the level of block and reassurance of the mother, (f) active inquiring and addressing per-operative problems, (g) helping the mother to see/hold her new born baby, (h) bringing the well covered patient to the post anaesthesia care unit and finally (i) introducing the patient and verbally informing per-operative events to the recovery nurse. Markers were scored and aggregated for each patient.

In all cases, the mother was transferred from the trolley to the operating table and an i.v line was established under local anaesthesia. Routine monitors, ECG, NIBP and SpO₂, were attached by a female nurse. The mother was then placed in a sitting position and the anaesthetist performed spinal anaesthesia as per standard technique. Subsequently, the mother was placed in a supine position with left lateral tilt and administered oxygen through Hudson mask. When the level of the block (checked with ice) reached up to the nipple level, a drape screen was raised in front of the patient and surgery was allowed to commence. Concomitantly, the anaesthetist co-administered IV fluid (Ringer lactate or NaCl 0.9%) with a bolus or infusion of ephedrine or phenylephrine to maintain blood > 75% of basal value. After delivery the mother received routine drugs such as syntocinon, antibiotic and ondansetron. The baby was shown to the mother. After the operation, her body was then cleaned and covered with a warm blanket. The screen in front of her was lowered, the monitors were detached and she was finally transferred to the post anaesthesia care unit (PACU). In PACU, the nurse performed routine management. Upon discharge, she showed the mother a questionnaire in Arabic and requested her to fill it within 24 hours.

The results from the mother's expectation & etiquette observation forms are expressed as a percentage. From etiquette observation form, aggregated score for each patient

calculated. From a possible maximum score of 24, a score ≥ 15 and ≥ 20 is considered a display of acceptable and excellent etiquette, respectively.

RESULT

Study population general data: A total of 120 consecutive Saudi mothers participated in the study, 8 of whom refused to fill the etiquette expectation assessment form and did not specify a reason. Eight more mothers were excluded from the study due to an inadequate level of block or because they had experienced significant side effects related to the spinal block. The mean (SD) age (years) and parity of the mothers was 31(5.5) and 2 (1.7) respectively. They were all educated to at least primary school level, could read arabic and had undergone elective caesarean section indicated because of previous CS (52%), big baby (12%), breech (10%), high blood pressure (8%) and other reasons (12%). Anaesthetists conducting spinal anaesthesia were male (78%), female (22%) and 58% were consultants and the remaining were registrars. All three observer anaesthetists were male, had a minimum of eight years obstetric anaesthesia experience.

Etiquette as perceived by the mother: The expectations of the vast majority of mothers, $\geq 80\%$, were exceeded in all elements of etiquette (table 1). Ninety seven mothers felt that the overall behaviour of personals in the theatre was better than they had expected and the remaining felt it was as per expectation.

Etiquette as observed by the third person: Markers of etiquette displayed by anaesthetists (%) are shown in table 2. Ninety percent of the observed etiquette was scored as acceptable and amongst this, 14% was considered excellent.

Figure 1

Table 1. Percentage of women expressing their expectations about elements of etiquette

Elements of Etiquette	More or much more than expected	As expected
<i>Attentiveness</i>	90	10
<i>Comfortable position</i>	87	13
<i>Body respect & coverage</i>	80	20
<i>Well looked after</i>	85	15
<i>Forewarn about pain / discomfort</i>	88	12
<i>Over all behavior</i>	97	3

Figure 2

Table-2 Markers of etiquette displayed by anaesthetists (%) during the peri-operative period

Events	Markers of Etiquette	Quality	Percentage
Per Anaesthesia	Head and body decently covered	No	10
		Fair	12
		Good	48
		Excellent	30
	Patient comfortably positioned	Yes	92
	No	8	
	Monitors with respect to exposure & comfort	Yes	80
	No	20	
	Verbal communication	Poor	15
		Fair	15
Good		50	
Excellent		20	
Extra activity in the theatre	Minimum	25	
	Moderate	53	
	Too much	22	
Number of people (excluding anaesthetist & technician)	≤4	38	
	≥5	42	
Per Operative	Level of spinal anaesthesia checked & patient reassured about the adequacy of block	Yes	56
		No	44
	Verbal communication	Poor	5
		Fair	37
		Good	48
		Excellent	10
	Per-operative problems: Absent or treated well	Yes	98
		No	2
	Anaesthetist or nurse helped the mother to see/hold the baby	Hold / kissed	52
Saw		25	
None		23	
Per Post-anaesthesia	Patient's position	Flat	8
		Head up	92
	Head & Body of the patient well covered	Yes	93
		No	7
	Patient introduced to the recovery nurse & information verbally passed on	Yes	48
No		52	

