

Patient-centric Workplace Culture: A Balancing Act for Nursing Leaders

Nazlee Siddiqui^{1,*}, Anneke Fitzgerald²

¹Australian Institute of Health Services Management, University of Tasmania, Hobart, Australia

²Griffith Business School, Griffith University, Gold Coast, Queensland, Australia

*Corresponding author: Nazlee.siddiqui@utas.edu.au

Abstract In Australia and globally, developing a patient-centric workplace culture is an ongoing challenge. Nurse managers must reflect on what a balanced functioning of patient-centric workplace culture entails and how to develop it in a context constrained by rising healthcare costs. This study has investigated nurses' perspective of the association between a patient-centric workplace culture and practical issues such as nurse staffing and perceived quality of nursing care. A mixed methods study design involved sequential (equal status and partially mixed) data gathering from nurses in public hospitals in NSW, Australia. First, a survey questionnaire was employed and yielded 136 responses after adjustment for missing data. This data was analysed using descriptive analysis techniques in SPSS. Then 21 self-nominated nurse managers were interviewed face to face. This qualitative data was transcribed and analysed for recurring themes using a continuous comparative method (CCM). Correlations of patient-centric workplace culture, with nurse staffing ($rS = .655$) and perceived quality of nursing care ($rS = .593$) were moderate. Correlation between nurse staffing and perceived quality of nursing care ($rS = .410$) also existed. Analysis of the interview data resulted in two major themes: the first theme confirmed the association between the three constructs of patient-centric workplace culture, nurse staffing and perceived quality of nursing care. The second theme identified gaps in embedding the espoused patient-centric workplace culture. The study revealed that a patient-centric workplace culture could facilitate positive relationships between nurse staffing and the perceived quality of nursing care. This would happen when patient-centric workplace culture focuses on proactive change management, teamwork and prioritises patient care and adequate nurse staffing. A critical need for nurse managers is to become positive leaders, who can build and embed a patient-centric workplace culture in today's resource constrained environment.

Keywords: *organizational culture, nursing leadership, patient-centric workplace culture, quality of care, nurse staffing*

Cite This Article: Nazlee Siddiqui, and Anneke Fitzgerald, "Patient-centric Workplace Culture: A Balancing Act for Nursing Leaders." *American Journal of Nursing Research*, vol. 5, no. 5 (2017): 165-172. doi: 10.12691/ajnr-5-5-2.

1. Introduction

When workplace culture is patient-centric, it allows nurses to truly focus on patient care [1]. Healthcare organisations operate on a patient-centric workplace culture continuum, depending on how weak or strong the organisation is at establishing, transmitting and updating values and norms around patient care [2]. An organisation's location on that continuum influences patients' experience of quality care [3], nurses' experience of care delivery [4] and practices of patient centred care [5]. As such, establishment of a patient-centric workplace culture is a critical feature for both nurses and patients.

Patient-centric workplace culture is a phenomenon of great importance in the current time, given the increased acceptance of patient centered care globally [6,7,8]. However, nursing management is encountering several issues in creating a patient-centric workplace. This include

rising healthcare costs [9], poor nurse staffing and nursing skill mix [10,11], unmanageable nursing workload [12], increased rate of delayed nursing tasks [13] and increased practices of thin staffing for cost saving [14]. Therefore, investigating how practical factors such as staffing, resource adequacy, and quality of care are aligning with espoused patient-centric workplace culture in the practice environment is a worthy exercise. Moreover, existing literature [5,15], advocates for frequently assessing a health system's readiness for patient-centric culture, amidst usual situation of concurrent reforms in the health sector.

Previous literature [16,17,18] has provided symptoms of positive relationship between patient-centric workplace culture, adequate nurse staffing and quality of care. This study extends the previous literature; aiming for empirical insights into whether nurses recognize why and how to balance patient-centric workplace culture, particularly with the functioning of nurse staffing and perceived quality of nursing care. Such insights are necessary to communicate the practical challenges of practising

patient-centric workplace culture in resource constrained environments.

1.1. Research Question

This study explores nurses' perception of the research question: "How are the constructs of patient-centric workplace culture, staffing and resource adequacy (from this point identified as nurse staffing) and perceived quality of nursing care associated in the Australian nursing practice environment?"

1.2. Definition of Variables

Patient-centricity is an inherent concept of nursing, as to many nurses, nursing is a profession to help people [19]. Healthcare literature, including McCormack's conceptual framework for person centered care [20], the Picker Institute's domains for patient centered care [21] and Kramer and Schmalenberg's Magnet study extension [2] have strongly endorsed the importance of being guided by patient concerns in improving care environments. In this study, patient-centric workplace culture is defined according to Kramer and Schmalenberg's conceptualization of the construct and portrays shared and adaptive system of values and goals that continuously balance concerns for patients and costs [1,2]. Norms such as enthusiastic teamwork, proactive change and productivity improvements support patient-centric workplace culture [2].

