

# Repositioning Practice of Bedridden Patients: An Evolutionary Concept Analysis

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## Abstract

**Introduction:** Repositioning practice is an essential pressure ulcer prevention intervention that has emerged in the history of nursing. Numerous terms are employed to indicate its meaning, such as turning, positioning, or posturing. However, there is no available analysis that distinguishes these terms or analyzes repositioning practice attributes.

**Objective:** To analyze repositioning practice as a concept of bedridden patients in hospitals by combining methods from Foucault's archeology of knowledge and Rodger's concept analysis.

**Concept Description:** Repositioning practice passes through three eras: classical, modern, and research. The repositioning practice is "turn a bedridden patient in a harmonized way and ends with anchor and documentation." The analysis concludes seven attributes for the repositioning practice: pre-turn, assessment, turn, harmonization, anchor, documentation, and time. The analysis assumes bedridden patients, and assigned nurses on duty are the antecedents. Moreover, the main consequence is pressure ulcer prevention, while patient safety and quality of care are the secondary consequences.

**Discussion:** Repositioning practice understanding has grown with time. Each era has added to or removed from nursing's understanding for repositioning practice until it appears as it now. The current analysis expects further development in repositioning practice understanding and applications.

**Conclusion:** Repositioning practice is an important nursing intervention and has shown a dynamic movement over history. It is expected that this dynamic will continue in the future.

## Keywords

bedridden, patient safety, pressure ulcer, quality of health care

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## Introduction

A pressure injury, pressure ulcer, or pressure sore refers to cellular death due to pressure and shear (Gefen, 2018). Experts have suggested a skin assessment (Kim et al., 2018), repositioning practice, offloading mattresses, nutritional support, and skincare (EPUAP/NPIAP/PPPIA, 2019) to prevent it. Even though evidence shows positive consequences from these measures in prevention (Gunningberg et al., 2017; Renganathan et al., 2018; Sving et al., 2014; Webster et al., 2017), repositioning practice has faced challenges related to its definition.

Nurses have been practicing repositioning for more than 200 years. Nevertheless, the evidence shows disagreements in defining repositioning either based on frequency (Jocelyn Chew et al., 2018), quality (Gunningberg et al.,

2017), techniques (Weiner et al., 2017), or even the used term (Jocelyn Chew et al., 2018). However, it is used in combination with the term "turn," such as "repositioning and turning" (Kozier et al., 2018) or "turning and repositioning" (White, 2011).

Nurses are receiving contradictory information about the repositioning practice. It starts from time (either every two,

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three, or based on the patient's condition) and passes through all attributes, which negatively impact the compliance. For instance, reports indicate that only 40% of patients needing repositioning are treated appropriately (Schutt et al., 2018). Furthermore, in India, a study found that 70% of patients did not get the required level of repositioning practice (Renganathan et al., 2018). Similar results have been obtained in Belgium (Beeckman et al., 2011), Sweden (Källman et al., 2016), Egypt (Ali et al., 2018), China (Feng et al., 2016), Australia (Chaboyer et al., 2016), Hong Kong (Kwong et al., 2016), and the Netherlands (Meesterberends et al., 2013). No one can compare these results or evaluate the improvement strategies among those studies without standardizing the intended meaning. Therefore, repositioning is a cornerstone in the ulcer prevention (Gefen, 2018) and crucial to the patient safety (Duncan, 2007). Standardizing the concept is a beneficial aspect to nursing science.

## Objectives

The current paper applied a hybrid analysis approach that utilizes the archeology of knowledge exploration (Gutting, 1989) and Rodger's evaluation concept analysis (Tofthagen & Fagerström, 2010) to clarify the contemporary meaning of repositioning. Moreover, the current paper presents the repositioning as performed by nurses for pressure ulcer prevention. Even though it might be performed by others or for different reasons such as grooming or feeding, the main concern is done by nurses or under nurses' supervision for pressure redistribution to achieve ulcer prevention (White, 2011). Therefore, the aim is to analyze repositioning in the nursing context.

