Stress and the intensive care patient: perceptions of patients and nurses

Journal Item

Stress and the Intensive Care Patient - perceptions of patients and nurses

by

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Abstract

This study was a replication of an earlier Cochran & Ganong study (1989) that investigated the perception of nurses and patients regarding the stressors faced by patients in the intensive care unit environment. As the original study was American in origin, one of the aims of the present study was to discover if the results would be replicated in a United Kingdom (UK) intensive care unit.

Data collection was by the use of an environmental stressor questionnaire that was an adaptation of the original data collection tool modified for use in a UK intensive care unit. The study was undertaken in two intensive care units producing a sample size of 71 patients and 71 nurses.

There appears to be a wide variation in the perception of nurses and patients regarding the stress faced by patients in the intensive care unit. Similarities were noted between subject groups as to the nature of the stressors, although nurses tended to rate items over which they believed they had control as being more stressful than did the patients. Patients tended to rate items related to their illness and physical comfort as being most stressful.

The results are in keeping with those from the Cochran & Ganong study.

Introduction

This article is concerned with the psychological needs of patients in the Intensive Care Unit (ICU). Many studies have noted the stressful nature of ICU for patients, but have failed to identify what constitutes a stressor. Can nurses working in ICU's perceive the psychological needs of their patients? It is this authors contention that if a nurse cannot perceive a patient need they cannot meet it, and thus are unable to provide the care that patients require. To assess whether the patients needs are being met one has to ask the patient. Thus this article examines the perception of both the patient and the nurse regarding the environmental stressors to which the patient is subject. The main focus of this article is what constitutes a stressor for the ICU patient.

Literature Review

As a previous study by Cochran & Ganong (1989) had already investigated the perception of both patients and nurses to stressors in American ICU's, it was decided to replicate their study within the United Kingdom (UK). It was anticipated that this research study would result in similar findings to the American study. That nurses would over emphasise the effect that environmental stressors have on patients in ICU's, compared to the patients own perception of the stressors.

It has often been said that the ICU is a stressful place in which to work. There are a number of studies that have attempted to demonstrate just how stressful an environment it is to work in (Foxall et al 1990, White & Tonkin 1991). It could be argued that if working in an ICU environment is stressful for nurses, and hospitalisation is a stressful event for the patient, as Connelly (1992) suggests when discussing "the stressful time of hospitalization" (p.335), then surely the ICU must prove to be stressful for the patient nursed there. Bergbom-Engberg & Haljamae (1989) concluded that

> "even as long as four years after respirator treatment, most patients (90%) who remembered their treatment still recall the situation as unpleasant and stress-evoking" (p.1068).

The environmental stressors that have been reported in the literature as affecting ICU patients, centre around the physical or psychological comfort of the patient, staff interaction with the patient, the physical environment of the ICU, family, the illness itself, and fear of death (Chen 1990 and Cochran & Ganong 1989). Other contributors to the stress of the ICU are the inability to communicate, the drugs used in the ICU to sedate and paralyse patients, the procedures performed and the equipment used. MacKellaig (1987) quotes Fisher as saying

> "a patient in an ITU confronts a more intensive barrage of stressors than a non-patient, and is less emotionally resilient and thus less able to adapt to these stressors. The potential result of this may be the manifestation of the ITU syndrome" (p.176).

The ICU syndrome is a psychological disturbance that results from either sensory overload, or from sensory deprivation. Sensory overload is defined as a state where the individual is exposed to many sensory stimuli to such an extent that they no longer feel in control of their environment. Whereas, sensory deprivation is characterised by a lack of meaningful stimuli for the individual. It may be said to be "precipitated by factors such as physical illness, medications, pain and emotional stress" (Fisk 1991 p.456). All stressors that are relevant to the ICU patient. Cochran & Ganong (1989) believe the ICU syndrome to be a "phenomenon of altered mental function which occurs in some patients in ICU and resolves after transfer from ICU" (p.1039). They state that there is disagreement regarding what are the most significant stressors for the ICU patient and thus, the ICU syndrome.

