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Appropriateness of care and moral distress among neonatal intensive care unit staff: repeated measurements

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ABSTRACT

Background: Perceived constraints to providing patient care in their own morally justified way may cause moral distress (MD) in neonatal nurses and physicians. Negative long-term effects of MD include substandard patient care, burnout and leaving the profession.

Aim: To assess the immediate impact of perceived inappropriate patient care on nurses' and physicians' MD intensity, and explore a possible moderating effect of ethical climate.

Design: In a repeated measures design, after baseline assessment, each participant completed self-report questionnaires after five randomly selected shifts. Data were analysed with logistic and Tobit regression.

Participants: Data were collected among 117 of 147 eligible nurses and physicians (80%) in a level-III neonatal intensive care unit in the Netherlands.

Results: At baseline, overall MD was relatively low; in nurses, it was significantly higher than in physicians. Few morally distressing situations were reported in the repeated measurements, but distress could be intense in these cases; nurses' and physicians' scores were comparable. Physicians were significantly more likely than nurses to disagree with their patients' level of care ($p = 0{\cdot}02$). Still, perceived overtreatment, but not undertreatment, was significantly related to distress intensity in both professional groups; ethical climate did not moderate this effect. Substandard patient care due to lack of continuity, poor communication and unsafe levels of staffing were rated as more important causes of MD than perceived inappropriate care.

Conclusions: Although infrequently perceived, overtreatment of patients caused considerable distress in nurses and physicians. Our unit introduced multidisciplinary medical ethical decision making 5 years ago, which may partly explain the low MD at baseline.

Relevance to clinical practice: MD might be prevented by improved continuity of care, safe levels of staffing and better team communication, along with other targeted interventions with demonstrated effectiveness, such as palliative care programs and facilitated ethics conversations.

Key words: ethical climate • moral distress • moral stress • stress of conscience

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INTRODUCTION

Neonatal intensive care involves treatments such as mechanical ventilation and extensive surgery, which are justified in the light of survival, cure or gain of quality adjusted life years (Lantos and Meadow, 2011). Severe complications, however, may give rise to suffering, residual physical, cognitive or social disability, and even death (Winchester *et al.*, 2009; Loe *et al.*, 2011). Nurses and physicians in the neonatal intensive care unit (NICU) often perceive imbalance between the burden of treatment and the outcomes. What is more, discrepancies between one's own moral convictions and actual care may give rise to feelings of hurt, or 'moral

distress' (MD) (Corley, 2002; Hilliard *et al.*, 2007; Cavaliere *et al.*, 2010; Oh and Gastmans, 2013).

Existing studies on MD have collected retrospective data, which may have given rise to recall bias (Bower, 1981) and exaggeration of past peak experiences (Redelmayer and Kahneman, 1996). In this study, we aimed to avoid this by surveying the impact of morally distressing situations immediately after shifts.

BACKGROUND

Different opinions on appropriate care exist between a number of European countries (Cuttini *et al.*, 2000; Sauer *et al.*, 2013). Also within multidisciplinary teams, moral positions are often not unanimously shared but depend on a person's culture, religion and previous experiences. In a study among 1651 ICU nurses and physicians, 439 (27%) of them perceived inappropriate care, defined as too much or too little care, in at least one patient (Piers *et al.*, 2011). Because of discrepancies between personal moral convictions and actual care, nurses and physicians may experience MD (Hamric and Blackhall, 2007; Hilliard *et al.*, 2007; Verhagen *et al.*, 2009; Cavaliere *et al.*, 2010). According to Jameton (1984, p. 6), this is emotional pain due to patient care situations in which professionals perceive a moral problem, know what to do and acknowledge their responsibility. Perceived constraints, however, preclude acting in a manner judged as morally right. MD has been demonstrated in nurses and physicians from different countries (Kälvemark *et al.*, 2004; Førde and Aasland, 2008; Oh and Gastmans, 2013). Major sources of MD include aggressive treatment without perceived benefit for the patient, witnessing pain and suffering, depersonalization of patients, deception and also working with incompetent colleagues (Hanna, 2004; Catlin *et al.*, 2008; Rice *et al.*, 2008; Cavaliere *et al.*, 2010).