## Literature Review

A literature search was conducted using the PubMed, Scopus, CINAHL, and Google Scholar databases, together with the E-library database of Chulalongkorn University. Moreover, there was a shelf search of the nursing textbooks available in the library of Chulalongkorn University. The terms "repositioning," "positioning," "turning," and "move out" were searched for in the keywords and titles of articles. Searches were performed in April 2021, and two independent investigators conducted the article selections based on presenting the following inclusion criteria: (a) definitions and attributes of repositioning, (b) antecedents, consequences, and empirical evidence of repositioning, and (c) published in English. The exclusion criteria were: (a) letters to the editors, (b) non-peer-reviewed articles, (c) commentaries, (d) discussing the repositioning out of pressure ulcer prevention context, and (e) discussing the repositioning performed by non-nursing personnel or for other than pressure ulcer prevention purpose. Fifty-six out of 176 potential references were selected based on the inclusion and exclusion

criteria. All of the authors performed the screening. First, the researchers checked for duplicate references and studies conducted on a different topic. Then, the title was screened for its inclusion of at least one of the search terms ("repositioning" or "positioning" or "turning" or "move out" and "patients"). Finally, references were screened against the exclusion criteria. The references that were not written in English were also excluded.

A total of 53 literatures were analyzed and divided become three groups, which included classical era (Basil, 1888; Bradford, 2016; Domville, 1881; Elliot, 1896; Nightingale, 1860; Rogers, 1849; Sanders, 1916; Scanlan, 1886), modern (Bardsley et al., 1964; Bliss et al., 1967; Burston et al., 1950; Carpendale, 1974; Cope, 1939; Exton-Smith, 1961; Matheson & Lipschitz, 1956; Newell Jr et al., 1970; Silver, 1967; Souther et al., 1973), and research (Beeckman et al., 2013; Berman et al., 2010; Bours et al., 2002; Carpenito, 2013; DeWit & Williams, 2013; Diepenbrock, 2011; Eckman & Aldinger, 2013; EPUAP, 2009; EPUAP/NPIAP/PPPIA., 2019; Hall & Clark, 2016; Jocelyn Chew et al., 2018; Kozier et al., 2018; Langemo et al., 2015; Lewis et al., 2016; Lynn, 2010; Lynn, 2018; Manderlier et al., 2017; Miles et al., 2013; Mogotlan, 2015; Moore & Cowman, 2015; Moore et al., 2011; Morton et al., 2017; NPUAP/EPUAP/PPPI, 2014; O'Neil, 2004; Potter et al., 2013; Rhoads & Meeker, 2008; Saliba et al., 2003; Samuriwo & Dowding, 2014; Soban et al., 2011; Springhouse, 2006; Tayyib & Coyer, 2017; Tayyib et al., 2016; Treas & Wilkinson, 2012, 2013; White, 2011; Wilkinson & Van Leuven, 2016; Yarkony, 1994).

Authors agreed to point out these epistemological events as follows; the year 1930 is the transition between the classical to modern era. That was due to shifting the nature of ulcer development understanding, as characterized by shifting the used expression from bedsore to be pressure sore. Therefore, the classical era ended in 1929. The modern era started in 1930 and ended by inventing the first classification system for pressure ulcers in 1974 (Shea, 1975). The classification still influences the modern classifications until nowadays. That classification opens the gate for massive studies in the field of pressure ulcer prevention (including repositioning). At that time, a panel of experts (EPUAP/NPIAP/PPPIA, 2019) proposed improvements for pressure ulcer understanding (Kottner et al., 2020), which influenced changes in the understanding of the nature of repositioning (Foucault, 2002). Authors assume that this period ended in 2020 due to proposed changes in repositioning techniques based on the presence of the last pandemic (Moore et al., 2020).

## Concept Description and Model

Literature that compound these words are textbooks used in teaching and hold in the title "fundamental of nursing" (Burton & Ludwig, 2014; DeWit & Williams, 2013; Kozier et al., 2018; Nugent & Vitale, 2014; Potter et al., 2013;

Suresh, 2017; Wilkinson & Van Leuven, 2016; Wilkinson, 2016; Yoost & Crawford, 2019) or “foundation of nursing” (Cooper & Gosnell, 2014; White, 2011). Therefore, passing these terms from writing and several revisional rounds reveals that the ambiguity of defining repositioning (or mixing it with turning) might be a stream in nursing science. Nevertheless, it appears as moving, positioning, and changing patient posture to refer to the same meaning (Kozier et al., 2018).