Previous studies that have attempted to investigate what the stressors for the patient are, have attempted to do so by comparing different hospital areas, e.g. hospice, medical and surgical areas. Also, studies have been performed that take into account the views of either the patient

or the nurse. According to Cochran & Ganong prior to their study, no studies had been performed that addressed the nurses' perception of stressors in an ICU environment together with the patients' perception (1989 p.1039). Once the stressors have been identified by both patient and nurse, it is possible for the nurse to counteract the stressors affecting patient's by manipulation of the environment and the delivery of care. However, if the stressors are not adequately identified by both parties, the patient's needs, the resolution of their stress, cannot be met.

Research Design

The research presented is a replication of an earlier study by Cochran & Ganong (1989), with minor modifications. Replication is a valid approach to research as it provides an opportunity to uphold the basic requirement of all research: that research should be reproducible. As most research deals with data that is taken to represent a whole population, any generalisations based upon the data are taken to be representative of the whole population and not just of the sample investigated. By replicating research studies, the generalisations and theories derived from the data and sample group can be tested to ascertain whether they are truly representative of the whole population or are a reflection of the particular sample or methodology that was used. The more that a research study is replicated, the more convincing are the theories generated. Presly (1991) shares the opinion that

> "Each replication under the same conditions further establishes the reliability of previous results." (p.40).

Sample

Two ICU's were invited to participate in this study and, after ethical approval was obtained, both agreed. Unit A consisted of a 4 bedded intensive care unit with patient admissions of

approximately 225 per year. Thirty-one qualified nurses were employed on the unit during the time of the study.

Unit B was a 9 bedded ICU that has a nursing staff of 40. There were a variety of grades of staff employed, from post-basic students through to Sisters, although all staff were qualified. Patient admission to this unit is in the region of 700 per year, all of whom are ventilated. Both units were situated within general teaching hospitals.

The patient sample was drawn from the same two ICU's as the nurse sample. Criteria for inclusion into the study were that the patient had been ventilated on the ICU and was able to understand English. The same exclusions were used as the Cochran & Ganong study (1989 p. 1039), namely: if the patient had gross neurological deficits, or a history of psychotic episodes.

It was thought, by this author, that the patient with neurological deficits or a history of psychotic episodes would have an altered perception of stress and the stressors affecting them and would therefore not be representative of the general population of ICU's. Although the non-English speaking patient would have stressors that were related to this fact, which would only affect those that could not speak English and therefore not be general stressors, it was not possible for the researcher to include them in this study because of translation difficulties.

The data collection tool used was a modified version of "The ICU Environmental Stressor Score" (ICUESS) used by Cochran & Ganong (1989 p. 1040). This is a 42 item Likert-type scale questionnaire based upon previous tools developed by Ballard & Nastasy (Cochran & Ganong 1989 p. 1039). The questionnaire was modified to include an additional eight items that the nurses in the Cochran & Ganong study felt should be included, and was now termed The Environmental Stressor Questionnaire - ESQ. In this study the scale used is 4 = "extremely stressful" to 1 = "not stressful" with an option of 0 = "not applicable", thus making a range of 0 - 200 total score. All participants received similar questionnaires,

although the demographic data sheets used were different for patients and staff, and the information sheets they were given reflected this. As with the original data collection tool (ICUESS) part of the ESQ asks the respondent to list the three most stressful items together with any items that they think should be included in the questionnaire, along with any comments they would like to add. All questions included in the ESQ arose out of the available literature on stress and hospitalisation on patients (see appendix 1 for the full ESQ).

Permission was obtained from the original authors to replicate their study and to use their data collection tool. A pilot study was performed in order to ascertain the effectiveness of the written instructions. After feedback the wording of several of the questions were changed to reflect the comments of the pilot sample, mainly that of changing some of the items on the ESQ from American to English.

The procedure for data collection was a replication of Cochran & Ganong's as published (1989 p. 1040). Thus patients were contacted two days after ICU discharge, had the purpose of the study explained to them, were asked for verbal consent and, upon agreement, were given a copy of ESQ to complete together with an instruction sheet. Demographic data was obtained from the patients' notes with their consent. Nurses were given written instructions and a copy of ESQ plus a demographic questionnaire. They were asked to complete the ESQ as they believed a patient who had been ventilated would. Informed consent was obtained from all the subjects included in the study.

