



Research Article

The Impact of Two Hourly Purposive Rounds (2HNR) on Nurses' Perception and Satisfaction: A Cross-Sectional Study

Zubaida Al Balushi^{1*}, Mudhar Al Adawi², Nasra Al Hashmi³, Samiha Al Habsi⁴, Sausan Al Habsi⁵, Asma Al Abdali⁶, Salwa Al Rawahi⁷, Maryam Al Khambashi⁸

¹Clinical Nurse Educator, Royal Hospital, Oman

²Nurse Researcher, Royal Hospital, Oman

³Assistant Director General for Allied Health, Royal Hospital, Oman

⁴Acting Ward Nurse, Royal Hospital, Oman

⁵Senior Staff Nurse, Royal Hospital, Oman

⁶Acting Unit Nurse, Royal Hospital, Oman

⁷Acting Ward Nurse, Royal Hospital, Oman

⁸Nursing Section Head, Royal Hospital, Oman

*Corresponding author: Zubaida Al Balushi, Clinical Nurse Educator, Royal Hospital, Oman

Citation: Al Balushi Z, Al Adawi M, Al Hashmi N, Al Habsi S, Al-Habsi S, et al. (2023) The Impact of Two Hourly Purposive Rounds (2HNR) on Nurses' Perception and Satisfaction: A Cross-Sectional Study. Int J Nurs Health Care Res 6: 1413. DOI: 10.29011/2688-9501.101413

Received Date: 13 March, 2023; **Accepted Date:** 17 March, 2023; **Published Date:** 20 March, 2023

Abstract

Nurses are the backbone of healthcare organizations, and they play a crucial role in delivering quality care and ensuring patient safety, and that, in turn, can be achieved through the two hourly purposive nursing rounds (2HNR). The 2 HNR is a structured rounding conducted by the bedside nurses on a one to two hourly bases. It has been associated with increased patient satisfaction and nursing care quality, improved nurse-patient interaction, reduced incidence of fall and call bell frequency, and early identification of patients' needs [1]. The current cross-sectional study aims to evaluate the impact of 2 HNR on nurses' satisfaction at the Royal Hospital, Oman. A total of 513 nurses from general units were surveyed using an online survey questionnaire. The current study revealed that majority of nurses were satisfied with 2HNR. A well and organized 2HNR would contribute positively to the healthcare organization's nurses satisfaction, care quality, and patient safety standards. Direct observation of the participants can be incorporated into the data collection process of similar future studies, to gain more valid and accurate findings.

Keywords: Cross-sectional Study; Nurses' perception; Two hourly purposive nursing rounds

Introduction

Nurses are the backbone of the healthcare organizations and they play crucial role in delivering quality care and ensuring patient safety [2]. The two hourly purposive nursing round (2HNR) can fulfill the last point [3]. In 2018, a tertiary hospital in Oman, has implemented the 2HNR in both adult and paediatric general medical and surgical wards, to ensure equity, quality, and standardized nursing care. The 2HNR has been studied by several authors and has been associated with positive outcomes [1,2].

The 2 HNR is a structured rounding conducted by the bedside nurses on one to two hourly bases [2]. The 2HNR is referred to as intentional rounds, timely rounds, and structured rounds in the literature and has been associated with increased patient satisfaction and the nursing care quality, improved nurse-patient interaction, reduced incidence of fall and call bell frequency, and early identification of patients' needs [1,2]. To the best of our knowledge, this is the first study done on the 2HNR in Oman; hence, it is an addition to the entire body of knowledge of the effect of 2HNR in hospital settings. This study aims to evaluate the impact of 2 HNR on nurses' perception and satisfaction at a tertiary hospital in Oman [3].

Methods

Study setting

The research study was conducted at a tertiary hospital in Oman to evaluate the impact of 2 HNR on nurses' perception and satisfaction.

Study design and population

A cross sectional design study was conducted from January 2020 to July, 2020. Nurses working in general units such as medical, surgical, pediatrics, maternity, cardiac units, as well as oncology were invited to participate by filling the online survey. A total of 513 nurses filled the online survey, to assess their satisfaction and perception about the Two Hourly Purposive Nurses Round (2HNR) [4]. The online link to participate in the survey were sent to the nurses by their ward in-charges and clinical nurse educators. Nurses working in critical care units and outpatient units were excluded. The total number of nurses who work at general units

(i.e 1000) and the sample selected for the study is (i.e 513 nurses) is representative to the target population.