Repositioning practice specifies the behavior of repositioning. Therefore, instead of using repositioning expression, which might refer to the frequency (Jocelyn Chew et al., 2018) of turn or duration between each performance (Hanna et al., 2016), authors agreed that repositioning practice specifies the actual performance (Avsar et al., 2019).

The analysis divided the historical period based on the changes in the preconceptual level. The preconceptual level was attribution, articulation, designation, and derivation of the context (where the concept belongs). Foucault believed that the changes in the preconceptual level depend on how people understand particle expression or deal with it. Understanding a concept is influenced by how people preserve it (Foucault, 2002).

### Classical Era Until 1929

Florence Nightingale adopted “moved about” (Nightingale, 1860) to refer to repositioning practice. While others utilized other terms such as; changed position, turn, moving, and turning (Scanlan, 1886) which shows disagreements on the terms for describing the intervention. Conceptualizing the content meaning shows that a patient who is unable to move will have bedsores in the forms of successions. Therefore, nurses have to do the intervention “move out” (Nightingale, 1860). If the nurse fails to do the “move out,” the patients will have pressure ulcer “bedsore” (Nightingale, 1860). For the nature of relation “*Type of dependences,*” bedsore depends on the nursing care (Scanlan, 1886). Therefore, the meaning contains the turn as physical action from nurses. *The combination* of repositioning practice depends on nursing efforts to prevent ulcer formation.

The second aspect of archeology is in the form of the “*enunciative*” (Foucault, 2002). Repositioning practice at that time appeared limited and depended on personal input. Also, there are no available discussions about doing “*procedure of intervention.*” As well there was a strong “*dogmatic*” belief in its importance with no reasons why that was necessary (Scanlan, 1886) accompanied by a weak scientific rationalization on when and how it should happen (Scanlan, 1886).

### Modern Era (1930–1974)

The aim of repositioning practice was exposing the skin to light, which (the light) would prevent pressure ulcers

(Grossman & Lightfoot, 1945). The analysis explicates that repositioning practice intends to be a practice (Bliss et al., 1967). It appeared as a teamwork intervention, not an individual task (Carpendale, 1974; Exton-Smith, 1961). Also, the frequency of turn was within two hours, which appears quite obvious (Silver, 1967) with scientific rationalizations (Bardsley et al., 1964; Exton-Smith, 1961; Matheson & Lipschitz, 1956). Also, documentation is appressed as an essential element (Silver, 1967).

Literature mentioned the need to offload the pressure by pads, mattresses, or other devices (Bliss et al., 1967), which implicitly proposes reducing the repositioning practice frequency every two hours. Also, the literature did not describe the techniques for fixing the patient’s posture “after the turn.” Trumble (1930) described all aspects of repositioning practice except the fixation. Finally, literature eliminates expressions that blame nurses for pressure ulcer development, which means a transfer in the field of memory “disappears.”

### Research Era (1975–2020)

In 1975, pressure ulcers were classified based on the anatomical aspect (Shea, 1975). Later, the risk assessment tools (Braden et al., 1987) generated revolutionary thoughts in pressure ulcer prevention. Then, the advisory panels were founded which transferred the concern to the global level (Moore, 1988). All those changes remodified pressure ulcer prevention and, as a result, impacted repositioning practice. Those reformations were characterized by clinical, academic, and organizational significant changes in pressure ulcer prevention. The endpoint was chosen as 2020, where the coronavirus disease 2019 (Tripathi et al., 2020) impacted pressure ulcer prevention, which includes the repositioning practice (Moore et al., 2020). Until the time of analysis, this consequence is not precise yet.

The analysis noticed the presence of colored pictures combined with written texts (Burton & Ludwig, 2014; Kozier et al., 2018; Nugent & Vitale, 2014; Potter et al., 2013; Wilkinson & Van Leuven, 2016; Yoost & Crawford, 2019). That denotes that the words cannot explain the repositioning practice alone and so the photos were required (Moore et al., 2015). References also focus on nurses’ compliance (Bergstrom et al., 2013; Cyriacks & Spencer, 2019; Jocelyn Chew et al., 2018), quality (Schutt et al., 2018), and its consequences (Moore et al., 2015).

