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Development of tools to measure dignity for older people in acute hospitals

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Disclosure

The authors have confirmed that all authors meet the ICMJE criteria for authorship credit (www.icmje.org/ethi cal_1author.html), as follows: (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content and (3) final approval of the version to be published.

Conflicts of interest

The authors declared no conflicts of interest with respect to the authorship, and/or publication of this article.

ABSTRACT

Background: Dignity is a concept that applies to all patients. Older patients can be particularly vulnerable to experiencing a loss of dignity in hospital. Previous tools developed to measure dignity have been aimed at palliative and end of life care. No tools for measuring dignity in acute hospital care have been reported.

Objectives: To develop tools for measuring patient dignity in acute hospitals.

Setting: A large UK acute hospital. We purposively selected 17 wards where at least 50% of patients are 65 or over.

Methods: Three methods of capturing data related to dignity were developed: an electronic patient dignity survey (possible score range 6-24); a format for non-participant observations; and individual face-to-face semi-structured patient and staff interviews (reported elsewhere).

Results: 5693 surveys were completed. Mean score increased from 22.00 pre-intervention to 23.03 after intervention (p<0.001). Staff-patient interactions (581) were recorded. Overall 41% of interactions (239) were positive, 39% (228) were neutral and 20% (114) were negative. The positive interactions ranged from 17% to 59% between wards. Quality of interaction was highest for allied health professionals (76% positive), lowest for domestic staff (22% positive) and pharmacists (29% positive), and intermediate for doctors, nurses, Health Care Assistants and student nurses (40% to 48% positive). A positive interaction was more likely with increased length of interaction from 25% (brief) to 63% (longer interactions) (F[2, 557]=28.67, p<.001).

Conclusions: We have developed a simple format for a dignity survey and observations. Overall, most patients reported electronically that they received dignified care in hospital. However, observations identified a high percentage of interactions categorised as neutral/basic care, which, while not actively diminishing dignity, will not enhance dignity. There is an opportunity make these interactions more positive.

Summary Box

What does this paper contribute to the wider global clinical community?

- Dignity in acute hospital care can be monitored by surveys and observations.
- Many interactions between staff and patients are neutral rather than positive.
- There is scope to improve dignified care by alerting staff to the value placed by patients on warm human interactions.

1. Introduction

Dignity is a concept that applies to all patients. However, older patients can be particularly vulnerable to experiencing a loss of dignity (Gallagher et al*.,* 2008; Nordenfelt, 2009, Tranvåg et al., 2015), especially in hospital (Calnan et al., 2013). There have been ongoing concerns about standards of hospital care for older people in England, resulting in recommendations for improving care quality and dignity for older people (Health Service Ombudsman, 2011; Age UK, 2012; Francis, 2013).

Frail older people and those with dementia have increased length of stay, readmission and inter-ward transfers compared to other patients (National Health Services (NHS) London, 2011), which further impacts on care experience. The adverse impact of frequent moves between hospital wards for older people has been identified in both the United Kingdom (UK) (Cornwell et al., 2012; Baillie et al., 2014) and the United States of America (USA) (Naylor and Keating, 2008). In the UK, one in four adult inpatients are people who have dementia (Alzheimer's Society, 2009). A number of studies suggest that they may experience poor quality of care (Jurgens et al., 2012; Clissett et al., 2013).

While there is much expert opinion on what would help improve dignity and some excellent brief case examples, there has been no systematic evaluation as to whether these approaches work in real life situations. Magee et al. (2008) conducted a study to identify elements of dignity by measuring each of the UK Charity 'Help the Aged' domains of dignified care: personal hygiene; eating and nutrition; privacy; communication; pain; autonomy; personal care;

end-of-life care and social inclusion (Levenson, 2007). They proposed indicators across these nine domains. The main themes from these indicators included choice, control, staff attitudes and facilities. End-of-life care was a challenging element to measure.

Barclay (2016 p. 141) defines the meaning of dignity in healthcare from a philosophical perspective, concluding that dignity is an important concept in healthcare because 'it signals that each one of us is equally worthy, capable of the unique human ability to shape a life according to a set of standards and values that infuse that life with meaning'. Barclay identified the limitations of current research into dignity in healthcare which is largely based on qualitative studies investigating patient and staff experiences and interpretations of dignified care. Clarifying and defining dignity becomes important to distinguish it from other aspects of health care such as good quality care or care of a high standard. Failure to clarify what is meant by dignified care can lead to dignity being subsumed into other activities which take precedence in the highly complex clinical environments in hospitals (Hall and Hoy, 2011). Additionally as Ho et al. (2013) found when testing the relevance of a dignity model which focuses specifically on end of life care with palliative older patients in Hong Kong, cultural variations in the experience of dignity limit the transferability of western concepts of dignity. Ebrahimi et al. (2012) emphasised that individual social and cultural backgrounds in different healthcare settings may influence preservation of patient dignity.