Study tool

The survey questionnaire was designed in English as it is the common language used in the hospital. The questionnaire consisted of closed ended questions to reveal perception of the nurses in regard to the 2HNR. A total of nine closed ended questions were established. Likert scale was used with five options from strongly agree to strongly disagree. These types of scales are commonly used to assess the attitude and opinion of the participants . The questions were about nurses' perceived ability of performing the round during the three shift duties, the perceived benefits and values for nurses and patients, the perceived work load and time consumption; reduction of call bell from nurses' point of view, satisfaction, and challenges of performing the 2NHR [5]. A survey questionnaire was constructed by the researchers based on program's objectives, and later on was piloted among 20 nurses in 2019. Nurses' feedback revealed that the survey questionnaire was clear.

Data collection

The online link to the survey questionnaire was distributed by the researchers to all general units through their ward nurses and clinical educators to invite them for participation. Ward nurses and clinical educators were utilized for the recruitment process as they were having access to all nurses' contact. A seven-month period was given to allow nurses participate and give feedback on the practice based on their experience. Frequent reminders were sent to reach the targeted sample size and that was with the help of ward incharges and the clinical nurse educators.

Statistical analysis

Descriptive analysis was performed to describe the characteristics of the participants such as percentage, frequency, counts of the gender, length of experience, and qualification (Table 1). Chi-square and cross tabulation analysis were conducted to correlate nurses' qualification with perceptions (i.e the perceived ability of the nurses in performing the round during the three shift duties, perceived benefits and values for nurses and patients, perceived workload and time consumption, reduction of call bell from nurses' point of view, satisfaction, and challenges of performing the 2NHR) (Table 2).

	Variable	Frequency <i>n</i> (Percentage)
Gender	Male	20 (3.9%)
	Female	492 (96.1%)
Length of Experience	Less than 3 years	76 (14.8%)
	3-6 years	123 (24%)
	7-9 years	83(16.2%)
	10-12 years	92 (18%)
	More than 12 years	138 (27%)
Qualification	Diploma in General Nursing	277 (54.1%)
	Post Basic Diploma	28 (5.5%)
	BSN with Post Basic Diploma	101 (19.7%)
	BSN without Post Basic Diploma	103 (20.1%)
	MSN	4 (4%)

Table 1: Participants' Characteristics (Nurses *n* = 513).

	Response	Total %	Qualification (<i>p</i> value)
Purposeful rounding enhanced my skills in managing my time	Agree	276(53.9%)	.024
	Neutral	138 (27%)	
	Disagree	98 (19.2%)	
Purposeful rounding enabled me to prioritize my care to patients	Agree	313 (61.1%)	.256
	Neutral	123 (24%)	
	Disagree	76 (14.9%)	
I am able to perform the purposeful nursing rounds during morning shift	Agree	279 (54.5%)	.125
	Neutral	147 (28.7%)	
	Disagree	86 (16.8%)	
I am able to perform the purposeful nursing rounds during afternoon shift patients	Agree	313 (61.1%)	.069
	Neutral	126 (24.6%)	
	Disagree	72 (14.1%)	
I am able to perform the purposeful nursing rounds during night shift	Agree	353 (69.1%)	.463
	Neutral	105 (20.5%)	
	Disagree	53 (10.4%)	

There are benefits and values to purposeful nursing rounds for patients	Agree	388 (76%)	.018
	Neutral	81 (15.8%)	
	Disagree	42 (8.2%)	
There are benefits and value to purposeful nursing rounds for staff	Agree	343 (67%)	.035
	Neutral	97 (18.9%)	
	Disagree	71 (14.1%)	
Purposeful nursing rounds decreases workload and saves time	Agree	167 (32.6%)	0.003
	Neutral	156 (30.5%)	
	Disagree	188(36.9%)	
Purposeful nursing rounds reduced the call bell usage (patients tend not to use the call bell when I perform the round regularly).	Agree	231 (45.2%)	0.014
	Neutral	107 (20.9%)	
	Disagree	173 (34%)	
I am satisfied with the current process of performing purposeful nursing rounds	Agree	260 (50.8%)	.181
	Neutral	152 (29.9%)	
	Disagree	99 (19.3%)	
I have challenges on performing purposeful nursing rounds during my shift	Agree	273 (53.4%)	.120
	Neutral	150 (29.5%)	
	Disagree	(17.2%)	

Table 2: Benefits and Challenges of the 2HNR.