On the other hand, literature had not shared a similar “*field of memory,*” for the time. For instance, international guidelines proposed an individualized plan for repeating the intervention “repositioning practice” (EPUAP/NPIAP/PPPIA., 2019). That meant there was no definite cut off point to determine the time between each repositioning practice, while others declared a specific predetermined point of time for the repositioning practice either every two hours (Kozier et al., 2018) or more (Bergstrom et al., 2013; Dancy et al.,

2010; Fragala & Fragala, 2014; Jocelyn Chew et al., 2018; Ostadabbas et al., 2011; Pickham et al., 2016; Vanderwee et al., 2007). As for the quality of pressure distribution, international guidelines present the highest focus on its need, which had almost disappeared from nursing textbooks.

**Attributes.** The analysis applied summative content analysis for the references from the last research era to explore the attributes, assuming that the knowledge accumulated appears in the work of literature at that particular point. The analysis showed that 577 different locations highlight a repositioning practice component. These points are categorized for 72 codes to generate seven defining attributes as summarized in Table 1.

**Pre-turn.** Pre-turn is what nurses do before starting the turn to make the patients ready (Lynn, 2010). Statements or text that refers to pre-turn features appear in 89 locations to consist of 15.7% of the total frequencies. (The detailed information can be seen in Supplementary File Table S1). Authors formulated these texts to 15 codes: identifying the patients, introducing the nurse, explaining the procedure, preparing the patient's bed, adjusting the arm, placing sheet, securing the patient's buttocks, adjusting the patient's knees, removing the pillows, elevating side rail, guaranteeing patient's privacy, the appropriate starting position, special considerations for the prone position, securing the patient's leg, and handwashing.

**Patient Assessment.** Assessing the patient is a primary step in nursing care (Doenges et al., 2019), including repositioning practice. Assess the patients' general condition appears in 41 locations to formulate 7.11% of the total over four codes: assess patient ability, assess pressure ulcer risk, revise the turn restrictions, and skin assessment (the detailed information can be seen in Supplementary File Table S2).

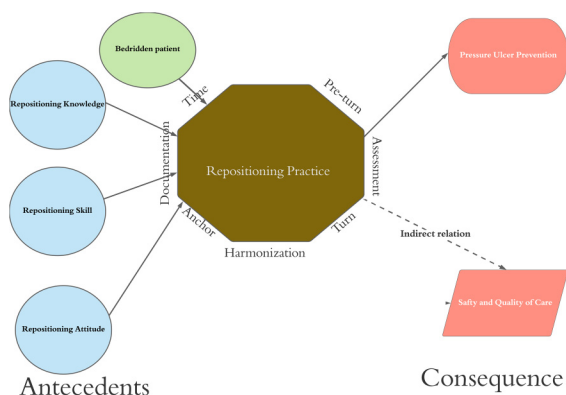
**Turn.** Turn is the brightest attribute, and it reflects the procedure to hold the patient and change his posture. It appears in many places in combination with repositioning (Lynn, 2010). Turn

appeared in 89 locations to formulate 15.5% of the total. The authors categorized these points over twelve codes: hand on the shoulder, hand on hip, hold head and neck, move the arm, one hand under the patient, move the leg, move the knees, monitoring the patients' conditions during the turn, lift by sheet or device, rolling the patients, pressure mapping, check the range of motions, and move the heels (the detailed information can be seen in Supplementary File Table S3).

**Harmonization.** Harmonization refers to the proper coordination between nurses during the action of turn (Berman et al., 2010; Burton & Ludwig, 2014; DeWit & Williams, 2013; Kozier et al., 2018; Nugent & Vitale, 2014; Potter et al., 2013; Wilkinson & Van Leuven, 2016; Wilkinson, 2016). Texts and pictures impersonate the harmonization as vital attributes. Although the term harmonization was not applied among the revised references, the authors preferred it to describe the current thematic meaning. Sixty-three locations mentioned the meaning of harmonization. Authors categorized them into four codes: two to three staff participate in the move, count to three, proper use of body mechanism, and one nurse at each side of the bed. The frequencies equal 10.8% of the total (the detailed information can be seen in Supplementary File Table S4).