Previous tools that have been developed to measure dignity have been aimed mainly at end of life care (Periyakoil et al., 2010; Vlug et al., 2011). Oosterveld-Vlug et al. (2014) developed Measurement Instrument for Dignity AMsterdam - for Long-Term Care facilities (MIDAM-LTC) to measure dignity in older people in nursing homes in the Netherlands and Jacelon and Choi (2014) developed a 23-item scale; the 'Jacelon Attributed Dignity Scale (JADS)' to measure self-perceived attributed dignity in community-dwelling older adults. However, a recent review (Zahran et al., 2016) found no intervention studies measuring changes in dignity, and no tools reported for measuring dignity in acute hospital care.

2. Aim

As a preliminary step in a wider programme of work to improve dignity for older people in acute hospitals, we first needed to decide how to measure dignity outcomes in this setting. This paper reports on the adaptation and initial testing of the tools used to measure dignity.

3. Methods

3.1 Defining dignity

We convened a multidisciplinary steering group, including doctors, nurses, student nurses, nurse academics, a physiotherapist and the Heads of Patient Experience Team and the Volunteering Service to advise on the development of tools to measure dignity. The steering group, on reviewing available tools, found none suitable to measure our intended outcomes. We, therefore, decided to develop and adapt existing tools to measure dignity outcomes in acute care.

The first challenge was to develop a working definition of dignity. A search of dignity definitions was undertaken and resulted in a list of pragmatic, philosophical, legal, policy-related and professional definitions of dignity. Many definitions are available but not all seemed relevant to acute healthcare. On reviewing the literature, a consensus emerged after much face to face and email discussion to adapt the UK Royal College of Nursing (2008a) definition. This was amalgamated with the Social Care Institute for Excellence (SCIE) (2006) Dignity in Care Research Overview Guide using work from the Policy Research Institute on Ageing and Ethnicity (PRIAE)/Help the Aged, and the opinions of the Dignity Project Steering group. The working definition of dignity for this project was:

"*Dignity is concerned with how people feel, think and behave in relation to the worth or value of themselves and others. Dignity in care means the kind of care, which supports and promotes, and does not undermine or erode, a person's self-respect regardless of any difference. Or, as one person receiving care put it more briefly, 'Being treated like I was somebody.*"

3.2 Setting

The study was conducted in a large acute NHS hospital Trust in London and included three acute hospital sites. We purposively selected six wards on two sites and five wards on a third site (17 wards in total). A mixture of medical, surgical, oncology, care of older people specialist wards and acute admission units were included in the study. At the time of the study there was acute pressure on beds in the hospitals and so it was common for wards to have patients with mixed aetiologies.

3.3 Research Design

The overarching research was a mixed methods intervention study in which before and after measures of dignity were collected.

3.4 Data collection tools

Three methods of capturing data related to dignity were used: an electronic patient dignity survey; non-participant observations, and individual face-to-face semi-structured interviews with patients and ward staff. In this paper we report on the electronic patient dignity survey and non-participant observation, both of which gave quantitative results. Qualitative interviews are reported elsewhere (Tauber-Gilmore et al., 2017).

3.4.1 Electronic patient dignity survey

The hospital already used an electronic hand-held survey to monitor patient experience generally. This included the following single generic question*: have you been treated with dignity and respect by staff on this ward?* The steering group agreed that this measurement was not sufficiently detailed to meet the study's aims and that we needed to develop a dignity-specific survey for this study.

Our literature review had found that existing tools developed to measure dignity were aimed mainly at palliative and end of life care or focused on long-term care and community settings (Zahran et al., 2016). Building on the systematic review the steering group narrowed the survey to seven questions reflecting factors influencing dignity in hospital. The seven questions

were developed iteratively with the steering group during face to face meetings and email discussions and were intended to prompt patients to reflect on their experiences of dignified care during their hospital stay:

1. Were the healthcare staff caring and compassionate?
2. At any point during your stay did you feel ignored by staff?
3. Did you feel the staff treated you as an individual person?
4. Were you given privacy when discussing your condition, treatment or care?
5. Where possible, did staff give you choices?
6. Where possible, were your preferences respected?

The first six questions required the participants to rate their responses on a four-point Likert scale, with options: *never, sometimes, often* and *always* (responses scored 1-4 in the data presented below). The last question was a free-text comment section to gather qualitative responses and provide background context to the data. A pilot of the survey had been conducted with older patients and subsequently the survey was revised for clarity of the questions. The survey was also pilot tested on patients with varying cognitive ability and age. Patients with known advanced cognitive impairment were excluded.

The final anonymous survey (above) was distributed to the participating wards. The Dignity Survey was an addition alongside existing in-patient surveys (i.e. Friends and Family test and the UK Health Service Adult Inpatients survey (NHS, 2013; 2015) and so participating wards were already familiar with the hand-held electronic device used.

Patients over 18 years were eligible to complete the survey; however, ward staff were encouraged to gather survey data primarily from patients aged 65 years and over. Survey submission could be at any time during the patient's admission. Survey responses were collected over three time periods using a cross-sectional design (six months each of: before, during and after the intervention), therefore different patients participated at each time point.