DISCUSSION

With the support of the results, a discourse will now be initiated on the various aspects of etiquette in relation to the patient and care provider. Whilst some thoughts may appear abstract, the aim has been to collate various related issues.

Etiquette is described as personal conduct or behaviour evaluated by an accepted standard of appropriateness for a social or professional setting. Hospital etiquette in particular applies to the interaction with medical, nursing and auxiliary

staff within one department (intra-department) or with other departments (inter-department), and also includes interaction with patients and other external contacts such as their relatives. The conventions of operating theatre etiquette address unique theatre environmental issues such as operating theatre life, usage of the operating room and other common areas, meetings and other forms of social interaction within the context of a work setting. The rules of operating theatre etiquette may vary by region, culture, surgical/anaesthesia speciality, workload, hospital policy and to a certain degree, various norms, traditions and laws governing the workplace.

The peri-operative etiquette of spinal anaesthesia for CS is similar to business etiquette in which a universally accepted conduct makes social interactions run smoothly in the hospital (ward/Theatre/PACU) environment. This involves the behaviour of the medical/nursing/auxiliary staff with the patient and with each other which ultimately affects the environment in the operating theatre during peri-operative period. From the perspective of consumerism, peri-operative etiquette is also similar to business as each individual patient is valued and the service provider displays good manners. The care provider pays special attention to their appearance, behaviour, communication and skills as these are components of etiquette which create an impression on the patient [2]. The anaesthetist, who is the person in-charge of anaesthesia, has the additional responsibility of controlling theatre etiquette.

The ambiance forms an impression on the patient who notices surrounding persons and their attitude, noises (conversation, music, mobile tunes) and activities (peeping through a glass window, walking, eating, drinking, hugging, using the mobile phone etc). Such is the environment in which the mother's body is exposed and positioned for the regional block. The patient's esteem requires almost as a basic right that her body be minimally exposed during the application of monitors (blood pressure cuff and ECG electrodes) and during the performance of spinal anaesthesia. Whilst the mother is sitting down for the spinal injection, the following actions can be performed to give her a reassurance of respect and care: placing a pillow over her lap, applying sticky tapes to prevent her hospital dress from falling down and inquiring about the room temperature. In addition, whilst standing behind her back, informing her in advance of events that are scheduled to occur (e.g. cleaning her back with cold antiseptic, palpating the iliac crest or spinous processes and inserting the needle for infiltration of local

anaesthetic in the skin and sub-cutaneous tissue) is a display of good etiquette. Maintaining conversation acts as distraction therapy by deviating thoughts that aggravate anxiety and pain.

The General Medical Council of UK has been on the forefront in advocating the importance of etiquette in doctor-patient interactions but has not yet compelled members to follow their recommendations [3]. Delineating the reason for poor etiquette is perhaps the first step in addressing this issue. Poor etiquette may be unintentional due to a language barrier, production pressure or other commitments [4]. It is widely accepted that etiquette is fundamental to good medical practice and the anaesthetist's image. Moreover, it should also be noted that etiquette has the potential to decrease malpractice litigation as there is an inverse relationship between the number of malpractice claims filed and the patients' assessments of the communication skills of their physicians [5, 6].

In this survey, the expectations of the majority of mothers were exceeded in all elements of etiquette. The question must be asked: does such a high level of customer satisfaction mean that they were well served? The answer is yes if etiquette is considered in a relative sense. However, etiquette in the absolute sense is ideally what can be offered to the patient and ignores the difference between the commanding role of the anaesthetist and the timid nature of the patient. In our study, etiquette was possibly far from ideal despite it being equal to or more than their expectations. Furst wrote "Etiquette and power are two concepts that seem to be contradictory, even mutually exclusive. The physician is empowered by virtue of knowledge, while the patient is submissive because of need. Power may be exercised, but it has to be done with tact and respect." [7]. Hence, due to the submissiveness of the patient, the mother may have considered a substandard of etiquette as adequate. During spinal injection, she may not have been aware of how much of her body is unnecessarily exposed or whether it was necessary that her back be uncomfortably flexed whilst the anaesthetist was scrubbing for the procedure. In addition, the mother may not know how many unwanted people are around her or whether she has the option of a stool to rest her feet.