Ethical consideration

This study was approved by the Hospital Scientific Research Board under approval number 62/2019. Participants of this study were informed about the objective of the research and voluntary participation was explained via an online link prior to introducing the survey questions. Additionally, participants were informed through the link that once they click on the bottom of the agreement; they automatically would agree to participate in the study. No details were required for the tool to identify specific participants. To secure the collected data, all data were transferred directly online to the primary researcher.

Results

Participants' characteristics

Based on the survey findings, a total of 513 nurses have completed the survey and female constituted the highest proportion (96.1%). In terms of experience, 27% were more than 12 years' experienced, followed by 24% of the participants having 3-6 years of experience. About 54.1% of the participants held Diploma in

general nursing . MSN qualified nurses formed the least percentage of participation (Table 1).

Benefits and challenges of the 2HNR

Around 53.9% of the participants believed that the two hourly nurses round (2HNR) had enhanced their skills of time management. Moreover, 61.1% were able to prioritize their patients care as a result of the two hourly rounding. The participants were able to perform the two hourly nurses round at all shifts, the morning shift (54.5%), the afternoon shift (61.1%), and the night shift (69.1%), respectively [6-8].

Looking at the benefits and values that are added by the 2HNR, the participants agreed that it does pose benefits and value to the patients (76%) and the staffs (67%). The 2HNR is seen as an approach to decrease the workload and save time among 32.6% of the participants, while it is not the same case among 36.9% of the participants, who disagreed on having the 2HNR as a way to reduce the workload and save time. Approximately 50.8% of the participants were satisfied with the 2HNR. About 53.4% of the

participants had faced challenges in performing the 2HNR during the shifts.

Based on the findings, the following significant correlations were found. There is a significant relationship between the qualification level and the nurses' ability in managing the time (p value 0.024). The 2HNR is deemed significant to add value and benefits to both patients (p value 0.018) and the staff nurses (p value 0.035). 2 HNR decreases the workload and saves time (p value .003), reduces the call bell frequency whenever performed on regular basis (p value 0.14).

Discussion

Female represented the highest proportion in this survey (96.1%) as at the local hospital the number of females is obviously nineteen times more than the male. As the 2HNR tackles the basic needs of the patients, general diploma nurses, who are usually the bedside nurses, formed the highest percentage of participation. Moreover, nurses who pose higher qualification

In term of ability in managing time and ability to prioritize the care by performing the intentional rounds, this study found that effective rounding could enhance the skills of nurses time management and task prioritization. This is supported by Fabry (2014) and Langley (2015) studies which found that intentional rounds causes fewer interruptions and spare of time during nursing activities [4,8]. Moreover, intentional rounds enhances nurses ability to manage their time, as it allows them to continuously assess and prioritize the nursing care, and identify patients concerns early [5,9-18].

A significant percentage of more than 54% of the participants could manage to conduct the 2HNR during all the shifts and that indicates that the 2HNR is doable and can be integrated into the daily nursing practice. However, a special attention must be paid to the factors that rendered other participants who did not manage to perform the 2HNR in all the shifts. Proper planning of the 2HNR process and policy can be executed to overcome the barriers to implantation [18].

In terms of benefits and values associated with the 2HNR, it can be argued that a significant percentage of the participants have gained time and tasks' management skills which are crucial to the nursing task implementation. More than half of the participants acknowledged that the 2HNR poses benefits and value to both the staffs and patients; therefore it can add a lot of value to the overall quality of the nursing care. The latter findings go parallel with [15,6,16] Patterson (2014), Harris et al. (2019), Ryan et al. (2019) findings, stressing that intentional nursing round has positive effect on patients as it recognizes changes and deteriorations in patients' health status and spares time for nurses to stay with sicker patients (Patterson, 2014) [15,6,16]. Importantly, by checking on patient frequently, all patients needs like pain management, comfort, and

safety needs would be met [13]. The 2HNR is seen beneficial to nurses and this finding supports the literature in terms of viewing the intentional rounds as beneficial too in understanding the patient and planning the care as accordingly, reducing patient's and family's anxiety and uncertainties [19].