3.4.2 Non-participant observations of interactions

The quality of interactions between older people and staff is an important influence on their experience of care (Bridges et al., 2010) and are central to a dignified care experience (Jacobsen, 2007; Tadd et al., 2011). Theoretical perspectives on dignity propose that there are two types of dignity: human dignity (termed menschenwürde in German), which cannot be taken away (Jacelon, 2003; Nordenfelt and Edgar 2005; Jacobson, 2007), and social dignity, which is experienced through interactions between self and others and can be threatened, lost or violated, or promoted (Jacobsen, 2007). Therefore, measuring the quality of interactions was agreed to be an appropriate method of studying the impact of the intervention. After an initial literature search, the Steering Group agreed upon a pre-validated tool 'Quality of Interaction Schedule (QUIS)' as the most appropriate non-participatory direct observation tool for the research study (Healthcare Improvement Scotland (HIS) & Healthcare Environment Inspectorate (HEI) QUIS 2012). QUIS was re-developed by NHS Scotland (2012) from the original work in long-term mental health settings by Dean et al (1993) for use in inspections focused on care of older people in acute hospital settings. QUIS is readily-available, inexpensive and has been previously tested and used in direct observations. The tool can be used in tandem with questionnaires and interviews to provide a broader view of dignified care in older people in hospital.

During initial pilot testing of the QUIS it was found not to adequately record some aspects of interest. We, therefore, worked with the steering group to make modifications. We added a hand-drawn diagram of the ward area being observed, and location of consenting patients and the observer during the observation period. After further piloting of the tool, a further adaptation included the length of interactions. The length of the interactions were recorded as brief (<1 minute), short interaction (1-3 minutes), or long interaction/intervention/activity/therapy (>3 minutes) (final format for observation tool in Figure 1).

The focus of the observation was on any staff-patient interaction that took place on the ward between consenting patients and any member of staff during each period of observation. Observations included:

- All aspects of interaction involving the patient during the observation period (e.g. greetings, introductions, explanations, care activities, technical tasks)
- All verbal and non-verbal communication between staff members and a patient
- Descriptions of the staff member and patient's attitude and/or manner towards each other
- Descriptions of the staff member and patient's appearance
- Language used by the staff member (i.e.: banter, technical, colloquial)
- Unanswered question, incomplete tasks or abruptly ended conversation or disengagement

and excluded:

- Any patient who had not consented to observation
- Any patient-patient interaction
- Direct observation of any intimate task undertaken behind a closed curtain or door
- Observation of emergency interventions (e.g. medical emergency, respiratory or cardiac arrest)

The quality of interaction was rated by the observer as:

- Positive Social Interactions that are warm, respectful, sensitive or enabling: enhance feelings of significance and security;
- Neutral Interactions that "get the job done" but without any positive social features;
- Negative Interactions which lack warmth or respect, undermine feelings of safety and significance, and are insensitive and can be disempowering.

The project manager (MT) provided training to all observers prior to undertaking observations to ensure consistency of recording and to check understanding of the tool. Observations were undertaken by a range of volunteers, including student nurses on a research placement, registered nurses (general and mental health), an occupational therapist and academic staff.

The observation period lasted for 45-60 minutes and the observer had time at the end of the period for written reflections. On a few occasions, the observation period went beyond an hour if there was an ongoing interaction in progress. The observer waited until the interaction was complete and then finished the session. The observations were carried out from Monday

to Sunday between the hours of 8am and 8pm. The observations were carried out during the pre-intervention phase only.

3.4.3 The intervention

Feedback from non-participant observation, patient and staff interviews and monthly dignity survey scores was given to all participating wards on a monthly basis. This was sent as an electronic report to the Ward Manager for local dissemination, and whenever it was possible to schedule a meeting the report was also discussed face to face between the project manager (MT) and the ward team, often at a handover or ward management meeting. However, it was not always possible to arrange a suitable time to do this face to face. It was not possible to track how far this information was disseminated to local staff on each ward.

Ward teams were offered the choice of various interventions suggested as supporting digni-fied care by the literature, including communication training, and facilitated discussions about observed events.

3.5 Data Analysis

Quantitative data were imported from the electronic survey and the observations into SPSS from Excel. Characteristics of the sample are described using frequencies and percentages. The effect of health care professional (HCP) groups, length of interaction, ward environment variables on quality of interaction (*negative*, *neutral*, *positive*) and the effect of the interven-tion across three periods (pre-intervention, intervention, post-intervention) and the patient survey four-point Likert scale patient experience responses (*never*, *sometimes*, *often*, *always*) were tested using a mixed random intercept model (ordinal dependent variable with a cumu-lative logit link function) where wards were treated as clusters, using SPSS version 22 proce-dure GENLINMIXED (GLM). F tests for each effect and odds ratios (OR) with Bonferroni corrected 95% confidence intervals and probability values (p) are presented. Our preference was to analyse individual question items as Likert type data rather than Likert scale data but we have analysed the composite score as Likert scale data (http://wiki.biologyscholars.org/@api/deki/files/2002/=Likert_Scale_Analysis.pdf). The OR is used as an overall measure of effect size. It is assumed that the cumulative odds ratio re-mains consistent whether it is based on *never* vs. *sometimes*, *often* and *always; never* and *sometimes* vs. *often* and *always*; *never*, *sometimes*, *often vs. always*.