Impact of MD

Corley (2002) recognizes three fields of impact of MD. Firstly, nurses' frustration, anger and guilt may result in avoiding contact with certain patients or becoming emotionally detached and cynical and thus providing substandard care (Hanna, 2004; Catlin *et al.*, 2008). Secondly, MD contributes to loss of integrity and self-respect, and consequently to dissatisfaction with work, burnout (Meltzer and Huckabay, 2004; Glasberg *et al.*, 2008) and leaving the job or even the profession (Gutierrez, 2005; Glasberg *et al.*, 2008; Cavaliere *et al.*, 2010). Thirdly, high turnover and decreased quality of care add to staffing problems.

Ethical climate

Ethical climate is concerned with aspects of work that may influence health care workers' ethical behaviour and decision making. It reflects the nature of relationships and communication between nurses and physicians. It also involves hospital policies, including decision making about patient care (Olson, 1998). A poor ethical climate may lead to higher MD (Olson, 1998; Pauly *et al.*, 2009). Penticuff and Walden (2000) for example found that nurses were more likely to address ethically challenging situations when they felt heard, and were supported by the supervisor.

AIMS

This study aimed to prospectively survey the impact of possible morally distressing situations immediately after shifts. The following research questions were addressed:

- To what degree do nurse/physician-related factors and patient-related factors influence perceived appropriateness of care for neonates?
- To what degree do variations in nurses' and physicians' opinion about appropriateness of care predict perceived intensity of morally distressing situations?
- To what degree do variations in perceived ward ethical climate impact on the relationship between appropriateness of care and intensity of morally distressing situations?

METHOD

In a repeated measures design, after baseline assessment, participants assessed morally distressing situations – in light of perceived appropriateness of patient care and the ethical climate – at the end of five randomly selected shifts (T1–T5).

Participants and procedures

All 147 nurses, physicians and nurse practitioners employed in a level-III NICU in the Netherlands were eligible for inclusion in the study; data were gathered from January to September 2013.

Baseline measures

At baseline, participants reported age, gender, NICU experience, work hours per week, level of education, role of religion in their moral concerns and having own children, and completed questionnaires on MD and ethical climate. MD was measured with 18 items of the 21-item Moral Distress Scale-Revised Neonatal-Pediatric Version (MDS-R; Hamric *et al.*,

2012), which suited the Dutch NICU situation, as confirmed with the author of the scale. Each item, representing a distressing situation, was scored for frequency from 0 (*never*) to 4 (*very frequent*), and intensity from 0 (*none*) to 4 (*great extent*). For each situation, the level of MD was calculated by multiplying the frequency score with the intensity score: range: 0 (*low*) to 16 (*high*). Additionally, the MDS-R contains two questions about any intention to leave the job. At baseline, the MDS-R had good internal consistency for MD (Cronbach's $\alpha = 0{\cdot}89$; Nunnally and Bernstein, 1994). The MDS-R had parallel versions for nurses and physicians.

Perceptions of the ethical climate in the NICU were assessed with 25 items of the 26-item Hospital Ethical Climate Survey (HECS; Olson, 1998). The items were slightly adapted to the NICU situation and were scored from 1 (*almost never true*) to 5 (*almost always true*), higher scores indicating a better ethical climate. The HECS had very good internal consistency (Cronbach's $\alpha = 0{\cdot}90$) at baseline. Both the MDS-R and the HECS had been translated into the Dutch language according to the 10 steps proposed by Wild *et al.* (2005).

Repeated measurements

At T1–T5, each participant completed self-report questionnaires after five randomly selected shifts with at least 1 week interval, reporting their perceptions of appropriateness of care, morally distressing situations and the ethical climate during the current shift. To raise the probability of a good response rate, shortened versions of the baseline questionnaires were administered. For MD, 10 of the 18 items of the MDS-R remained, based on factor loadings in the original version (Corley *et al.*, 2001) and validity for the Dutch NICU situation (Appendix A1). In our sample, at baseline, there was a very high positive correlation between the full version and the 10-item version (Spearman's $\rho = 0{\cdot}96$). The 10 items were scored 0 (*no*) or 1 (*yes*) for presence during the workday, and 0 (*none*) to 4 (*great extent*) for intensity. To distinguish between baseline and repeated measurements results, the term 'moral distress' refers to the baseline measurement, and 'presence and intensity of morally distressing situations' to T1–T5 measurements.

To assess the ethical climate, 10 of the 25 HECS items remained, based on standardized factor loadings (Olson, 1998) and validity for the Dutch NICU situation (Appendix A2). At baseline, there was a very high positive correlation between the full version and the shortened version (Spearman's $\rho = 0{\cdot}94$).