In this study, some nurses perceived 2HNR as a burden and extra work for them. This result aligns with Fabry (2014), Harris et al. (2019) and Ryan et al. (2019) studies in which some nurses also perceived that intentional round was an additional work and burden to them [4, 6,9,16]. The last was attributable to the following. First, the burden of rounds' documentation. Secondly, nurses perceived that they had been checking on their patients on regular and frequent basis in the normal course of patient care and the 2HNR would not add a lot in knowing patients basic needs [6,9,16]. In the current study, some nurses felt reluctant to perform the 2HNR as they thought that the 2HNR takes them away from focusing on sicker patients. Though the participants of this study valued the role 2HNR in prioritizing their patients care, the 2HNR was perceived as a workload [16]. This finding is contradicting with the 2HNR task prioritization component and goal and this point can be an indication of improper proper education on 2HNR and lack of buy-in of the task among nurses [9,16].

Based on the participants perception, whenever the 2HNR had been performed regularly, the call bell usage has had reduced. The last finding matches Krepper (2014), Mathew (2014) and Langley (2015) findings [7,8,10]. Attending call bells, at each two hours, ensures fulfillment of our patients' needs and reduction of the call bell [7,17].

This study found that more than half of the nurses were found to be satisfied with the current process of the 2HNR. Langley (2015) also found that intentional rounds have a positive effect on staff satisfaction, secondary to enhanced teamwork and communication [8]. The 2HNR was found to be associated with some challenges since more than half of the respondents (53.4%) reported that they had challenges with performing the 2HNR. These challenges included rounds' documentation load, difficulty in structuring the rounds along with other nursing procedures, and rapid flow of patients. According to the literature, time constraints and perception of being too busy, fluctuating in patients' number and acuity, staffing levels, and rounds' documentation loads were the major challenges identified for the 2HNR [13]. The challenges can be overcome by performing a well-organized 2HNR process. A well-organized 2HNR can offer multiple benefits to nurses, patients, families, and the entire health care organization.

Conclusion

In conclusion, the current cross-sectional study aimed to evaluate the impact of 2HNR in a tertiary hospital in Oman. The study continued in general units from January 2020 to July 2020

(Seven Months). A total of 513 nurses responded to the online survey, which assesses the perceived ability to perform the round during the three-shift duties, the perceived benefits and values for nurses and patients, the perceived workload and time consumption, reduction of call bell from a nurse's point of view, satisfaction, and challenges of performing the 2HNR. The collected data were processed and analyzed descriptively to describe the characteristics of the participants and by Chi-square and cross-tabulation analysis to correlate nurses' qualifications with studied variables. Ethical approval was obtained from the Hospital Scientific Research Board under approval 62/2019. The collected data shows that most of the respondent is female nurses with a percentage of 96.1%, and there is a good distribution of their experience, varying from less than one year to more than 12.

This study valued the role 2 HNR in prioritizing patients' care. Whenever the 2HNR was performed regularly, the call bell usage was reduced, and the majority of nurses were satisfied with the current process of the 2HNR. On the other hand, challenges that were perceived as workload, by nurses were the documentation load and difficulty structuring the rounds along with other nursing procedures and rapid flow of patients. Overall, this study acknowledges that a well and organized 2HNR procedure would contribute positively to the entire health care organization's quality and patient safety standards, and staff satisfaction. A more rigorous study needs to be conducted to further explore challenges to the 2HNR practice at the tertiary hospital in Oman, considering the staffing level, structure of the ward, leadership, structured rounding education, ward layout, and workload [11].

Limitation

The main limitations of the current study are as follows. This is a single center study and that might limit generalization of the results to other health care organizations. Moreover, the study was dependent on filling the online self-administered survey questionnaire. It would be a great input if the online survey findings would be verified with onsite clinical researcher's observations by the researchers, to add more credibility to the entire study findings. Cross tabulation of data has been limited to the participants' qualifications, while years of experience and gender could have impacted the study findings.