Findings, Results and Data Analysis

There was a 100% response rate at each ICU, resulting in a total sample of 71 nurses participating, 31 from unit A and 40 from unit B. The sample was by necessity a convenience sample.

A convenience sample of the first 71 patients who met the study criteria were included in the study. The sample was drawn from the two ICU's in proportion to the nurse sample.

The following is a summary of the demographic information collected.

Age distribution

Table 1 represents the age distribution of the subjects according to their groups. It is interesting to note that the mean age of the patients is almost twice that of the nurses. This may suggest that differences in the scoring between the two groups is attributable to age.

Grade of staff

As may be expected, the largest grouping of staff is that of Staff Nurses, with Sisters/Charge Nurses being the second largest group (Table 2).

Environmental Stressor Questionnaire Data

Data analysis was undertaken on the ESQ using various statistical tests. Although the differences between the two groups is visually evident when comparing the tables, the differences are not statistically significant, therefore descriptive statistics will be used to present the data from the ESQ's.

ESQ Scoring

As discussed earlier, the ESQ was completed using a Likert-type scale. An overall score was calculated by summation of an individual's responses (0 - 4) for the 50 questions. The highest total score possible on the ESQ was 200, and the lowest 0. The mean scores and range of scores for the patient and nurse groups are given in Table 3.

Most stressful items

By adding all the individual scores for each item on the ESQ it was possible to find the most stressful items on the ESQ for each sample group. Table 4 summarises this information (see Appendix 1 for a description of all the ESQ items).

All subjects were asked to choose three items out of the fifty on the ESQ that they considered the most stressful. Table 5 lists the items that occurred most frequently by rank order of patients' responses. The nurses' responses are also provided for comparison.

Most frequent score

By use of a Likert-type scale for the responses to each of the items it was possible to define the most common response for each of the sample groups. This information is described in Diagram 1.

Limitations of the study

The patients in this study were asked to participate after they had been discharged from the ICU. This occurred within two days of leaving the ICU. It is possible that the patient did not pay too much attention to their environment, or forgot what occurred to them in the ICU. This could account for the discrepancy of scores compared to the nurses working in the environment on a daily basis.

The subjective nature of the wording may limit the effectiveness of some of the items on the ESQ in eliciting the information required, for example item 1 the subjective nature of being restricted (by tubes and lines). The word 'stress' has itself a subjective nature to it. As there was no definition of stress given in the information sheets or the ESQ there may have been different interpretations as to what stress actually means or entails. This may have affected the results as individuals mark items as more or less stressful than others based upon their interpretation of what stress means.

Due to the constraints on the researcher a convenience sample was used, this could have had an effect on the results.

Discussion of findings and results

The most striking result of the scoring of the ESQ's is the disparity between the subject groups on the mean and range of scores (Table 3). Whilst all the patients scored the ESQ as under 100, the lowest nurse score was 120. This is almost twice the patient mean score of 67. From this result alone it would seem that there is a wide gulf between the perceptions of the patients and the nurses as to the stressfulness of the ICU environment, with the nurses over-emphasising the stressful nature of the ICU. Looking at the score ranges for the sample groups, the nurses scored the ESQ as twice as stressful as the patients did on both the lower and upper boundary of the score range (120 vs. 56 and 187 vs. 95 respectively).

In part this can be explained by reference to Diagram 1 that pictorially presents the most frequently chosen response for each of the sample groups. The information shows that whilst the patients score items as mainly 1 or 2, the nurses score them as 3 or 4. Thus, the nurses consistently score each item as two categories higher than the patients. For every 'not stressful' or 'mildly stressful' that the patient scored an item, the nurses were more likely to score it as 'very stressful' or 'extremely stressful' respectively.