An exploratory factor analysis of the six patient experience questions, using MPLUS version 4.2, identified a single factor with an eigenvalue >1 (3.56) suggesting that a total score would be a valid overall measure of patient experience. The overall Cronbach's alpha for the six questions was 0.68 (before intervention 0.66, during intervention 0.63, after intervention 0.70). The change in total patient experience score (6-24) across the three time periods was tested using a general linear model (SPSS Mixed) with bootstrapping (1000 repeated samples) to address non-normality present in the total score variable (skewed towards the maximum score). The F-test, for the overall period effect, and β with 95% Bonferroni corrected confidence intervals and probability values (p) for pair-wise comparison of periods are presented.

3.6 Ethics

Ethical approval was obtained via the UK national ethics service, and via the local hospital Research and Development office (reference number14/LO/1683). The study was conducted in accordance with the recommendations for physicians involved in research on human subjects adopted by the 18th World Medical Assembly, Helsinki 1964 and later revisions. Consent to participate in the study was sought from each participant after a full explanation had been given; an information leaflet was provided.

Patient confidentiality was maintained by recording no personal identifiable information. Participants were assured that all observation data was anonymised. Patients were included if they were aged 65 years or above, admitted to one of our hospitals for any reason, able to understand sufficient English to give written informed consent and to participate in observation, interview or an electronic survey. Patients who were not able to give informed consent, were unable to understand written and spoken English or judged by the nurse in charge of the shift to be too unwell to participate were excluded.

4. Results

4.1. Electronic Patient Dignity Survey

Patients submitted a total of 3611 surveys during the pre-intervention and intervention stages. In the six months after the intervention patients submitted an additional 2082 surveys. As noted above, each person only completed the survey at one time point. There was an improvement in patient experience across the three periods of the study on all six patient experience survey questions and for overall patient experience total mean score (Table 1). The maximum possible survey score was 24. The mean total survey score was higher post-intervention than pre-intervention (22.61 vs 22.0) and the mean difference (0.69, 95%CI 0.45 to 0.92, p<.001) was statistically significant (Table 2). This upward trend continued, reaching 23.03 after six months which was significantly different from pre-intervention (0.32, 95% CI 0.08 to 0.56, p=0.04). The predicted distribution for *never*, *sometimes*, *often* and *always* from the model closely mirrors that for the observed data e.g. *Were the healthcare staff caring and compassionate* pre-intervention 1.4%, 4.3%, 8.9%, 85.4% vs. 1.6%, 4.6%, 8.4%, 85.5% . The only exception was for '*Were the healthcare staff caring and compassionate*' which did not differ significantly between intervention and pre-intervention (p=.75).

4.2. Non-participant observations

Fifty three patients who met the inclusion criteria were approached. Seven declined and were not contacted again. Forty six patients consented to observation. Of these, 28 (61%) were female; 20 (44%), 19 (41%) and 7 (15%) were aged 65 to 74, 75 to 84, and 85 and over respectively. Twenty four (52%) were white British, 9 (19%) were black and minority ethnic (BME), 5 (11%) were white Irish, and 4 (9%) were "other not stated".

Five hundred and eighty-one individual staff-patient interactions were recorded. Overall 41% of interactions (239) were positive, 39% (228) were neutral and 20% (114) were negative. The percentage of interactions per ward that were positive ranged from 17% to 59%, between wards with twenty or more observations. In the random intercepts only model, the quality of interaction did not vary significantly between wards (Wald Z=1.54, p=.12).

Quality of interaction was highest for allied health professionals (76% positive), low for host/domestic staff (22% positive) and pharmacists (29% positive), and similar for doctors, nurses, health care assistants (HCAs) and student nurses (40% to 48% positive). A positive interaction was more likely with increased length of interaction from 25% (brief) to 63% (long). Length of interaction was positively and significantly associated with quality of interaction (F[2, 557]=28.67, p<.001).

Quality of interaction varied significantly between HCPs (F[7,572]=3.98, p<.001). The effect of HCP on quality of interaction was attenuated (F[7,550]=2.76, p=.008) in the model that included both HCP and length of interaction. The latter effect remained similar (F[2,550]=26.58, p<.001). The odds ratios (OR) and their 95% confidence intervals for this model are shown in Table 3. Compared to trained nurses, student nurses and Allied Health Professionals were significantly more likely to have been observed having high quality interactions with patients. There was no significant difference between nurses and all other types of staff observed. Long conversations were significantly more likely to be positive than brief ones.

The moderating effect of HCP on length of interaction was not statistically significant (F[13,537]=0.589, p=.86) i.e. the effect of length of interaction was the same for all HCP groups.