In our study, the etiquette displayed by the care provider as observed by the third person was considered acceptable in the vast majority of cases. Such an observation is highly satisfying for any hospital claiming a good standard of practice. Yet, there could be many factors which create

doubts on such an accomplishment. The observers may have been biased or may have had different beliefs about proper manner. Unnecessary exposure of the mother's body may have been considered necessary by an observer. The needless activities, conversations and noises in the theatre or from the room next door, which the patient unwillingly tolerates as norms of the unfamiliar place, may be customary for the observer.

It is worth stating that our study looked at the "expectations" of young mothers in relation to the moral aspect of care during spinal anaesthesia and caesarean section, rather than total peri-operative care. Expectation is defined as belief that a given response will be followed by some event; an event which has either a positive or negative affect [8]. During the last five decades extensive research has been undertaken to explore the role of expectations in the interaction between patients and health care services. Thompson and Sullivan have identified three important influences in developing and modifying expectation [9]. They are in the context of three frameworks: (a) Personal, (b) Social and (c) Relationships. Personal influences are past experiences which provide a framework for the comparison with a present experience. These determine attitudes and behaviours. Personal and socio-demographic characteristics have broad influences on expectations. The third set of influences, relationships, develop and modify expectations related to the context within which the relationship is set. As distinct from others, it is crucial to consider in the particular context of anaesthesia care. The operating theatre environment in which caesarean section under regional anaesthesia is performed is special and exclusive to the patient.

There is a dynamic interaction between the mother and the care provider in which expectation may emerge during the process rather than it being anticipated. The mother who is having caesarean section under spinal anaesthesia for the first time may not have yet formulated an expectation [10]. Her expectations may change as the experiences unfold [11]. Therefore, we need to know more about how expectation is related to peri-operative etiquette and how it is conceptualized and expressed by the patients.

The five point likert scale and scoring system used in our study may have had limitations as well. Measurement of "etiquette" was attempted which in the true sense is probably difficult to measure. The fact that many events are unanticipated means that even where expectations are articulated, there may be no relationship between them. The emotionally charged mother may have difficulties in

expressing her feelings. Moreover, a good outcome such as the delivery of a healthy baby or the absence of pain during surgery can lead to affirmative retrospective evaluation despite some of the dissatisfaction that may have occurred during peri-operative care. Another limitation of this study was that the wide dimensions of etiquette were not analysed. Instead, only a few markers of good etiquette were focussed upon.

Professional technical competence may also have importance in achieving patient satisfaction. Multiple attempts in performing intravenous cannulation or sub-arachnoid injection can annoy the patient and alter her perception about the anaesthetist's manners. A meta-analysis of studies on patient satisfaction with medical care suggested greater satisfaction with doctors who have been shown to display greater technical competence [12]. The mannerism in theatre also reflects the tacit dimension of our knowledge which we learn from our colleagues, and as Smith wrote "We should consider methods of recording the behavioural traits and practical unwritten knowledge exhibited by excellent anaesthesiologist, and we should explore the means of making more widely visible." [13]

CONCLUSION

The intimate relationship between the mother and anaesthetist during the procedure of spinal anaesthesia/caesarean section is a unique one indeed. Our study concluded that during the procedure of spinal anaesthesia and caesarean section, the vast majority (97 %) of our patients perceived that they received etiquette more than they had expected. However, patient's submissiveness and care-provider's dominance may have achieved such a high score. Etiquette in its absolute sense might not be as high as it appeared in this study. However, conceptualization of mannerism during the intra-anaesthesia/operative events may not be fully comprehended by the patients. More studies are required to understand the concept of etiquette in patients having operation under regional anaesthesia.