The nurse staffing concept concerns the availability of competent nurses to meet context-specific patient care needs [22]. The construct can cover objective concepts of availability of nurses such as nursing care hours per shift for direct patient care [23], nurse to patient ratios [24] and percentage of registered or professional nurses in the total number of direct care nurses [25]. Besides objective measures, researchers often assess the construct subjectively, capturing nurses' sense of support and resources to deliver the required care [17,27]. In this study, nurse staffing describes whether nursing staff perceive they have the time, number of nurses and skill mix to deliver quality care [25]. The construct also covers nurses' perception about whether staffing decisions permit spending time with patients and discuss patient care in the workplace [25].

Perceived quality of nursing care in this study is covering the process aspect of care, including the effectiveness of nurses' initiatives. Example of such initiatives are technical care for daily living, informational care for explaining care delivery to patients and providing emotional care to individual patients [28]. This construct reflects nurses' perception rather than external measures of nursing care. Readers can refer to an earlier published work of the authors [29], for more information about this construct.

2. Methods

2.1. Research Design

The authors were guided by pragmatism [30], to seek practical and theoretically enriched answers to the

research question: "How are patient-centric workplace culture, nurse staffing and perceived quality of nursing care associated in the Australian nursing practice environment". Each of these constructs and their association with each other are measurable with existing quantitative survey instruments, confirming the relevance of a quantitative approach to the research question. However, answers to the research question also have to be pragmatic, leveraging the insight of on the ground nursing experience. Such pragmatic query is beyond the capacity of quantitative measures, making it necessary to conduct this research with mixed methods. The research design matches the mixed methods typology of partially mixed sequential equal status [31]. Accordingly, data collection in this study took place sequentially in 2009, with a survey questionnaire preceding the semi-structured interviews.

Readers who are interested to learn about the functioning of the overall domain of the Australian nursing practice environment, rather than focusing on the construct of patient-centric workplace culture, can refer to an earlier publication of the authors [29]. Furthermore, readers interested for details of the application of mixed methods design in this study can refer to another earlier work of the authors [32].

2.2. Survey Procedure, Participants and Data Analysis

Authors received assistance from the New South Wales Nursing and Midwifery Board (NMB) in the participant selection process. The target was Registered Nurses working primarily in an inpatient setting in NSW, with minimum of two years of experience. The NMB's involvement ensured consistent application of the screening criteria from the relevant nursing register. These screening criteria also necessitated the use of purposive sampling procedure [33] for the survey, guiding the survey to reach nurses with sufficient experience to answer the research question. This study provides an example of mixed methods research that find it restrictive to fix quantitative inquiry to probability sampling procedures [34].

The survey received a return of 157 packs, from the circulation of 2050 survey packs. The final sample size was 136, after necessary adjustments for missing data. Respondents of the survey were predominantly female (92%), on average, 50 years of age, with an average 25 years of nursing experience, and working mostly in public hospitals (74%). Please note that detailed information on participants of this study have been published in an earlier work [29].

The patient-centric workplace culture measure employed in this study uses 12 items rated on a 1 to 7 Likert scale. These scales originated from the "cultural values" sub-scale of the "Essential of Magnetism (EOM)" instrument developed by Kramer and Schmalenberg [33]. The nurse staffing measure uses 4 of Lake's "staffing & resource availability" sub-scale of the Practice Environment Scale-Nursing Work Index (PES-NWI) [25], again rated 1 to 7 on Likert scales. The measure of perceived quality of nursing care has 8 Likert scales, taken from Greenslade and Jimmieson's job performance instrument [26].

The Likert scales had ordinal measures; with scale values of one (1), representing the most negative position of “strongly disagree” and seven (7), representing the most positive position of “strongly agree”. The score calculation for each of the three constructs involved averaging the mean values of each item within that construct. This approach of calculation of the constructs, taking the average value and providing equal weight to each item in the construct, is consistent with the practise of previous researchers [16,25]. Confirmatory factorial and reliability analyses were conducted to ensure the three constructs had acceptable factorial and reliability measures, reflecting factor loadings of at least 0.5 [35] and Cronbach’s standardized alpha (CSA) value of higher than 0.7 [33]. Table 1 below is presenting the factorial and reliability data.