Acknowledgement

The researchers would like to convey their great gratitude to the participants for their participation in this study. Special thanks to the tertiary hospital's Administration for its' ostensible support in facilitating the study resources. The study has no conflict of interest.

References

1. Al Danaf J, Chang BH, Shaeer M, Johnson KM, Miller S, et al. (2017) Surfacing and addressing hospitalized patients' needs: proactive nurse rounding as a tool. *J Nurs Manag* 26: 540-547.
2. Christiansen A, Coventry L, Graham R, Jacob E, Twigg D, et al. (2018) Intentional rounding in acute adult healthcare settings: A systematic mixed-method review. *J Clin Nurs* 27: 1759-1792.
3. East L, Targett D, Yeates H, Ryan E, Quiddington L, et al. (2020) Nurse and patient satisfaction with intentional rounding in a rural Australian setting. *J Clin Nurs* 29: 1365-1371.
4. Fabry D (2014) Hourly rounding: perspectives and perceptions of the frontline nursing staff. *J Nurs Manag* 23: 200-210.
5. Flowers K, Wright K, Langdon R, McIlwrath M, Wainwright C, et al. (2016) Intentional rounding: facilitators, benefits and barriers. *J Clin Nurs* 25: 1346-1355.
6. Harris R, Sims S, Leamy M, Levenson R, Davies N, et al. (2019) Intentional rounding in hospital wards to improve regular interaction and engagement between nurses and patients: a realist evaluation. *Health Serv Deliv Res* 7: 1-166.
7. Krepper R, Vallejo B, Smith C, Lindy C, Fullmer C, et al. (2014) Evaluation of a standardized hourly rounding process (Sharp). *J Healthc Qual* 36: 62-69.
8. Langley S (2015) Effects of rounding on patient care. *Nurs Stand* 29: 51-59.
9. Macy E (2022) Improving hourly rounding on an orthopaedic trauma unit. *Orthop Nurs* 41: 387-390.
10. Mathew B (2014) Improving Nurses Knowledge of Purposeful Rounding By Implementing Evidence into The Practice Setting In The Emergency. 2014. Doctoral Chatham University.
11. Mulugeta H, Afenigus AD, Wagnaw F, Haile D, Tadesse A, et al. (2020) The effect of hourly nursing rounds on patient satisfaction at Debre Markos Referral Hospital, Northwest Ethiopia: a non-randomized controlled clinical trial. *International Journal of Africa Nursing Sciences* 13: 100239.
12. Negarandeh R, HooshmandBahabadi A, AliheydariMamaghani J (2014) Impact of regular nursing rounds on patient satisfaction with nursing care. *Asian Nurs Res* 8: 282-285.
13. Neville K, Lake K, LeMunyon D, Paul D, Whitmore K (2012) Nurses' perceptions of patient rounding. *J Nurs Adm* 42: 83-88.
14. Nuckols TK, Needleman J, Grogan TR, Liang LJ, Worobel-Luk P, et al. (2017) Clinical effectiveness and cost of a hospital-based fall prevention intervention. *J Nurs Adm* 47: 571-580.
15. Patterson LM (2014) Preparing staff for intentional rounding. *Journal for Nurses in Professional Development*. 30: 16-20.
16. Ryan L, Jackson D, Woods C, Usher K (2019) Intentional rounding: an integrative literature review. *J Adv Nur* 75: 1151-1161.
17. Shin N, Park J (2018) The effect of intentional nursing rounds based on the care model on patients' perceived nursing quality and their satisfaction with nursing services. *Asian Nurs Res* 12: 203-208.

Citation: Al Balushi Z, Al Adawi M, Al Hashmi N, Al Habsi S, Al-Habsi S, et al. (2023) The Impact of Two Hourly Purposive Rounds (2HNR) on Nurses' Perception and Satisfaction: A Cross-Sectional Study. *Int J Nurs Health Care Res* 6: 1413. DOI: 10.29011/2688-9501.101413

18. Taherdoost H (2019) What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/ attitude scale/ likert scale. *International Journal of Academic Research in Management*, 8: 1-10.
19. Toole N, Meluskey T, Hall N (2015) A systematic review: barriers to hourly rounding. *J Nurs Manag* 24: 283-290.