**Anchor.** An anchor is a heavy metal piece used by ships to assure stability over the sea (King, 2019). Although the anchor is not a famous description for fixing patients on specific posture, authors assumed it displays the intended meanings. Therefore, the anchor is fixing the patient on a specific posture. It allows the revascularization of body organs, which were under pressure (Schwartz & Gefen, 2019). The literature mentioned anchor meaning in 116 different location. The analysis categorized them over 13 codes: assure the comfort, support the head, shoulder, and arms (one code), support the leg, support the back, support the heel, support the feet, support the knees, support the forearm, wait to be sure, revise the angle between patient and the bed, secure devices, eliminate the sheeting effect, and secure the bony prominences. The percentages of those codes are equal to 20.28% (the detailed information can be seen in the Supplementary File Table S5).

**Documentation.** Documentation is what nurses do to inform about the actualization of repositioning practice (Collier, 2016). Several studies rely on what nurses document as evidence of actualization (Jocelyn Chew et al., 2018). Documentation related issues appear for 60 locations among the revised texts to formulate 13 codes: how that happened, skin condition, current posture, describe the body condition, who participated, clarifying any pain or discomfort, policy-based, level of patient's cooperation, equipment used, record physician notification, reminders, and factors influencing the decision. The percentages of those codes equal to 10.57% (the detailed information can be seen in Supplementary File Table S6).



**Figure 1.** Conceptual diagram.

**Table 1.** Summative Content Analysis for Repositioning Practice Attributes.

Attribute	Code	Frequency	% in the attributes	% in the overall
Pre-turn = 15 codes	Identify patient	4	4.49%	0.69%
	Introduce nurse	3	3.37%	0.52%
	Explain the procedure	5	5.62%	0.87%
	Prepare the bed	17	19.10%	2.95%
	Adjust the arm	7	7.87%	1.21%
	Place draw sheet	8	8.99%	1.39%
	Securing patients' buttocks	1	1.12%	0.17%
	Adjusting patients' knees	6	6.74%	1.04%
	Adjusting patient's legs	1	1.12%	0.17%
	Remove the pillows	10	11.24%	1.73%
	Side raise	7	7.87%	1.21%
	Guaranteeing patients privacy	7	7.87%	1.21%
	Appropriate starting posture	5	5.62%	0.87%
	Prone position consideration	6	6.74%	1.04%
	Hand wash	2	2.25%	0.35%
	Total of pre-turn locations	89	100.00%	15.42%
Assessment = 4 codes	Ability to assist	7	17.07%	1.21%
	Pressure ulcer risk	8	19.51%	1.39%
	Turn restriction	11	26.83%	1.91%
	Skin	15	36.59%	2.60%
	Total of assessment locations	41	100.00%	7.11%
Turn = 12 codes	Hand on shoulder hand on hip	14	15.73%	2.43%
	Hold head and neck	7	7.87%	1.21%
	Move the arm	5	5.62%	0.87%
	One hand under the patient	2	2.25%	0.35%
	Move the leg	3	3.37%	0.52%
	Move the knees	4	4.49%	0.69%
	Monitoring patient condition	2	2.25%	0.35%
	Lift by sheet or device	28	31.46%	4.85%
	Rolling	21	23.60%	3.64%
	Pressure mapping	1	1.12%	0.17%
	Range of motion	1	1.12%	0.17%
	Heels	1	1.12%	0.17%
	Total of turns	89	100.00%	15.42%
Harmonization = 4 codes	Two to three staff	23	36.51%	3.99%
	Count to three	10	15.87%	1.73%
	Body mechanism proper use	20	31.75%	3.47%
	One at each side of bed	10	15.87%	1.73%
	Total	63	100.00%	10.92%
Anchor = 13 codes	Assure comfort	16	13.68%	2.77%
	Head and shoulder	14	11.97%	2.43%
	Support the leg	8	6.84%	1.39%
	Support the back	12	10.26%	2.08%
	Heel	14	11.97%	2.43%
	Feet	4	3.42%	0.69%
	Knees	6	5.13%	1.04%
	Hand and forearm	3	2.56%	0.52%
	Wait to be sure	2	1.71%	0.35%
	Patient bed angel	16	13.68%	2.77%
	Secure the device	14	11.97%	2.43%
	Eliminate sheet effect	2	1.71%	0.35%
	Bony prominence	6	5.13%	1.04%
	Total	117	100.00%	20.28%

(continued)

Table 1. Continued.