Table 1. Validity and Reliability of the measures

Constructs	Nurse staffing	Perceived quality of nursing care	Patient-centric workplace culture
No. of items	4	8	12
Factor Loadings	.909, .901, .874, .870	.860, .838, .814, .809, .801, .752, .674, .643	.789, .784, .784, .771, .767, .760, .751, .734, .704, .671, .621, .480
*KMO	.755	.845	.875
Reliability (Cronbach Standardized Alpha)	0.911	0.905	0.914

*Kaiser Myer Olkin measure of sampling adequacy

The initial data analyses were descriptive, comprising mean and Spearman’s rank order correlations (SRC). The mean analysis helped to examine for mean values below point 4, on a scale of 1 to 7, which will indicate respondent’s

disagreement that the inquired feature of the construct is adequately present in the workplace. Analysis with SRC happened at two different levels. The first level checked for association between the three constructs i.e. nurse staffing, patient-centric workplace culture and perceived quality of nursing care. The second level assessed association between the items of patient-centric workplace culture and the constructs of nurse staffing and perceived quality of nursing care. Analysis of patient-centric workplace culture, needed to be presented as a total score (Table 3), to reflect the overall presence of the construct in the practice environment and then again, as single items (Table 4), for insights around how individual components of this construct are associated with the other two constructs. The association can be assessed as low, moderate and high in cases where the value of coefficient correlation (rS) is below 0.4, between 0.4 to 0.7 and above 0.7 respectively [36].

2.3. Interview procedure, participants and data analysis

Sixty-five nurses agreed to participate in semi-structured interviews, by returning the interview consent form with the survey pack. A review of the literature [37,38], suggested that semi-structured interviews might need sample sizes in the range of 5 to 25 to reach data saturation. That is, the point when the information from new participants provides little value addition to the themes under study [36]. There is also acknowledgment that understanding the point of data saturation is complex as it is subjective, and influenced by factors such as interviewing experience of the interviewer, data analysis technique, structure of the interview and the interviewees’ familiarity with research topics [39].

Table 2. The profile of the 21 interviewees

SL.	Name	Nursing classifications	Practice Area	Age	Gender	Nursing Experience
1	MG	Registered nurse	Paediatric	41	Female	20
2	HE	Registered nurse	Aged Care	55	Female	25
3	AD	Registered nurse	Critical Care	39	Female	4*
4	ER	Registered nurse	Critical Care	42	Female	17
5	MC	Registered nurse	Midwifery	51	Female	30
6	HH	Registered nurse	Palliative	57	Female	37
7	RS	Registered nurse	Mixed Medical	52	Female	23
8	SD	Nurse unit manager	Peri-operative	54	Female	30
9	JK	Nurse unit manager	Critical Care	51	Female	32
10	BLP	Nurse unit manager	Mixed Medical	59	Male	20
11	BLF	Nurse unit manager	Critical Care	63	Female	40
12	CD	Nurse unit manager	Critical Care	47	Male	21
13	BC	Nurse unit manager	Palliative	62	Female	41
14	DN	Nurse unit manager	Critical Care	50	Female	32
15	RM	Clinical nurse specialist	Mental Health	60	Female	30
16	KD	Clinical nurse specialist	Midwifery	43	Female	18
17	SL	Clinical nurse educator	Midwifery	45	Female	6*
18	BM	Clinical nurse educator	Medical Nursing	43	Female	23
19	MD	Clinical nurse consultant	Paediatrics	44	Female	23
20	MP	Clinical nurse consultant	Infection control	53	Female	33
21	JC	Clinical nurse consultant	Post- Acute	60	Female	34

Note: * British graduate nurses and the reported years of experience is relevant to Australian nursing practice environment only.

The authors recruited twenty-one interviewees, with purposive sampling, from the pool of sixty-five, to select nurses with various clinical practice areas and nursing classifications, as shown in Table 2. In light of the interviewees' extensive work experience, as shown in Table 2, authors deemed the recruited number of participants was adequate to arrive at meaningful themes for the research question. Interviews were conducted one to one basis, each having duration of about forty-five minutes. Interviews took place by phone or at premises, other than their workplace, as preferred by the interviewees. Readers may read an earlier work of the authors [29], for more information on the semi-structured interviews conducted in this study.

The overarching interview question based on the previously stated research question was "how do you think things are currently functioning in the nursing practice environment, regarding matters such as concern for patients and the support you receive to deliver quality care". This interview question was prepared using cues from the survey data, which revealed the existence of significant correlations between patient-centric workplace culture, nurse staffing, and quality of care in the nursing practice environment.

Analysing the semi structured interviews involved two stages: first, provisional coding of individual interviews and the secondly, development of themes. The first stage included tasks such as identification of patterns, labelling the patterns into codes, and organising relevant quotes of interviewees into provisional codes. The development of themes occurred in the next stage, using a continuous comparative method (CCM), studying the provisional codes for commonality and differences among the twenty-one interviewees. Therefore, each theme reflected finalised codes and represented intense patterns that could be either recurring or uncommon [40]. Table 5 lists the finalised codes relevant for the two themes generated from the interview data. For the first theme, data saturation happened with analysis of eighteen interviews, as data from them added meaningful insights to the codes in this theme [36]. In the second theme, data saturation happened with twenty interviews. This indicates that twenty-one interviews were sufficient to fulfil the purpose of this research.

2.4. Ethical considerations

Human Research Ethics Committee of the university, with which the authors were associated with at the time of the study, had approved the original and amended ethical protocol of this study.