Perceived appropriateness of care at T1–T5 was evaluated by asking respondents (a) to report the actual support mode for the child under their care that had caused most MD during the day in question and (b) to report the support mode they considered most appropriate for that child. Response categories for both questions were 'full treatment', 'restriction of treatment', 'withdrawal of life sustaining treatment and focusing on comfort care' and 'deliberately ending the patients' life or euthanasia' (Willems *et al.*, 2014). For every participant, the combined responses on these two questions were classified into three categories: (a) agree with the actual support mode, (b) perceive that too much support was given and (c) perceive that too little support was given. Data on gestational age and Apgar score of the patients for whom appropriateness of care was determined on T1–T5 were retrieved from the electronic patient records.

Data analysis

Demographic characteristics and background variables of the study population, as well as scores on measures of MD, ethical climate and perceived appropriateness of care, are presented as percentages (for categorical variables) and means and standard deviations (SDs) or medians and interquartile ranges (for continuous variables). *T*-tests were used to examine whether differences between subgroups were statistically significant.

The relationship of background variables with perceived appropriateness of care at T1–T5 (research question 1) was evaluated with logistic regression applying generalized estimating equations (GEE), which accounts for the within-subject correlations. The dependent variable in the logistic GEE model was perceived appropriateness of care in which the category 'agree' was maintained, but the categories 'prefer more intensive treatment' and 'prefer less intensive treatment' were combined into 'disagree with the current treatment'. We first entered the covariates: professions, experience, work hours, religion, having own children, gestational age and Apgar score at 5 min. In a second step, the variable work hours was excluded because (a) it was highly correlated with profession, i.e. physicians working more hours than nurses ($\rho = 0{\cdot}71$; $p < 0{\cdot}001$), and (b) not significantly related to appropriateness of care.

Studying the relationships of predictors and covariates with intensity of morally distressing situations as outcome variable over time (research question 2) was complicated by a serious floor effect in that a large proportion of the respondents did not perceive morally distressing situations at workday-level. Because linear regression would therefore not show a normal distribution of the residuals, we used Tobit regression, which is suited for seriously lower (or

upper) censored data (Twisk and Rijmen, 2009). Tobit regression deals with the floor effect by assuming that the observed outcome is a truncated version (with truncation at 0) of an underlying latent score that is normally distributed. A longitudinal version of this model was used to examine the unique contribution of each of the independent variables to MD intensity experienced over time in a random effects model. A random intercept was included in the model to account for within-subject correlations. First, appropriateness of care, ethical climate, time point (T1–T5), profession, work hours, experience, role of religion, having own children, gestational age and Apgar score at 5 min were entered. In a next step, the variable work hours was excluded because profession and work hours were highly correlated. In addition, the variables gestational age and Apgar score were excluded because they were not significantly related to the intensity of morally distressing situations in the complete model. Thus, eventually, the following variables were entered: appropriateness of care, ethical climate, profession, experience, role of religion and having own children.

The interaction *appropriateness of care* × *ethical climate* was added to the model to determine the moderating effect of ethical climate on the relationship between appropriateness of care and MD (research question 3). Data were analysed with SPSS 21.0 (IBM SPSS, New York, USA) and Stata 13.0 (StataCorp, Texas, USA). Significance levels were set at 0·05, two-sided.

Ethical considerations

The study was performed according to the principles of the Declaration of Helsinki. Participants received both oral and written information and, a few days later, were asked to give their consent; participation was voluntary. The institutional ethical review board waived the need for approval because the participants did not have to undergo medical procedures, or follow special rules of behaviour (MEC-2012-452).

RESULTS

Of the 147 eligible persons, 117 consented to participate (80%); 87 nurses (77%) and 30 physicians (91%) (including seven nurse practitioners, who in view of their role in our unit were identified as physicians). Response rates for the total sample at the different assessments were T0: 114 (78%); T1: 106(72%); T2: 101 (69%); T3: 93 (63%); T4: 87 (59%) and T5: 95 (65%). Participant characteristics are presented in Table 1.