Over two thirds of the observers recorded 'Yes' (positive responses) to six of the seven ward environment variables (Appendix 1). The one exception where a majority of observers did not say 'yes' was in response to the question about whether the nurse in charge made a visit to the patient in their bay (40%). Observers who responded 'Yes' to the seven ward environment variables were more likely to have seen a positive interaction than those who said 'No' or provided a qualified answer to these variables. The largest difference in positive response amongst patients who answered 'Yes' or 'No' to each question was associated with a clutter free bay (47% vs. 29%) and the smallest difference with whether the nurses in charge visited the bay (44% vs. 39%).

Six of the seven ward environment variables were significantly associated with quality of interaction (Table 4). 'Is the ward temperature comfortable?'(p=.36) was the only ward environment variable that was not significantly associated with quality of interaction.

When all seven ward environment variables were fitted together simultaneously into the GLM three variables were not significantly associated with quality of interaction: 'Is the ward temperature comfortable? (p=.71), 'Do the patients in your bay appear clean, well-groomed and comfortable?' (p=.55) and 'In your bay, are any personal items within easy reach of patients?' (p=.11). Three variables remained significant but with reduced odds ratios: Is the bay clutter free?' (2.02 to 1.94) 'In your bay, are water jugs, call bells, mobility aids (if required) for patients within easy reach? (2.08 to 1.83) and 'In your bay, are any personal items within easy reach of patients?' (2.01 to 1.53). The odds ratio for 'Does the ward smell fresh?' increased from 1.78 to 2.21 and from 1.47 to 1.53 for 'Did the nurse in charge visit you in your bay'.

The findings did not change noticeably after the addition HCP and length of interaction into the model. The F statistics for the effect of HCP and length of interaction were similar to those found previously in the model that included both HCP and length of interaction ($F[7,493]=2.70$, p=.009 vs. $F[7,550]=2.76$, p=.008) and ($F[2,493]=24.72$, p<.001 vs. $F[2,550]=26.58$, p<.001) respectively and the odds ratios were similar favouring the quality of interaction given by students and allied health professionals.

Observers' written free text reflections indicated that most interactions were task oriented and were initiated as a result of responding to patients' needs i.e. personal care, medication round, observation, doctors' round, physical examination, planning for discharge, answering call bells.

4.3 Uptake of interventions

All the wards expressed appreciation of the feedback from the data collection tools, particularly monthly feedback from the patient survey. However, wards found engagement with dignity support interventions offered by the research team challenging and minimal use was

made them. Only communication training for nurses and facilitated discussions about observed events or care experienced by patients on the ward were taken up. Workload pressures were given as the dominant reason for staff not engaging more with the project. However, Ward Managers and some other staff were enthusiastic about the detailed feedback they received from the surveys, observations and the interviews reported elsewhere (Tauber-Gilmore et al., 2017). Continence training was provided for the whole Trust as a result of findings from the study. An interactive meeting using a theatre group to stimulate discussion about the leadership issues associated with promoting and sustaining dignified care across the whole Trust was undertaken.

5. Discussion

In this study we have reported a set of indicators which include amendment of a previously developed observation tool, and a newly devised closed question patient survey using an electronic ward survey system and tested these tools in an acute hospital setting. A separate paper, Tauber-Gilmore et al. (2017) reports related patient and staff interviews.

The patient survey questions, which focused on aspects of dignity such as privacy, being treated as an individual and being offered choices, indicated that most patients had dignified care experiences. Goodrich and Cornwell (2008) argued that patient survey results alone should be interpreted cautiously, as positive reports may not reflect a wholly positive experience. Nevertheless, surveys can reveal trends. In this study they did indicate improvements during the study. The quality of interactions, which were observed as a further measure of dignified care, revealed a less positive picture.

A minority of interactions observed were negative (20%), and a further 39% were neutral/basic care. With thought and attention these could be transformed into positive social interactions and enhance patient dignity. Neutral/basic care interactions are unlikely to promote a feeling of being valued, which nurses and patients have identified as being central to dignified key experiences (Baillie and Gallagher, 2011).

In contrast to other studies, our findings suggested the longer the interaction, the more positive the interaction. In a recent study, Barker et al. (2016) investigated the quality and quantity of interaction between staff and older patients using QUIS and found that the length of interaction was not associated with the quality of interaction. In our study the quality of interaction was higher for allied healthcare professionals, lowest for domestic staff and similar for nurses, HCAs and doctors. Barker reported similar quality of interactions between HCAs and registered nurses. The quality of interaction is key to dignified care experiences (Jacobsen, 2007), shapes service users' experiences (Barker et al., 2016) and can influence patient outcomes (Doyle et al., 2013). It is not clear why domestic staff in our study scored the lowest.