As per the approved protocol, both the survey and the interview ensured voluntary participation for participants. The first author returned the transcript of the interview to individual interviewees by email, allowing them the option to confirm, amend, challenge or add new information to the transcript. Participant information sheet had explained the process of transcript confirmation, stating that the transcripts deemed confirmed, if interviewees did not reply within two weeks from the date of the email. Fifteen of the interviewees replied with confirmation and the remaining six did not reply at all.

The first author maintained a reflective journal to reflect on the experience with individual interviewees, including remarks about intense feelings from interviewees. The first author also shared the coding process with the second author, to enhance the credibility of the research process [41].

3. Results

This section contains two parts: the survey and the interview results.

3.1. Survey Result

The Table 3 reports the descriptive data such as the mean value of the individual constructs, along with the correlation co-efficient values of the relationship between the three constructs.

Table 3. Association between patient-centric workplace culture, nursing staffing and perceived quality of care

Construct		1	2	3
1. Patient-centric workplace culture	Mean: 4.83	1.0		
	SD: 1.10			
	n = 136			
2. Nurse staffing	Mean: 3.72	.655	1.0	
	SD: 1.59			
	n = 135			
3. Perceived quality of nursing care	Mean: 5.19	.593	.410	1.0
	SD: 1.04			
	n = 135			

All correlations are significant at $p < 0.001$

Data in Table 3 addressed the research question, confirming association between patient-centric workplace culture, nurse staffing and perceived quality of care, with evidence of significant correlation when any two of the three constructs paired. Correlations of patient-centric workplace culture, with nurse staffing ($rS = .655$), and perceived quality of nursing care ($rS = .593$), were moderate. The correlation between nurse staffing and perceived quality of nursing care was also at moderate level ($rS = .410$). The other point to note in Table 3 is that nurse staffing was an area of concern with a mean value of 3.72, which is below the neutral point. In fact, 3 of the 4 items in nurse staffing, covering concepts of adequacy of number of nurses and levels of appropriately skilled nursing staff, received mean values below the neutral point.

Table 4 further details the association between the three constructs, including correlations between each item of patient-centric workplace culture and the two other constructs i.e. nurse staffing and perceived quality of nursing care. Patient-centric workplace culture had moderate correlations with both nurse staffing and perceived quality of nursing care when looking at prioritization of patient concern (i.e. items 3 and 6 in italics in Table 4), pro-activeness in change management (item 5 in italics in Table 4) and teamwork and enthusiasm (items 4, 7, 9, 10 in italics in Table 4). Therefore, these

items reflect aspects through which patient-centric workplace culture influences nurse staffing and perceived quality of nursing care in the Australian nursing practice environment.

Item 1 in Table 4, expectations for high performance and productivity in the workplace, deserves more attention, since it showed little or no association with nurse staffing. However, this item had a mean value of 6.1 (on a Likert scale of 1 to 7), which indicates nurses face high expectations for performance and productivity in the workplace. Then again, the item had significant correlation with perceived quality of nursing care. This was an interesting finding, indicating that certain aspect of patient-centric workplace culture, that had association to quality of care, was still not functioning in alignment to the existing nurse staffing. Another additional information that can be useful here is that survey respondents' opinions differed regarding prioritizing patient concern versus cost control (i.e. items 3 versus 6 in Table 4) within the construct of patient-centric workplace culture. For example, 70% of survey respondents agreed that patient concern is important in workplace, but only 51% of the respondents agreed that patient concern is a priority over cost consciousness.

Table 4. Correlations between items of workplace culture and constructs of nurse staffing and perceived quality of nursing care

Workplace Culture items		Nurse Staffing	Perceived Quality of nursing care
1. High performance & productivity are expected	Mean: 6.10	0.163	0.364**
	SD: 0.98		
2. Cultural values are known & shared	Mean: 5.3	0.228**	0.435**
	SD: 1.26		
3. Concern for patients is paramount	Mean: 5.6	0.415**	0.503**
	SD: 1.55		
4. Contributions of all (e.g. team members; doctors, nurses) are valued	Mean: 5.2	0.510**	0.403**
	SD: 1.46		
5. Changes are proactively anticipated	Mean: 4.39	0.537**	0.487**
	SD: 1.47		
6. Cost is important, but the patient comes first	Mean: 4.23	0.491**	0.402**
	SD: 1.86		
7. People are enthusiastic	Mean: 4.29	0.638**	0.527**
	SD: 1.54		
8. Swift actions are taken	Mean: 4.3	0.530**	0.329**
	SD: 1.58		
9. Inter disciplinary teamwork is present	Mean: 5.26	0.393**	0.531**
	SD: 1.31		
10. Intra-disciplinary teamwork is present	Mean: 5.01	0.405**	0.536**
	SD: 1.44		
11. Cultural values are transmitted to new team members	Mean: 4.82	0.357**	0.504**
	SD: 1.32		
12. New things are tried	Mean: 4.76	0.469**	0.294**
	SD: 1.47		