Table 1 Baseline characteristics of the study population

Characteristics	Nurses ($n = 87$)	Physicians ($n = 30$)
Mean age*(SD)	38·2 (10·0)	38·5 (8·9)
Mean NICU experience (SD)	10·2 (7·6)	7·9 (7·4)
Mean work hours per week (SD)	28·3 (6·1)	43·7 (8·1)
Female, *n* (%)	86 (98·9)	19 (63·3)
Profession†, *n* (%)		
ICU nurse	65 (74·7)	
ICU nurse in training	6 (6·9)	
Nurse awaiting ICU training	1 (1·1)	
High care nurse	15 (17·2)	
Neonatologist		10 (33·3)
Fellow neonatology		3 (10·0)
Paediatrician in training		5 (16·7)
Resident		5 (16·7)
Nurse practitioner		7 (23·3)

SD, standard deviation; NICU, neonatal intensive care unit.

*Mean age and mean NICU experience are presented in years.

†Three nurses and one physician did not report their professional level.

At baseline

Overall, the mean frequency score for morally distressing situations was 0·98 (SD = 0·48), the mean intensity score was 2·21 (SD = 0·81) and the mean MD score (='frequency × intensity') was 2·21 (SD = 1·55); median MD score was 2·00 [interquartile range (IQR) = 1·12–2·72]. Highest scoring items were: patient care suffers from lack of provider continuity (mean 3·89), diminished patient care due to poor team communication (mean 3·81), work with unsafe levels of staffing (mean 3·65), care for a ventilator dependent child when no one wants to stop (mean 3·20), and physicians in training perform painful procedures only to increase their skills (mean 2·92).

Nurses scored significantly higher on MD than did physicians; mean 2·40 (SD = 1·68) versus 1·68 (SD = 0·98) ($p = 0·01$). Median scores for nurses and physicians respectively were 2·11 (IQR = 1·24–2·90) and 1·58 (IQR = 1·04–2·08).

Nine nurses (13·0%) and one physician (5·6%) had ever considered leaving their job because of MD; one nurse (1·4%) and one physician (5·6%) had actually resigned for this reason. At the time of the survey, three nurses (4·3%) and none of the physicians considered leaving due to MD. The mean HECS score (range 1–5) was 3·86 (SD = 0·46). Nurses rated the ethical climate significantly poorer than did physicians, mean 3·73 (SD = 0·43) and 4·27 (SD = 0·33), respectively ($p < 0·001$).

Repeated measurements

With respect to the first research question, the analyses showed that physicians more frequently disagreed with the current treatment for the 'morally most distressing patient during their shift' than did nurses,

Table 2 Participant- and patient-related predictors of perceived appropriateness of patient care*

Variable	OR	SE	*p*-Value	95% CI
Time point (T1–T5)	0·95	0·10	0·67	0·77, 1·18
Nurse/physician related				
Profession	2·62	1·04	0·02	1·21, 5·71
Experience	1·05	0·02	0·02	1·01, 1·10
Religion	0·99	0·61	0·99	0·30, 3·31
Own children	0·90	0·33	0·78	0·43, 1·88
Patient related				
Gestational age	0·99	0·01	0·16	0·98, 1·00
5-min Apgar score	0·87	0·07	0·08	0·74, 1·02

CI, confidence interval; OR, odds ratio; SE, standard error.
*Total number of observations for this logistic regression analysis with generalized estimating equations was 410.

Table 3 Predictors and covariates of shift-level intensity of distressing situations*

Variable	Beta	SE	*p*-Value	95% CI
Predictors				
Appropriateness of care				
Diminish treatment	0·183	0·059	<0·001	0·07, 0·30
Intensify treatment	−0·166	0·235	0·48	−0·63, 0·30
Ethical climate	−0·065	0·036	0·07	−0·14, 0·01
Covariates				
Time point (T1–T5)	−0·005	0·018	0·07	−0·04, 0·03
Nurse/physician related				
Profession	−0·002	0·064	0·97	−0·13, 0·12
Experience	0·001	0·003	0·67	−0·01, 0·01
Religion	0·155	0·062	0·01	0·03, 0·28
Own children	0·064	0·054	0·24	−0·04, 0·17

CI, confidence interval; SE, standard error.
*Total number of observations for this Tobit regression was 410.

and participants with more experience more frequently disagreed than did participants with less experience. No significant influence of patients' gestational age and Apgar score could be demonstrated (Table 2).

Most nurses and physicians agreed with the current treatment, and only very few participants perceived that treatment should be intensified; 1·3–1·5% of the nurses versus 4·8–6·7% of the physicians. More frequently, however, participants wish to diminish treatment intensity; 3·1–11·8% of the nurses versus 14·3–31·3% of the physicians.