Attribute	Code	Frequency	% in the attributes	% in the overall
Documentation = 13 cods	How that happen	3	4.92%	0.52%
	Skin condition	15	24.59%	2.60%
	What is the current position	7	11.48%	1.21%
	When that happen	17	27.87%	2.95%
	Describe the body condition	2	3.28%	0.35%
	Who participate in doing?	3	4.92%	0.52%
	Presence of pain or discomfort	3	4.92%	0.52%
	Document unusual findings	1	1.64%	0.17%
	Based on policy	1	1.64%	0.17%
	Level of cooperation	2	3.28%	0.35%
	Equipment used	3	4.92%	0.52%
	Record physician notification	1	1.64%	0.17%
	Reminders	2	3.28%	0.35%
	Factors influencing the decision	1	1.64%	0.17%
Total	61	100.00%	10.57%	
Time = 10 codes	Within 30 min	4	3.40%	0.69%
	Within 1 h.	2	1.70%	0.35%
	Every 1 to 2 h.	5	4.30%	0.87%
	Every 2 h.	33	28.20%	5.72%
	Within 3	7	6.00%	1.21%
	Within 2 to 4 h.	8	6.80%	1.39%
	Every 4 h.	3	2.60%	0.52%
	Frequent (no specification)	36	30.80%	6.24%
	Based on individualized plan	17	14.50%	2.95%
	Reminders	2	1.70%	0.35%
Total	117	100.00%	20.28%	
Total of codes = 72	All score	577		100%

*Time.* Repositioning practice is a time-dependent intervention (Moore, 2010; Moore et al., 2020; Moore & Van Etten, 2014). Nevertheless, there is disagreement in the proper time. Literature from the modern era presents exact time points, starting from 30 min (Burston et al., 1950) to 2 h (Bardsley et al., 1964; Bliss et al., 1967; Newton, 1938). The 2-h recommendations kept appearing in the research era (Baillie, 2011; Baillie et al., 2014; Bergstrom et al., 2013; Carpenito, 2013; Herman & Rothman, 1989). However, others suggested different time points (De Meyer et al., 2019; Fragala & Fragala, 2014; Moore et al., 2013; Palfreyman & Stone, 2014; Peterson et al., 2013).

Issues related to time appear in 117 different locations. Those were categorized over ten codes as follows: within 30 min, within one hour, every one to two hours, every two hours 33 times, within 2 to 4 h eight-times, every 4 h, based on individualized plans, and two locations mentioned based on time reminding, and there were 36 locations, which mentioned the time with no specifications for the duration. The frequency of all these points equals 20.28% (the detailed information can be seen in Supplementary File Table S7).

*Antecedents.* Antecedents are the pre-request issues to actualize the construct "Repositioning practice." From the literature, it appears that repositioning practice required having a

patient at risk for pressure ulcer development (White, 2011). Also, it required someone to perform the procedure (Jocelyn Chew et al., 2018). As the analysis focused only on cases that nurses performed and excluded the literature arguing about others, competent nurses are assigned to deliver the care for that patient who exists physically near the nurse. Furthermore, satisfying the harmonization required secondary nurse(s) that help in the performance. Absence of these preconditions might not satisfy the intended meaning of the repositioning practice as presented above. Figure 1 shows the antecedents' relations with the central construct.

*Consequences.* The consequence of the repositioning practice is evident. If the repositioning is performed, it will directly enhance pressure ulcer prevention. Also, it will impact the quality of care (Duncan, 2007), patient satisfaction (Kalisch et al., 2014), and patient safety (Kalisch et al., 2011), as it appears in Figure 1.

*Model case.* Ms. X is a nurse in the ward. She is assigned to a bedridden patient. Ms. X realizes that the patient is unable to turn or move. At 08:00, Ms. X planned the turning procedure for the patients every two hours. Ms. X performed the turning with the help of her colleagues. Ms. X rolled the patients according to the protocols and followed the steps one by one to change the posture. Ms. X anchored the patient to

the new position. After that, Ms. X documented the procedure done. She recorded the help by other nurses' initials. Also, Ms. X documented the coming time and suggested the new posture. This procedure was repeated by the same techniques for all days, and the patient did not develop any pressure ulcers.

## Discussion

The current paper aims to analyze the repositioning practice as concept of bedridden patients during hospitalizations. The current analysis displays the defragmentation of the terms, descriptions, and included attributes. The current analysis shows the importance of turn as the main component, but turn alone did not satisfy the purpose of the interventions in assuring the offloading. Therefore, using the term "turn" would not refer to the repositioning practice. Moreover, the data taken from nurses' notes would be limited in reflecting the repositioning compliance, as it did not tell the evaluators about presenting other attributes rather than the documentation. Thus, it highlights the need for a suitable measurement approach for measuring performance.