Both groups scored items as 'non-applicable' (scored as 0), although as might be expected the patients used this score more frequently than the nurses. Reference to Diagram 1 shows that whilst it was the least used category for the nurses, it was the third most frequent category of score for the patient group. It is important to note that the mean age of the patient group was 59 and that four of the items on the ESQ referred to the hearing of noise in the ICU. It may have been that a significant number of patients had difficulty with their hearing, accounting for their considering that these items were 'not-applicable' to them. Also, one item refers to missing your spouse, it is possible that this was 'not-applicable' due to

either the patient being single or their spouse being deceased. Unfortunately, the demographic data did not include this detail.

Also, it may be that the patients are not finding the ICU environment stressful because they are conforming to the 'good patient' role. Cochran & Ganong (1989) allude to this when they state that their findings

> "could be due in part to a 'good patient' syndrome in which the patient avoids labelling items as stressful for fear of being perceived a complainer" (p.1042).

An alternative explanation for the 'good patient' role is that the patients are socialised to expect certain discomforts and inconveniences when they are a patient and become compliant with the treatments and procedures. One of the nurses made the comment that many long term ventilated patients who are conscious and aware of their surroundings come to understand and expect certain things to happen to them. This may also explain the nurses' high scoring as when they are placing themselves in the 'patient role', they are scoring the items with the benefit of their knowledge and experience, a form of 'insider information'. Thus, as a patient, they feel more stressed because they know of potential difficulties and complications.

Another explanation for the patients not finding the ICU environment as stressful as the nurses believe they would, is that the patients may be in denial. The patients may use denial as a defence mechanism and may not remember the experience they had.

The information in Table 4 highlights that both sample groups found items 18 (having tubes in your nose or mouth), 37 (not being in control of oneself) and 44 (not being able to communicate) to be among the six most stressful items, when all the scores for an item were added together. Thus there was a degree of commonality between sample groups, though this was not consistent.

The fact that the nurses cite item 45 (fear of death) as among the most stressful may in fact reflect their fear of the patients death, as this would be the ultimate failure. Although this item was considered to be stressful by the patients (see Table 5) it was not scored as highly as the nurse group, possibly because the patient has an unerring faith in the medical profession's ability.

These results do show a consistency with those of Cochran & Ganong (1989). The most stressful items by mean score in their study were item numbers 18 (having tubes in your nose or mouth), 34 (being stuck with needles), 32 (being in pain) and, 28 (unable to sleep) for the patients and, 32 (being in pain), 37 (not being in control of oneself), 18 (having tubes in your nose or mouth), and 1 (being restricted by tubes/lines) for the nurses. It can be seen that two of the items from the Cochran and Ganong study have re-occurred among the most stressful for the patients in this study, with three of the items for the nurse group re-occurring in this study in the same order.

Table 5 displays the inconsistency mentioned earlier in that when the top 7 items (by individual choice) are listed, three items are shared amongst both sample groups (18 - having tubes in your nose or mouth, 32 - being in pain and 45 - fear of death). Whilst the nurses place item 32 (being in pain) at number one position, the patients place it in joint 5th position and instead place item 18 (having tubes in your nose or mouth) in first position with the nurses placing this in 4th position. Item 45 (fear of death) is placed in joint 5th position by the patients and joint 4th by the nurses.

The reasoning for the inconsistency among the placings in this table may be explained by the motives behind the scoring. The high placing of item 32 (being in pain), by nurses, may be that nurses believe they can take measures to alleviate patients pain. Whilst the patients place item 18 (having tubes in your nose or mouth) in first position this is placed 4th position by the nurses, reflecting the fact that while the patient can be made more comfortable regarding tubing, a tube in the nose or mouth is inevitable for a ventilated patient. The nurses have

positioned items over which they have control, communication with the patient and the patients loss of control, higher up the ranking.

Comments

At the end of the ESQ the subjects were asked for any comments they wished to make and for any additional items that they felt should be included in the questionnaire. One nurse felt that there should be a way of measuring the noise level on the ICU and recording this on the ESQ. Whilst 3 comments were made regarding the noise levels on the ICU's used in the study, with one patient mentioning the constant noisy environment, noise did not feature highly amongst the ESQ scoring of the sample groups. Another nurse wondered whether doctors and nurses discussing the patients condition in ear-shot of them but not with them should be included as an item. Finally, only one nurse mentioned that she had often thought about what it must be like to be an ICU patient.