Table 3 gives the results of the Tobit regression analysis with MD intensity as outcome variable (concerning the second research question). Only religion and the wish to diminish treatment significantly predicted MD intensity. There was a trend for poorer ethical climate scores ($\rho = 0{\cdot}07$) to be correlated with higher distress intensity.

Also, in the repeated measurements, nurses rated the ethical climate significantly poorer than did physicians. Accumulated results over T1 to T5 show means of 3·71 ($SD = 0{\cdot}43$) and 4·31 ($SD = 0{\cdot}33$), for nurses and physicians respectively; the difference in mean score was statistically significant at each time point (all p-values $< {\cdot}01$). A moderating effect of ethical climate on the relationship between perceived inappropriate care and MD intensity (which concerns the third research question) was not found ($p = 0{\cdot}60$).

DISCUSSION

Given the frequent confrontations with patient suffering, baseline MD among the nurses and physicians was lower than we expected, and lower than reported in other studies (Elpern *et al.*, 2005; Hamric and Blackhall, 2007; Burston and Tuckett, 2013; Fernandez-Parsons *et al.*, 2013). Nevertheless, wide inter-individual variations were observed, and some nurses and physicians reported considerable MD. Baseline MD reported by nurses was significantly higher than that reported by physicians, in line with earlier studies, which might be due to power imbalance in decision making about patient care; nurses often are responsible without decisive authority (Burston and Tuckett, 2013). Furthermore, nurses are more directly confronted with patient suffering and for a longer time.

The order and impact of the 'top-5' causes of MD in a study among NICU nurses in the northeastern United States (Cavaliere *et al.*, 2010) differ remarkably from our 'top-5'. Emphasis in the former is on medical ethical decision making versus organizational factors in our study. In addition, nurses' mean MD levels were higher in the study by Cavaliere *et al.* (2010; 4·96–9·16 versus 3·15–4·28). These discrepancies may reflect different attitudes with respect to continuation of treatment in the United States and the Netherlands, with a more liberal opinion towards discontinuation in the latter. Possibly, the practice of multidisciplinary medical ethical decision making in our ward (de Boer *et al.*, 2012), which offers the opportunity to raise and discuss concerns about treatment, also explains the lower scores. Studies on preventive interventions indeed suggest that freedom to express concerns, facilitated ethics conversations and intensive communication may help prevent MD (Helft *et al.*, 2009; Okah *et al.*, 2012; Quenot *et al.*, 2012). Further evidence, although scarce, suggests that (a) education on pain and symptom management, ethical/legal issues, communication and spirituality may be of benefit in caring for dying neonates (Rogers *et al.*, 2008); and (b) a palliative care program (Brandon *et al.*, 2014) can reduce levels of MD.

In this study, the ethical climate was perceived as poorer by nurses than by physicians; nurses scored significantly lower on items concerning supervisor support, use/helpfulness of directives, mutual respect and conflict handling, taking feelings into account, having a say and working with competent colleagues. The discrepancy could stem from their respective training programs. While nurses are trained to cooperate and to be interdependent, for physicians autonomy and independent decision making are important, leaving them less susceptible to aspects such as inter-collegial and supervisor support, or getting respect from nurses.

Although morally distressing situations were reported, and some were even very intense, most shifts passed without MD. Together with the relatively low level at baseline, this may partly explain that only three nurses (4·3%) and none of the physicians considered leaving their job due to MD.

Regarding the first research question, which addressed the influence of participant characteristics and patient characteristics on perceived appropriateness of care, we found that physicians were most likely to disagree with the current life-sustaining treatment. An explanation for this finding may be that nurses are not final decision makers in this respect, and therefore adapt easier than physicians to a medical decision made by others. The finding that participants with more years of experience were more likely to disagree with the current treatment than were the less experienced was statistically significant, but the difference is too small to have clinical relevance. Patients' gestational age and Apgar score at 5 min, as measures of illness severity, did not have significant impact on perceived appropriateness of care.