***Correlation is significant at $p < 0.001$;

**Correlation is significant at $p < 0.05$

3.2. Interview Result

The analysis of the interview data, in regards to the research question, resulted in two major themes. During the interviews, as nurses were describing how things

function in their workplaces, the first theme of association between the three constructs (i.e. patient-centric workplace culture, nurse staffing and perceived quality of nursing care) had emerged. In most cases, the association was apparent when they described their concern for how things are becoming more challenging at work. Some nurses shared a view that delivering the best quality of care is too difficult nowadays. As a nurse manager stated:

Often, the best quality of care for the patient is not possible, but it is what resources and work environment will allow. That is what really works and has become the norm. Unfortunately, that is also how we are losing our enthusiasm for doing great things at work. (JK)

The above statement shows the nurse manager accepted that, nursing care only match the quality of the available resources. In this acceptance, the authors notice support for the notion of association between the three constructs i.e. patient-centric workplace culture, nurse staffing and perceived quality of nursing care. The nurse manager's statement endorsed that quality of care is not achievable on its own, but with the support of resources and norms of work practices in the nursing practice environment. The term "resource" here, as further explained by this manager, referred to the number of beds, nursing numbers, and skill mix to support patient acuity levels (i.e. the level of nursing care required for each patient). The mention of "loss of enthusiasm" and "norm" is important, as these words signal how nurse staffing and the usual standard of care may influence nurses' enthusiasm for the cultural value of patient care in their daily work.

Furthermore, some nurses perceived nursing leaders (e.g. Director of Nursing) as not proactive, not engaging with nurses at bedside, and failing to negotiate the resources necessary to deliver quality care. Such responses from nurses reflected how components of patient-centric workplace culture i.e. teamwork and proactive change management, impact perceived quality of care. These insights, as shown in Table 5, generated the code "Reciprocity between the constructs", and supported the theme of *association between patient-centric workplace culture, nurse staffing, and perceived quality of care*. Table 5 provides summary of all of the finalized codes, along with the relevant frequency of the codes, for the two themes in this study.

Table 5. Themes and the corresponding codes

Theme	Finalized codes and frequency
<u>Theme 1</u>	<u>Codes & (frequency):</u>
Association between patient-centric workplace culture, nurse staffing and perceived quality of nursing care	Change Implementation & teamwork (15); Support from Director of Nursing (10); Reciprocity between the constructs (18)
<u>Theme 2</u>	<u>Codes & (frequency):</u>
Gaps in embedding patient-centric workplace culture.	High expectations (17); Poor Staffing (20); Prioritizing money over patient care (16)

Analysis of the interview result generated another major theme: *gaps in embedding patient-centric workplace culture*. One of the distinct patterns that supported this theme is high expectation versus inadequate staffing and resources in the nursing practice environment. Quite a few nurses expressed a distinct feeling of lack of support, to meet high expectations in their workplaces.

Their accounts describe a management, which on one hand, is full of expectations about financial and patient care targets, but on the other, cannot afford to provide the resources required to meet those expectations. Nurses understood that financial targets are necessary, as there is huge pressure to contain cost in health. Furthermore, some nurses provided the rationale that, due to the current knowledge explosion in medical science and technology, almost everybody in health, including patients and families, have higher expectations of hospitals. However, nurses still felt grievances against such high expectations as disclosed in the following quote from a nurse manager:

Oh, so much is expected from us by the nursing administrators... it's about KPIs, it's about the treasury basically asking the hospitals to justify the amount of money that they are putting into hospitals, as of course the benchmarks aren't being met because the staffing are not just there, but they are not interested in that. This is not fair and definitely no way to prioritise for patient care. (DN)

Nurses' concerns with the demonstrated approach to prioritizing patient care, as revealed in the above statement, signals that there is a mismatch between the espoused patient-centric workplace culture and the way nurse staffing is functioning in the nursing practice environment. The signal of mismatch seems quite genuine, when nurses revealed a perception that their leaders, in reality, are prioritizing financial KPIs over patient care. Authors noticed the same perception when another nurse manager talked about how the nursing leaders often seem more conscious about concern for money than patient care:

We don't see the Director of Nursing as a nurse; sadly because a lot of their decisions are not always in the interest of the patients. Often it is just political and it is expedient and it is money. (BLF)

The next section provides an integrated view of the survey and interview results, articulating richer answers to the research question; which is, "How are the constructs of patient-centric workplace culture, nurse staffing and perceived quality of nursing care associated in the Australian nursing practice environment?"