We found that the majority of interactions, even positive ones, were task orientated. Ariño-Blasco et al (2005) found that undignified care was associated with: invisibility; de-personalisation and treatment of the individual as an object; narrow and mechanistic approaches to care. Task oriented cultures have been linked with emphasis on performance targets, dignity not being valued by the system, increased regulations, policies and procedures, increased administrative and clerical work, lack of resources (Calnan et al., 2005), lack of training and awareness, lack of time, and shortage of staff (Woolhead et al., 2005). However, this is not echoed by service users who strongly feel that being nice has nothing to do with resources (Elaswarapu, 2007). Several authors have explored compassionate care in hospitals. Maben *et al*. (2007) found that after two years in practice the majority of newly qualified nurses experienced frustration and some level of burnout. Davison and Williams (2009), and Firth-Cozens and Cornwell (2009) explored factors which influence compassionate care; these include professional factors, cultural factors and personal factors. Bridges and Fuller (2015) developed a programme to improve and support the delivery of compassionate care by health and social care teams. They used workplace learning to promote change by enabling the development of leadership and relational practices of the team and individual team members.

Innes et al (2016) conducted a pre-test-post-test study to evaluate the quality of care for patients with dementia in two Maltese hospitals. The authors used Person-Centred Care Assessment Tool to examine staff perceptions of the extent to which person-centred care was provided. They also used Person-centred Climate Questionnaire to explore staff perceptions of facilitators and inhibitors of person-centred care. They found contrasting differences what staff say person-centred dementia care is and what was observed in practice. They also ob-

served in their dementia care mapping that, as in our study, interactions between patients and staff were often brief and mainly task oriented.

Elaswarapu (2007) considered environmental factors as an indicator for measuring dignity. The environment has an important influence on provision of dignified care and a UK wide survey of nurses revealed that the care environment was often a barrier to promoting dignity for patients (Royal College of Nursing, 2008b). In our study, observers who responded 'yes' to the seven ward environment variables were more likely to have a seen a positive interaction than those who said 'No' or provided a qualified response. Another indicator of measuring dignity was leadership. Ward managers were less visible and had less interactions with patients than other healthcare staff. Only 40% of observers reported that the nurse in-charge made a visit to the patient in their hospital bay during the observation period. Practical measures are required to support and encourage health care professionals to provide more dignified care. Ward leadership is significant in directing and supporting HCPs in providing both relational aspects of care and direct 'hands on care' (Kinnear et al., 2014), shaping a positive team climate for care (Patterson et al., 2011), staff well-being and team work, job satisfaction, and positive organisational climate and support (Maben et al., 2012)

Although a range of multi-disciplinary staff were observed only nursing staff were involved in any of the actions taken by ward managers to promote dignity on the intervention wards. More work needs to be undertaken in identifying the types of interventions that ward managers and other members of the multi-disciplinary team would find useful in helping support dignified care in acute settings. Certainly we found little appetite among ward staff to engage in education, co-design, action planning or championing dignity. Our research has highlighted the importance of testing recommendations in practice settings for their acceptability and feasibility before making generalised recommendations. Dewar and Nolan (2013, p.1248) provide a model to help staff to deliver compassionate, relationship-centred care for older people. They feel that this should be based on 'appreciative caring conversations' that enable nurses and patients to really get to know each other as individuals. Such knowledge enables patients and their families to work with nurses to shape their care.

Despite the reluctance or inability to engage in activities designed to support dignity on the intervention wards, patient reported indicators of dignity improved across all wards during the intervention phase and these continued to improve for a further 6 months. The dignity

scores reported by patients at the start of the study were already high, suggesting that margins for improvement were small, despite this statistically significant increases were still recorded. This suggests that the feedback of specific ward based data via the seven questions on the electronic patient survey can improve dignity in acute hospital settings. It is not known whether this could be achieved by simple patient survey data alone or whether the findings reflect a combination of in-depth feedback (including the results of observation and patient and staff interviews) with follow-up monthly patient survey feedback. The findings suggest that consistent, but light touch on-demand interventions, focused on dignity coupled with regular ward specific patient feedback, helps ward managers to promote dignity in their ward areas.

6. Limitations

The study was conducted in one single hospital group. We excluded patients who are cognitively impaired. People with dementia, delirium and communication difficulties are at particular risk of negative experiences of care and so special measures to interview and observe older patients with cognitive problems need to be developed. The Hawthorne effect cannot be ruled out. The wards had volunteered to take part in the study and were aware that dignity was being monitored on their wards by the research team. The patient survey data were collected by ward staff who also identified the patients asked to complete the survey and this could influence the results. The survey data was collected on patients aged 18 years and over and not just on older people. Because of the relatively short length of stay in acute care and the length of the data collection and feedback period, it was not possible to have the same patients complete the survey before and after intervention. However, our sample size for comparisons was large.

We did not conduct test-retest stability testing on the dignity survey. We did not conduct inter-rater reliability for the observation tool, nor did we have capacity in the team to repeat observations after the interventions.