Examining the second question showed that nurses and physicians reported significantly higher intensity of distressing situations on days when they wished to diminish a severely ill neonates' treatment versus days when they agreed with treatment. This effect did not occur for the wish to intensify treatment, which suggests that perceived overtreatment had greater impact than undertreatment. Perhaps, increased distress intensity due to perceived overtreatment is related to giving invasive treatments to vulnerable neonates, especially when one is convinced that these will not contribute to the child's well-being. When nurses and physicians wish to intensify treatment, however, they may on the one hand be concerned with the child's suffering, but on the other hand believe it supports recovery. Perhaps, the joint effect of these two antagonistic forces does not add to distress intensity. An important new finding was that at shift-level, nurses' and physicians' perceived presence and intensity of distressing situations were not significantly different, contradicting earlier cross-sectional studies. This suggests that morally distressing situations at shift-level may be interpreted and weighed differently than MD considered in retrospect over a longer time frame. Furthermore, regarding the third research question, although with borderline significance ($p = 0{\cdot}07$), the intensity of morally distressing situations seems to inversely depend on the ethical climate. Therefore, a positive ethical climate could possibly help nurses and physicians to better deal with MD.

Study limitations

The study had several limitations. Notably, the low incidence of morally distressing situations at workday-level restricted the options for data analysis. The rather large percentage of missing data on distressing situations, especially at T3–T5, could reflect that repeated measurements, even with shortened questionnaires, may still be burdensome. Lastly, the repeated measures design prevented complete anonymity of the respondents.

CONCLUSIONS

Some participants in this study occasionally experienced considerable MD, partly because of perceived overtreatment of patients. Setting-specific stressors, such as lack of provider continuity, and unsafe levels of staffing should be taken into account when developing new interventions for nurses and physicians in addition to the current interventions that help prevent MD, notably facilitated ethics conversations.

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WHAT IS KNOWN ABOUT THIS TOPIC

- Moral distress may be present in both nurses and physicians.
- Residual moral distress accumulates over time.
- Long-term effects are poor patient care, burnout and leaving the profession.
- Preventive measures include freedom to express concerns, facilitated ethics conversations, intensive communication, education and a palliative care program.

WHAT THIS PAPER ADDS

- Perceived overtreatment, but not undertreatment, is likely to increase moral distress.
- Although previous studies report higher scores for nurses, moral distress reported during shifts did not differ between nurses and physicians.
- Lack of provider continuity, team communication and safe levels of staffing are important stressors for neonatal intensive care unit medical and nursing staff.

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APPENDIX: TEN-ITEM VERSIONS OF MORAL DISTRESS SCALE AND HOSPITAL ETHICAL CLIMATE SCALE

Table A1 Moral Distress Scale-Revised (Hamric *et al.*, 2012); shortened 10-item version for T1–T5*

1.	Today I witnessed health care providers giving 'false hope' to parents.
2.	Today I followed the family's wishes to continue life support even though I believed it was not in the best interest of the child.
3.	Today I initiated extensive life-saving actions when I thought they only prolonged death.
4.	Today I felt pressure to order tests and treatments that I considered to be unnecessary/I carried out the physician's orders for what I considered to be unnecessary tests and treatments.
5.	Today I continued to participate in care for a hopelessly ill child who was being sustained on a ventilator, when no one would make a decision to withdraw support.
6.	Today I provided care that did not relieve the child's suffering because I/the physician feared that increasing the dose of pain medication would cause death.
7.	Today I increased the dose of sedatives/opiates for an unconscious child that I believe could hasten the child's death.
8.	Today I witnessed diminished patient care quality due to poor team communication.
9.	Today I watched patient care suffer because of a lack of provider continuity.
10.	Today I worked with 'unsafe' levels of nurse staffing.

*At baseline, correlation of the 25-item Moral Distress Scale- Revised and the shortened 10-item version was very high, Spearman's $\rho = 0{\cdot}96$

Table A2 Hospital Ethical Climate Survey (Olson, 1998); shortened 10-item version for T1–T5*

1.	Today parents knew what to expect from their child's care.
2.	Today nurses and physicians trusted one another.
3.	Today I had access to the information necessary to solve a patient care issue/problem.
4.	Today my manager supported me in my decisions about patient care.
5.	Today my peers helped me with difficult patient care issues/problems.
6.	Today nurses and physicians here respected each other's' opinions, even when they disagreed about what was best for the patient.
7.	Today there was a sense of questioning, learning and seeking creative responses to patient care problems.
8.	Today safe patient care was given on my unit.
9.	Today I respected my manager.
10.	Today I was able to practice nursing/medicine on my unit as I believe it should be practiced.

*At baseline, correlation of the 18-item Hospital Ethical Climate Scale and the shortened 10-item version was very high, Spearman's $\rho = 0{\cdot}94$.