4. Discussion

The quantitative survey, as well as the qualitative interviews in this study, detail how certain aspects of patient-centric workplace culture such as concern for patients, proactive change management, and teamwork function interdependently with nurse staffing and perceived quality of care. Furthermore, the study found that Australian nurses feel current nursing leaders are focusing on financial control rather than patient care; compromising the foundation of patient-centric workplace culture, that is, establishment of value of patient care in daily work [2]. A consequence of such compromise is the undermining of the possible positive relationship between patient-centric workplace culture, nurse staffing and perceived quality of care. Given the breakdown of the relationship between these three important constructs, as revealed in this study, it is not surprising that a recent literature [13] has reported

deteriorating conditions in the nursing practice environment.

An important insight from this study is the poor state of nurse staffing in practice environments. Except for a few papers, including Walker et al.'s report on a private hospital [42], examples of inadequate levels of staffing are not uncommon in Australia and abroad [11,43,44]. However, the practical implications of inadequate nurse staffing become clearer when the relationships between nurse staffing, patient-centric workplace culture and perceived quality of nursing are considered. Inadequate numbers and skill-mix of nurse staffing can jeopardize the patient-centric workplace culture and create compounded negative impacts on quality of nursing care. In the absence of adequate nurse staffing, it is difficult for nurses to spend time with patients, which is again a common factor supporting the cultural process of establishing patient concern in the workplace [2] and delivery of quality care [45].

Another crucial insight from the interview in this study is that nurses are experiencing gaps between espoused patient-centric workplace culture and the way resources, including nurse staffing is functioning to deliver care. This notion may have resonated with the quantitative survey findings, which reported insignificant correlation between the expectation of high performance from nurses, and the construct of nurse staffing. These findings raise a concern that while the theme of patient-centered care is increasingly professed in nursing management [46], the required support of nurse staffing to deliver patient centered care is not being provided. Such concern is in line with the talk of lip-service for patient centered care, as discussed in previous literature [47], and well supported by the grievance of nurses against their leaders, as disclosed during the interviews in this study. It is high time for nurse leaders to realize that advocacy of patient concern without the necessary support of nursing staff will fail the purpose, and put unrealistic expectation on nurses [48].

The findings in this study endorse the view that development of positive nurse leaders is crucial for practices of patient-centric workplace culture [49]. A required attribute of this positive nurse leader is the capacity to balance practices of patient centric workplace culture, nurse staffing and delivery of quality care. While there is no easy solution to align the practices of the three constructs, a direction for changed nursing leadership seems evident. That is, nurse managers are to become positive leaders, advocating patient centric workplace culture, nurse staffing as one, and unified agenda. When these two constructs become one agenda, nursing leaders can set staffing as per the required patient centric culture. Success in the proposed advocacy is likely to assist quality care and professional nursing, as evidenced in magnet hospitals [50,51].

In line with the findings of this study, a positive nurse leader will need to exhibit appreciation for true teamwork [52]. Without such appreciation, there will always be the danger of continuing the misaligned practices of patient-centric workplace culture, nurse staffing and perceived quality of care. Example of probable approaches in this avenue include long-term measures like transformational leadership

for shared governance models [53,54], as well as, immediate measures like holding ward events for greater engagement between nursing leaders and bedside nurses [27].

This study had the limitation of a small sample size and low response rate in the survey. However, the addition of 21 interviews may have mitigated the concern for data quality, out of the identified limitations in the survey. The semi-structured interviews of the study were open to responder bias [55]. The authors attempted to counter responder bias, by briefing interviewees that the aim of the study was to capture their perceptions of what is actually happening in their workplaces. Readers should draw learning from this study cautiously, as the data collection happened during a global financial crisis. Notwithstanding, the time of the data was crucial to capture the functioning of the patient centric workplace culture in resource constrained environment.

5. Conclusion

The study has provided empirical evidence of nurses' perspective of why and how patient centric workplace culture, nurse staffing and perceived quality of care should function in association. Drawing on the evidences, the authors initiated a discussion about the need for positive nursing leaders, who can advocate for patient-centric workplace culture and appropriate nurse staffing as one and unified agenda. It would be valuable to assess, in future studies, if advocacy of such unified agenda by nursing leadership could also be financially beneficial.