The impact of repositioning practice is understood by its absence. Several studies express the impact of long-standing pressure on the tissues, leading to pressure ulcer development (Gefen, 2009), so lacking repositioning practice increases the chance of pressure ulcer development. Therefore, the realization of repositioning practice leads to the absence of pressure ulcers (or at least minimizes its chance) (Chaboyer et al., 2016). That minimization for pressure ulcer development impacts the patient, health organizations, and quality of care in general.

Pre-turn is the preparation of the nurse and the patient. It is the time between deciding to reposition and making the turn. Second, repositioning practice required nurses to assess patients that included assessing the patient's capacity to assist during the turn, assessing pressure ulcer risk areas, assessing turn restriction, and assessing skin condition. Third, change the patient's posture by holding and turning him/her or repositioning (Lynn, 2010). Four, harmonization is needed when a repositioning practice is done if it takes more than one person to achieve. In some conditions, anchor is used to help facilitate the pressure distribution (Gefen, 2009) and revascularization of the pressed organs (Schwartz & Gefen, 2019).

Nurses have to record their actions. The documentation would help the nurse to evaluate their performance. It will become worse or better in a matter of time. The last and the most crucial factor is time. Time for giving repositioning practice is a conflicting issue in the literature. It could be 30 min or more than six hours. The current analysis clarifies the structure of repositioning practice that might be used in education, training, measurements, or improvement projects. In assuring the proper descriptions for the repositioning

practice, applicable sharing of the study result will have much potential.

## Implications for Practice

The current study impacts the state of nursing science over three levels: nursing administration, nursing education, and nursing research. First, nursing leaders are responsible for ensuring nurses' compliance in repositioning practice for immobilized patients. Leaders applied several projects and approaches to enhance nurses' performance, but the lack of unified description for the concept limits their abilities for improvements.

In addition, repositioning practice concept analysis clarifies the critical boundaries between repositioning practice and related concepts, such as turn. These clarifications enhance the description for the nursing students. Last but not least, the current analysis unified the description for the repositioning practice. Experts will generate comparative studies and evaluate the consequence of the any related interventions focused on improving the repositioning practice by unified the terms and agreed on its meaning.

## Limitations

The current analysis had three limitations: the nature of included literature (input concern), the nature of changes in the future, and the nature of the analyzer. Firstly, the current analysis included studies that varied from textbooks, studies, and editorial articles. These manuscripts differ in their nature and the methods of describing the concept. Even with the authors' efforts to systematically analyze these articles but lacking a standardized methodical evaluation for the grade of reference interrupted the quality of analysis. Secondly, the concept changes according to time. Therefore, the concept is sensitive to further changes in the future based on the advances in the technology or development in information technology. The analysis failed to predict these suspected changes and the nature of their influence. Finally, the analysis depends on the authors' subjective understanding of the nature of the concept based on their background, which might differ if authors with different backgrounds reconduct the analysis.

## Conclusion

Repositioning practice is a challenging concern in pressure ulcer domains. Even though the term looks straightforward, it needs further clarification. The analysis adopted archeology of knowledge with Rodger concept analysis to conclude that the term passes through three eras (classical, modern, and research). Each of these eras adds or removes for the repositioning practice until it is defined as turning for bedridden patients that contains harmonization, anchor, documentation, and a time-dependent intervention.

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## Ethical Statement

We declare that an ethical statement is not applicable as this manuscript does not involve human or animal research.

## Author Contribution

Abdulkareem S. Iblasi (ASI), Yupin Aunguroch (YA), Joko Gunawan (JG), I. Gede Juanamasta (IGJ), and Cheryl Carver (CC) made substantial contributions to conception and design, or acquisition of data, or the analysis and interpretation of data. ASI, YA, JG, IGJ, and CC involved in drafting the manuscript or revising it critically for important intellectual content. ASI, YA, JG, IGJ, and CC gave final approval of the version to be published. Each author has participated sufficiently in the work to take public responsibility for appropriate portions of the content.




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## Supplemental Material

Supplemental material for this article is available online.

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