7. Conclusion

We have developed a simple format for a dignity survey and observations which worked well in practice (easy to use and with apparent acceptability) and yielded information, which when fed back to wards, seems to have had an effect on dignity. Overall, most patients reported that they received dignified care in hospital. However, observations identified that there was a

high percentage of interactions that were categorised as neutral/basic care, which, while not actively diminishing dignity, will not enhance dignity either. This indicates an opportunity to convert these interactions to positive interactions. With greater recognition of how the quality of interactions contributes to dignified care, more positive patient experiences could result. The relationship between length and quality of interaction give an opportunity to modify clinical practice for the benefit of dignity. The findings suggests that a consistent but light touch organisational focus on dignity coupled with regular ward specific patient feedback helps ward managers promote dignity in their ward areas.

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Table 1. Patient experience survey: responses to the six questions pre-intervention, during intervention and post-intervention

Ward	Response	Pre-intervention		During intervention		Post-Intervention	
		No.	%	No.	%	No.	%
Were the healthcare staff caring and compassionate?	Never	43	1.6%	5	0.6%	13	0.6%
	Sometimes	125	4.6%	27	3.1%	45	2.2%
	Often	231	8.4%	93	10.7%	131	6.4%
	Always	2348	85.5%	742	85.6%	1856	90.8%
At any point during your stay did you feel ignored by staff?	Never	2068	75.3%	739	85.2%	1856	90.8%
	Sometimes	275	10.0%	90	10.4%	119	5.8%
	Often	69	2.5%	7	0.8%	14	0.7%
	Always	333	12.1%	31	3.6%	56	2.7%
Did you feel the staff treated you as an individual person?	Never	212	7.7%	61	7.0%	104	5.1%
	Sometimes	147	5.4%	24	2.8%	60	2.9%
	Often	221	8.1%	83	9.6%	113	5.5%
	Always	2165	78.9%	699	80.6%	1768	86.5%
Were you given privacy when discussing your condition,	Never	40	1.5%	3	.3%	13	0.6%
	Sometimes	125	4.6%	15	1.7%	44	2.2%
	Often	215	7.8%	81	9.3%	104	5.1%
	Always	2366	86.2%	768	88.6%	1884	92.1%
Where possible, did staff give you choices?	Never	64	2.3%	15	1.7%	14	0.7%
	Sometimes	215	7.8%	49	5.7%	78	3.8%
	Often	371	13.5%	107	12.3%	177	8.7%
	Always	2097	76.3%	696	80.3%	1776	86.8%
Where possible, were your preferences respected?	Never	38	1.4%	9	1.0%	11	0.5%
	Sometimes	167	6.1%	28	3.2%	45	2.2%
	Often	287	10.4%	83	9.6%	134	6.6%
	Always	2255	82.1%	747	86.2%	1854	90.7%
Total score (possible range 6-24)	Mean (SD)	22.00	(2.79)	22.61	(2.17)	23.03	(2.03)

Table 2. Patient experience survey: comparison between pre-intervention, during intervention and post-intervention

Question	F(numerator df, denominator df), p	Odds ratio (95% CI)[1]		
		Post-intervention vs. Pre-intervention	During intervention vs. Pre-intervention	Post-intervention vs During intervention
Were the healthcare staff caring and compassionate?	F(2,5654)=15.61, p<.001	1.63 (1.29 - 2.07), p<.001	1.11 (0.84 - 1.48), p=.75	1.60 (1.18 - 2.16), p<.001
At any point during your stay did you feel ignored by staff?	F(2,5652)=80.02, p<.001	0.32 (0.26 - 0.40), p<.001	0.53 (0.40 - 0.69), p<.001	0.61 (0.45 - 0.83), p<.001
Did you feel the staff treated you as an individual person?	F(2 ,5652)=30.89, p<.001	1.88 (1.52 - 2.31), p<.001	1.42 (1.10 - 1.83), p=.003	1.41 (1.08 - 1.85), p=.007
Were you given privacy when discussing your condition, treatment or care?	F(2,5653)= 20.63, p<.001	1.86 (1.44 - 2.40), p<.001	1.57 (1.15 - 2.14), p=.002	1.32 (0.95 - 1.85), p=.12
Where possible, did staff give you choices?	F(2,5654)=37.60, p<.001	2.01 (1.64 - 2.46), p<.001	1.44 (1.13 - 1.84), p<.001	1.50 (1.15 - 1.96), p<.001
Where possible, were your preferences respected?	F(2,5653)=25.08, p<.001	1.94 (1.54 - 2.44), p<.001	1.47 (1.11 - 1.95), p=.001	1.49 (1.09 - 2.02), p=.001
		β (95% CI)[2]		
	F(numerator df, denominator df), p	Post-Intervention vs. Pre-intervention	During intervention vs. Pre-intervention	Post-intervention vs During intervention
Total score (6-24)	F(2, 5629.68)=93.94 , p<.001	1.01 (0.83 - 1.18), p<.001	0.69 (0.45 - 0.92), p<.001	0.32 (0.08 - 0.56), p=.004

[1] Mixed model (random intercepts): cumulative logit for individual questions

[2] F(numerator degrees of freedom, denominator degrees of freedom), p; Odds ratio(OR) and 95% Bonferroni corrected confidence interval(CI),

p; β and 95% Bonferroni corrected CI, p

Table 3. Quality of interaction regression models: influence of Health Care Practitioner and length of conversation.