References

- [1] Brouwer B, Kaljouw M, Kramer M, Schmalenberg C, Achterberg T. Measuring the nursing work environment: Translation and psychometric evaluation of the Essentials of Magnetism. *International nursing review*. 2014; 61(1): 99-108.
- [2] Kramer M, Schmalenberg C. Essentials of Magnetic Work Environment Part 4. *Nursing* 2004; 34(9): 44-8.
- [3] Kieft RA, de Brouwer BB, Francke AL, Delnoij DM. How nurses and their work environment affect patient experiences of the quality of care: a qualitative study. *BMC Health Services Research*. 2014; 14(1): 249.
- [4] Pope T. How person-centred care can improve nurses' attitudes to hospitalised older patients. *Nursing Older People*. 2012; 24(1): 32-7.
- [5] McCance T, Gribben B, McCormack B, Laird E. Promoting person-centred practice within acute care: the impact of culture and context on a facilitated practice development programme. *International Practice Development Journal*. 2013; 3(1): 1-17.
- [6] Meterko M, Wright S, Lin H, Lowy E, Cleary PD. Mortality among Patients with Acute Myocardial Infarction: The Influences of Patient-Centered Care and Evidence-Based Medicine. *Health Services Research*. 2010; 45(5p1): 1188-204.
- [7] Rathert C, Wyrwich MD, Boren SA. Patient-centered care and outcomes: a systematic review of the literature. *Medical care research and review: MCRR*. 2013; 70(4): 351-79.
- [8] Ryan C. The Power to drive change: Working together for excellence. Creating a continuously improving consumer engagement framework for excellence in patient-centered care. *World hospitals and health services: the official journal of the International Hospital Federation*. 2016; 52(1): 37-41.
- [9] Van Oostveen CJ, Mathijssen E, Vermeulen H. Nurse staffing issues are just the tip of the iceberg: A qualitative study about nurses' perceptions of nurse staffing. *International Journal of Nursing Studies*. 2015; 52: 1300-9.
- [10] Dawson AJ, Stasa H, Roche MA, Homer CSE, Duffield C. Nursing churn and turnover in Australian hospitals: nurses perceptions and suggestions for supportive strategies. *BMC Nursing*. 2014; 13(1): 1-10.
- [11] Duffield C, Diers D, O'Brien-Pallas L, Aisbett C, Roche M, King M, et al. Original Article: Nursing staffing, nursing workload, the work environment and patient outcomes. *Applied Nursing Research*. 2011; 24: 244-55.
- [12] Bogossian F, Winters-Chang P, Tuckett A. "The Pure Hard Slog That Nursing Is . . .": A Qualitative Analysis of Nursing Work. *Journal of Nursing Scholarship*. 2014; 46(5):3 77-88.
- [13] Roche MA, Duffield C, Friedman S, Twigg D, Dimitrelis S, Rowbotham S. Changes to nurses' practice environment over time. *Journal of Nursing Management*. 2016: n/a-n/a.
- [14] Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *The Lancet*. 2014; 383(9931): 1824-30.
- [15] Okun S, Schoenbaum S, Andrews D, Chidambaran P, Chollette V, Gruman J, et al. *Patients and health care teams forging effective partnerships*. Washington DC: Institute of Medicine. 2014.
- [16] Messmer PR, Turkel MC. Magnetism and the nursing workforce. *Annual review of nursing research*. 2010; 28: 233-52.
- [17] Schmalenberg C, Kramer M. Essentials of a productive nurse work environment. *Nursing research*. 2008; 57(1): 2-13.
- [18] Kramer M, Schmalenberg CE. Best quality patient care: a historical perspective on Magnet hospitals. *Nurs Adm Q*. 2005; 29(3):275-87.
- [19] Newton JM, McKenna L. The transitional journey through the graduate year: a focus group study. *Int J Nurs Stud*. 2007; 44(7): 1231-7.
- [20] McCormack B. A conceptual framework for person-centred practice with older people. *International journal of nursing practice*. 2003; 9(3): 202-9.
- [21] Bezold C, Rowley W, Peck J, Rhea M. *Patient-Centered Care 2015: Scenarios, Vision, Goals & Next Steps*. <http://www.altfutures.org/pubs/health/Picker%20Final%20Report%20May%2014%202004.pdf>: The Institute of Alternative Futures on behalf of the Picker Institute, Camden, ME 04843; 2004.
- [22] American Nurses Association. *ANA's Principles for Nurse Staffing*. 2nd ed. Silver Spring, MD 20910-3492: American Nurses Association; 2012.
- [23] Needleman J, Buerhaus P, Pankratz VS, Leibson CL, Stevens SR, Harris M. Nurse staffing and inpatient hospital mortality. *New England Journal of Medicine*. 2011; 364(11): 1037-45.
- [24] McHugh MD. Better Nurse Staffing and Nurse Work Environments Associated With Increased Survival of In-Hospital Cardiac Arrest Patients. *Medical care*. 54(1): 74-80.
- [25] Aiken LH, Sloane D, Griffiths P, Rafferty AM, Bruyneel L, McHugh M, et al. Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ Quality & Safety*. 2016.
- [26] Aiken LH, Sloane D, Griffiths P, Rafferty AM, Bruyneel L, McHugh M, et al. Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ Quality & Safety*. 2016.
- [27] Lake ET. Development of the Practice Environment Scale of the Nursing Work Index Research in Nursing & Health 2002; 25: 176-88.
- [28] Greenslade JH, Jimmieson NL. Distinguishing between task and contextual performance for nurses: development of a job performance scale. *Journal of Advanced Nursing*. 2007; 58(6): 602-11.
- [29] Siddiqui N. Investing in Human Relations for Healthy Nursing Practice Environment, Nurses' Job Satisfaction and Quality of Nursing Care. *American Journal of Nursing Research*. 2013; 1(1): 10-9.
- [30] Cornish F, Gillespie A. A pragmatist approach to the problem of knowledge in health psychology. *Journal of health psychology*. 2009; 14(6):800-9.
- [31] Leech N, Onwuegbuzie A. A typology of mixed methods research designs. *Quality and Quantity*. 2009; 43 (2): 265-75.
- [32] Siddiqui N, Anneke Fitzgerald J. Elaborated integration of qualitative and quantitative perspectives in mixed methods research: A profound enquiry into the nursing practice