Many of the patient comments were concerned with how good the treatment they received was; to say that they had no complaints, and to praise the staff for their kindness and caring attitudes. However this may be an example of the patients wishing to be seen as a 'good patient' as discussed earlier.

Conclusions

This study was designed to assess whether the results of an earlier study by Cochran & Ganong were applicable to the UK ICU. Also, it attempted to distinguish what the patient in the ICU perceives as being a stressor. It asked what the significant stressors were for the patient and whether these were different from the nurses perception of patient stressors. Finally, it also asked whether nurses working in the ICU can accurately perceive the stressors, and thus psychological needs, affecting their patients.

From the findings and results the following conclusions can be made:

1. Overall the outcomes were similar to those found by Cochran & Ganong (1989). The items rated as most stressful in their study have continued to appear in this. With the finding that nurses over emphasised the stress felt by the patient there is consistency with the Cochran & Ganong study and with earlier studies. Thus, this study has shown that the findings of Cochran & Ganong (1989) have a relevance in the UK ICU.

2. Nurses on ICU appear to have more concern over the items and categories that they believe they can change, for example pain control. They perceive the patient as being more concerned about these items. Thus, they may be neglecting the patient's true stressors in favour of others.

3. Nurses are able to perceive three of the top six most stressful items for the patients. This would seem to show that nurses are aware of the fact that the ICU is stressful for the patient and the nature of some of the stressors.

4. If the patients were fulfilling the role of the 'good patient', then this may mean that the nurses need to re-evaluate how they interact with the patients. If the patients are not expressing their needs the nurse must ensure that this is not because the patient is trying to please them. This can only come about through education of staff working in the ICU.

5. That nursing practice, at least in the two ICU's studied, needs to alter to cater for all the needs of the patients regarding stress. Some recommendations regarding this are listed below.

Although this was only a small study it has highlighted the difference between the perceptions of patients and staff as to the significant stressors in the ICU environment. Nurses should be aware that the care they provide may not always be aimed at the needs that the patient considers most important.

Thus, there is further work that needs to be carried out to explore this. The study has only highlighted that the patients do perceive the ICU environment as stressful. It has not addressed the issue of changing practice.

Recommendations

Due to the limitations as outlined above, there is a need for further study of this topic. In carrying out any further research it would be appropriate to recognise the points made earlier. Therefore, the following would be recommended to further examine this topic:

1. The use of matched pairs of nurses and patients. This would allow the researcher to account for any peculiarities that occur to patients, for example the patient who is deaf and would score certain items as 'non-applicable'. By matching the patient with a nurse, who completes the ESQ as they believe that patient would, would allow for this.

2. The differentiation between patients who are admitted to the ICU as emergencies and those who have planned admissions. There may be differences in stress between the two types of patient if pre-admission information is given to patients before they are admitted to the ICU. The patients admitted as an emergency will not have access to this information and may therefore suffer unnecessary stress.

3. The use of different methodologies to counter any limitations of using prepared lists of stressors.

4. The use of interview techniques with the staff and patient groups to counter any problems with the Likert-scale used.

5. The collection of demographic data should be extended to include items such as marital status and family relationships. This may provide valuable insight into patient responses to

items 14 (missing your husband or wife), 22 (only seeing family and friends for a few minutes each day) and 47 (being unable to fulfil family roles).

Although the conclusions show that the nurses perceive some of the stress that the patient is faced with, there is support amongst the findings and results for the education of ICU staff with regard to the degree of stress experienced by patients, and to the nature of the stressors. The perception of staff members as to exactly what it is that patients find stressful would seem to be inaccurate. This education would need to be re-evaluated in the light of further research.

As the patients have indicated that they do find the ICU environment stressful, this needs to be addressed. Those patients that are admitted to the ICU electively need to have a form of pre-admission visit to the unit accompanied by their relatives and an ICU nurse. This time should be taken to explain the noise levels, the machinery and the 'day' that the patient can expect, such as the number of staff who will care for them in a 24 hour period.