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Figure 3

Appendix-1
Mother's Expectation Form
Patient' No..... Date.....
Mother's expectations (measured on Likert scale) during her visit to operating theatre for having caesarean delivery under spinal anaesthesia.
Dear mother,
I would be grateful if you kindly fill the form below. This will help us to improve our service

In the operating theatre:

- The doctors & nurses were attentive.
 - Much less than I expected.
 - Less than I expected.
 - As I expected.
 - More than I expected.
 - Much more than I expected
- My position for spinal injection was comfortable (arms on the pillow & feet on the stool).
 - Much less than I expected.
 - Less than I expected.
 - As I expected.
 - More than I expected.
 - Much more than I expected
- My body was well covered and respected
 - Much less than I expected.
 - Less than I expected.
 - As I expected.
 - More than I expected.
 - Much more than I expected
- During the operation anaesthetist looked after me well
 - Much less than I expected.
 - Less than I expected.
 - As I expected.
 - More than I expected.
 - Much more than I expected
- I was forewarn about the pain/ discomfort and was comfortable during the operation
 - Much less than I expected.
 - Less than I expected.
 - As I expected.
 - More than I expected.
 - Much more than I expected

Figure 4

Overall I feel I was served well during the whole procedure.

- ☐ Much less than I expected.
- ☐ Less than I expected.
- ☐ As I expected.
- ☐ More than I expected.
- ☐ Much more than I expect

*Thank You very much for your kind attention you paid to fill this form.
Please return this form to the ward nurse.*

Appendix-2
ETIQUETTE OBSERVATION FORM:
During Spinal Anaesthesia for Caesarean Section

Date: Pt's No: Indication for CS: Age:
Parity: Can read Arabic Y/N Consented: Y/N.
Anaesthetist: Male/Female. Consultant/Registrar. Observer:

1-BODY EXPOSURE / POSITION DURING SPINAL ANAESTHESIA. (Max=6, Min=0)

- Patient head and body decently covered.
 - (a) No = 0
 - (b) Fair = 1
 - (c) Good = 2
 - (c) Excellent = 3
- Patient is comfortably positioned (stool for foot rest & pillow for arm rest). Yes= 2 / No=0.
- Monitors (ECG, NIBP & Pulse oximetry) with respect to the exposure and comfort of the patient. Yes=1 / No=0

2-PERFORMANCE OF SPINAL ANAESTHESIA (max=6, min= 0)

- Verbal communication with the patient:
 - (a) Poor = 0
 - (b) Fair = 1
 - (c) Good = 2
 - (c) Excellent = 3
- Extra activity in the theatre: [Noises, talking, walking]
 - (a) Minimum = 2
 - (b) Moderate = 1
 - (c) Too much = 0
- Number of people in theatre: (a) $\leq 4=1$ (b) $\geq 5=0$

Figure 5

3- DURING THE OPERATION (max=8, min= 0)

- Level of spinal anaesthesia checked before commencing the operation and patient reassured about the adequacy of block. Yes=1 / No=0
- Communication with the patient
 - (a) Excellent=3
 - (b) Good = 2
 - (c) Fair = 1
 - (c) Poor = 0
- Per-operative problems: [(a) Nausea (b)Vomiting (c) Discomfort (d) significant pain. (e) Significant apprehension. (f) Shortness of breath (g) severe pruritis.] either absent or if present, patient reassured and treated adequately (yes=1/ No=0)
- Anaesthetist or nurse helped the mother to see/ hold the baby.
 - (a) Saw =1
 - (b) Hold / Kissed= 3
 - (d) None = 0

4-RECOVERY ROOM. (max=4, min=0)

- Patient's position: (a) Flat= 0 (b) Head up = 1
- Head & Body of the patient well covered: Yes=2 / No=0
- Patient introduced to the recovery nurse Information regarding preoperative events and post operative management verbally passed on to the PACU nurse. Yes=1 / No=0

[Possible total maximum (Max) score= 24 & minimum (Min) score= 0; A Score of ≥ 15 and ≥ 20 considered display of acceptable and excellent etiquette respectively.

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Author Information

J.S. Anwari, (FFARCS)

Consultant Anaesthetist, Department of Anaesthesia, Riyadh Military Hospital

K.J. Anwari

Medical student, University of Liverpool