- environment. *International Journal of Multiple Research Approaches*. 2014; 8(2): 137-47.
- [33] Teddlie C, Yu F. Mixed Methods Sampling. *Journal of Mixed Methods Research*. 2007; 1(1): 77-100.
- [34] Onwuegbuzie AJ, Collins KMT. A Typology of Mixed Methods Sampling Designs in Social Science Research. *Qualitative Report*. 2007; 12(2): 281-316.
- [35] Hair JJ, Black W, Babin B, Anderson R. *Multivariate Data Analysis*. New Jersey: Prentice Hall; 2009.
- [36] Sarma P, Misra R, Aggarwal A. Outcome in patients with enthesitis related arthritis (ERA): juvenile arthritis damage index (JADI) and functional status. *Pediatr Rheumatol*. 2008; 6(1): 1-7.
- [37] Creswell JW, Plano Clark VL. *Designing and Conducting Mixed Methods Research*. California: Sage Publications, Inc. Thousand Oaks California 91320; 2007.
- [38] Guest G, Bunce A, Johnson L. How Many Interviews Are Enough? *Field Methods*. 2006; 18(1): 59-82.
- [39] Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies. *Qualitative Health Research*. 2016; 26(13): 1753-60.
- [40] Bradley EH, Curry LA, Devers KJ. Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Serv Res*. 2007; 42(4): 1758-72.
- [41] Ryan F, Coughlan M, Cronin P. Step-by-step guide to critiquing research. Part 2: qualitative research. *British Journal of Nursing*. 2007; 16(12): 738-44.
- [42] Walker K, Fitzgerald K, Duff J. Supporting a Healthy Culture: Results of the Practice Environment Scale, Australia in a Magnet® Designated Hospital. *Journal of Nursing Administration*. 2014; 44(12): 653-8.
- [43] Swiger PA, Patrician PA, Miltner RS, Raju D, Breckenridge-Sproat S, Loan LA. Review: The Practice Environment Scale of the Nursing Work Index: An updated review and recommendations for use. *International Journal of Nursing Studies*. 2017; 74: 76-84.
- [44] Parker D, Tuckett A, Eley R, Hegney D. Construct validity and reliability of the Practice Environment Scale of the Nursing Work Index for Queensland nurses. *International journal of nursing practice*. 2010; 16(4): 352-8.
- [45] Ball JE, Murrells T, Rafferty AM, Morrow E, Griffiths P. 'Care left undone' during nursing shifts: associations with workload and perceived quality of care. *BMJ Quality & Safety*. 2014; 23: 116-25.
- [46] Gabutti I, Mascia D, Cicchetti A. Exploring "patient-centered" hospitals: a systematic review to understand change. *BMC Health Services Research*. 2017; 17(1): 364.
- [47] Rankin JM. The rhetoric of patient and family centred care: an institutional ethnography into what actually happens. *J Adv Nurs*. 2015; 71(3): 526-34.
- [48] Groves W. Professional practice skills for nurses. *Nursing Standard*. 2014; 29(1): 51-9.
- [49] Scully NJ. Leadership in nursing: The importance of recognising inherent values and attributes to secure a positive future for the profession. *Collegian*. 22(4): 439-44.
- [50] Kutney-Lee A, Stimpfel AW, Sloane DM, Cimiotti JP, Quinn LW, Aiken LH. Changes in Patient and Nurse Outcomes Associated With Magnet Hospital Recognition. *Medical Care*. 2015; 53(6): 550-7.
- [51] Friese CR, Xia R, Ghaferi AA, Birkmeyer JD, Banerjee M. Hospitals In 'Magnet' Program Show Better Patient Outcomes On Mortality Measures Compared To Non-'Magnet' Hospitals. *Health affairs (Project Hope)*. 2015; 34(6): 986-92.
- [52] Polis S, Higgs M, Manning V, Netto G, Fernandez R. Factors contributing to nursing team work in an acute care tertiary hospital. *Collegian*. 24(1): 19-25.
- [53] Keane AE. The Relationship between Nurse Manager Leadership Style and the Enculturation of Shared Governance [text]: Walden University; 2017.
- [54] Bamford-Wade A, Moss C. Transformational leadership and shared governance: an action study. *J Nurs Manag*. 2010; 18(7): 815-21.
- [55] Cooper DR, Schindler PS. *Business Research Methods Boston, USA.: McGraw-Hill Irwin*; 2006.