Model Term	Odds ratio (95% confidence interval)	P
Health Care Practitioner	$F_{(7,550)}= 2.75$ p = 0.008	
Doctor	0.98 (0.53-1.85)	0.96
Health Care Assistant	1.16 (0.73-1.82)	0.53
Host/Domestic	0.70 (0.43-1.12)	0.14
Student nurse	2.20 (1.16-4.17)	0.016
Pharmacist	0.84 (0.30-2.40)	0.75
Allied Health Practitioner	3.49 (1.43-8.50)	0.006
Other	2.00 (0.52-7.69)	0.31
Nurse	1.00 (-)	
Length of conversation	$F_{(2,550)}=26.58$ p <0.001	
Brief	0.24 (0.15-0.39)	<0.001
Short	0.79 (0.48-1.30)	0.354
Long	1.00 (-)	

Table 4.
Quality of interaction: influence of ward environment: Odds ratios (OR) and 95% confidence intervals (CI)

Question	Unadjusted		Unadjusted	
	OR (95% CI)	P	OR (95% CI)	P
Does the ward smell fresh?	1.78 (1.13-2.82)	0.014	2.21 (1.18-4.14)	0.013
Is the ward temperature comfortable?	1.22 (0.08-1.85)	0.36	0.91 (0.57-1.46)	0.71
Do the patients in your bay appear clean, well-groomed and comfortable?	1.62 (1.10-2.40)	0.015	1.15 (0.73-1.82)	0.55
Is the bay clutter-free?	2.02 (1.40-2.90)	<0.001	1.94 (1.31-2.88)	<0.001
In your bay, are water jugs, call bells, mobility aids (if required) for patients within easy reach of patients?	2.08 (1.45-2.99)	<0.001	1.83 (1.19-2.81)	0.006
In your bay, are any personal items within easy reach of patients?	2.01 (1.31-3.09)	0.001	1.53 (0.91-2.58)	0.11
Did the nurse in charge visit you in your bay?	1.47 (1.04-2.09)	0.030	1.53 (1.05-2.23)	0.027

Appendix 1: Ward environment and quality of interaction

Ward environment	Yes total		Yes Quality of interaction						No/Sometimes Quality of interaction					
			Negative		Neutral		Positive		Negative		Neutral		Positive	
	No.	(% of all)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Does the ward smell fresh?	500	(86)	93	(19)	193	(39)	214	(43)	21	(26)	35	(43)	25	(31)
Is the ward temperature comfortable?	472	(81)	93	(20)	180	(38)	199	(42)	21	(19)	48	(44)	40	(37)
Do the patients in your bay appear clean, well	446	(78)	81	(18)	174	(39)	191	(43)	32	(26)	50	(40)	42	(34)
Is the bay clutter free?	402	(71)	67	(17)	147	(37)	188	(47)	47	(28)	71	(43)	48	(29)
In your bay, are water jugs, call bells, mobility aids (if required) for patients within easy reach?	394	(68)	64	(16)	151	(38)	179	(45)	49	(26)	77	(41)	60	(32)
In your bay, are any personal items within easy reach of patients?	466	(81)	87	(19)	172	(37)	207	(44)	26	(24)	53	(49)	29	(27)
Did the nurse in charge visit you in your bay?	215	(40)	32	(15)	89	(41)	94	(44)	74	(23)	121	(38)	124	(39)

Figure 1: Quality of Interaction Schedule (QUIS): Observation Recording Sheet

Observer's Name:		Observer's Signature	
Ward:		Date:	
Time Observation Period Started:		Time Observation Period Finished:	
Total Number of Interactions:	Positive:	Neutral:	Negative:

Before you start the patient observation:

Map the area you are observing below: O for your position, X for patients NOT being observed. Include bed numbers and any other significant features.

1)	Does the ward smell fresh?	
2)	Is the ward temperature comfortable?	
3)	Do the patients in your bay appear clean, well groomed and comfortable?	
4)	Is the bay clutter free?	
5)	In your bay, are water jugs, hearing aids, mobility aids (if required) call bell for patients, within easy reach?	
6)	In you bay, are any personal items within easy reach of patients?	
7)	Did the Nurse in Charge visit your bay during the observation period?	
Other Impressions/information for context:		

Adapted from Healthcare Improvement Scotland (HIS) and Healthcare Environment Inspectorate (HEI) QUIS 2012
Version 3 11/09/2014

Time:	Interaction Description:	Between:	Code:	Verbal/ Non-Verbal:	Length of Interaction:	Reflections:

Code: Positive +: Warm, respectful, sensitive, enabling interactions. Enhanced feeling of significance/security
Neutral =: Basic care. Functional. 'Gets the job done' without any of the positive interaction characteristics.
Negative - : Cold, insensitive, unhelpful, disrespectful, disempowering or diminish significance/security.

Length: 1: Brief Interaction
2: Short Conversation
3: Long conversation/Intervention/Activity/Therapy

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