With reference to Table 5, the listing of the stressors identified by patents in rank order, nurses should be aware that a considerable number of the items mentioned as stressful are easily remedied. Sixteen patients mentioned that not knowing what day it was contributed to their stress in the ICU. This could be remedied by the nurses communicating with the patients, even when they are ventilated and sedated, to tell them the time, the day, and also, to introduce themselves (which was indicated by 6 patients as being stressful).

There are inevitably going to be some items that nurses have little ability to influence. The most frequent response to a stressful item was that of 'having tubes in your nose or mouth'. This has already been discussed as being inevitable, however, it may be that reassuring the patient would help or alternatively, the use of comforting measures such as flavoured mouth sticks to counter the taste or smell of the plastic tubing.

Further studies should be undertaken to assess the level of stress the patients are under before implementation of any changes, and after implementation. This would have the advantage of assessing the effectiveness and suitability of the changes implemented. Ideally both of these studies should be undertaken on the same unit and with a controlled sample group to ensure that there are no sample bias involved.

From the results presented it has been suggested that the education of nurses regarding patient perception of stress needs to be addressed. This should be at a number of levels. Whilst it should be addressed at the pre-registration level, it should also be addressed at the post-registration level. There should be a development of the theory and the practical elements of stress management and recognition for ICU nurses. This should be incorporated into education programmes such as the ENB 100 intensive care course. In-house orientation programmes could address the issue of stress management in the ICU patient. Also the incorporation of relevant and up-to-date research in this field into practice.

Seven years after the original study, by Cochran & Ganong, this research has identified similar stressors for the patient in the ICU. This author feels that it is now time to incorporate these findings and recommendations into nurse education and practice. By being aware of what the patient finds stressful and concentrating less on what nurses themselves see as stressful, it may be possible to reduce the stress to which the patient is exposed. Although nurses are unable to influence some of the items identified by patients as stressful, they can, with thought and imagination, find ways to reduce the stressful nature of many of the stressors identified. This in turn may also reduce the stress for nurses because they are actively helping their patients.

	Age range	Mean age
Patients	18 - 84	59
Nurses	21 - 40	30

Table 1 Age distribution of subjects within their groupings.

Grade	Number
Senior Sister or equivalent	2
Sister/Charge Nurse	11
Staff Nurse	54
Post Basic Student	4
Total number of Nurses	71

Table 2 Grade and number of staff

Subject Group	Mean Score	Score Range
Patients	67	56 - 95
Nurses	148	120 - 187

Table 3 ESQ scores by subject group.

Rank	Patients	Nurses
1st	4 (Being Thirsty)	32 (Being in pain)
2nd	18 (Having tubes in your nose or mouth)	44 (Not being able to communicate)
3rd	44 (Not being able to communicate)	37 (Not being in control of yourself)
4th	1 (Being restricted by tubes/lines)	45 (Fear of death)
5th	28 (Not being able to sleep)	18 (Having tubes in your nose or mouth)
6th	37 (Not being in control of yourself)	15 (Not having treatments explained to you)

Table 4 Most stressful items by highest score.

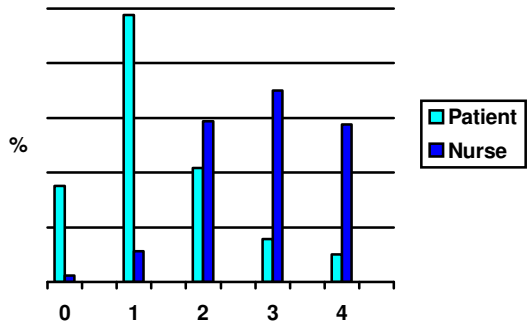

Diagram 1 A ranking of the most frequently occurring response by sample group.
(0 - 4 indicate the response according to the Likert-type scale and the higher the bar the higher the response was ranked)

Table 5

Item Number	Item	Patient Rank	Number of Patients	Nurses Rank	Number of Nurses
18	Having tubes in your nose or mouth	1st	26	4th	17
4	Being thirsty	2nd	19	8th	4
19	Not knowing what time it is	3rd	16		
6	Uncomfortable bed or pillow	4th	15		
1	Being restricted by tubes/lines	5th	14		
32	Being in pain	5th	14	1st	35
45	Fear of death	5th	14	4th	17
28	Not being able to sleep	6th	13	5th	8
44	Not being able to communicate	6th	13	2nd	30
13	Having to wear oxygen	7th	12		
10	Feeling the nurses are watching the machines closer than they are you	8th	9		
22	Only seeing family and friends for a few minutes each day	9th	8	8th	4
14	Missing your husband or wife	10th	7	10th	2
43	Hearing people talk about you	10th	7	9th	3
2	Not having the nurse introduce themselves	11th	6		
37	Not being in control of yourself	11th	6	3rd	22
42	Being in a room which is too hot or too cold	12th	5	10th	2
29	Not being able to move your hands	13th	3		
31	Having lights on constantly	14th	2	10th	2
7	Hearing the telephone ring	15th	1		
25	Unfamiliar and unusual noises	15th	1	9th	3
34	Being stuck with needles	15th	1	7th	5
40	Having no privacy	15th	1	9th	3

35	Not knowing where you are			5th	8
15	Not having treatments explained to you			6th	6
16	Hearing your heart monitor go off			6th	6
11	Having your blood pressure taken too often			7th	5
36	Having nurses use words you cannot understand			8th	4
9	Having strange machines around you			9th	3
20	Hearing other patients cry out			9th	3
48	Financial worries			9th	3
21	Having men and women in the same room			10th	2
23	Not knowing when to expect things to be done			10th	2
49	Fear of AIDS			10th	2
50	Being pressurised to consent to treatments			10th	2

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Appendix 1
The Environmental Stressor Questionnaire

Environmental Stressor Questionnaire					
	Extremely Stressful	Very Stressful	Mildly Stressful	Not Stressful	N/A
1. Being restricted by tubes/lines					
2. Not having the nurse introduce themselves					
3. Having the nurse be in too much of a hurry					
4. Being thirsty					
5. Having your blood pressure taken often					
6. Uncomfortable bed or pillow					
7. Hearing the telephone ring					
8. Frequent physical examination by doctor or nurse					
9. Having strange machines around you					

10. Feeling the nurses are watching the machines closer than they are watching you					
11. Hearing the buzzers and alarms from the machinery					
12. Nurses and doctors talking to loud					
13. Having too wear oxygen					

	Extremely Stressful	Very Stressful	Mildly Stressful	Not Stressful	N/A
14. Missing your husband or wife					
15. Not having treatments explained to you					
16. Hearing your heart monitor alarm go off					
17. Having nurses constantly doing things around your bed					
18. Having tubes in your nose or mouth					
19. Not knowing what time it is					
20. Hearing other patients cry out					
21. Having men and women in the same room					
22. Only seeing family and friends for a few minutes each day					

23. Not knowing when to expect things to be done					
24. Being awakened by nurses					
25. Unfamiliar and unusual noises					
26. Watching treatments being given to other patients					

	Extremely Stressful	Very Stressful	Mildly Stressful	Not Stressful	N/A
27. Having to look at the pattern of tiles on the ceiling					
28. Not being able to sleep					
29. Not being able to move your hands or arms because of intravenous (I.V.) lines					
30. Being aware of unusual smells around you					
31. Having lights on constantly					
32. Being in pain					
33. Seeing intravenous (I.V.) bags over your head					
34. Being stuck with needles					
35. Not knowing where you are					
36. Having nurses use words you cannot understand					

37. Not being in control of yourself					
38. Not knowing what day it is					
39. Being bored					
40. Having no privacy					
41. Being cared for by unfamiliar doctors					

	Extremely Stressful	Very Stressful	Mildly Stressful	Not Stressful	N/A
42. Being in a room which is too hot or cold					
43. Hearing people talk about you					
44. Not being able to communicate					
45. Fear of death					
46. Not knowing the length of stay in ICU					
47. Being unable to fulfil family roles					
48. Financial worries					
49. Fear of AIDS					
50. Being pressurised to consent to treatments					

Please list the three most stressful items from the list above (by number)

1. 2. 3.

Any additional items that you feel should be included:

Any comments you wish to make: