

Motivation Based Caring: An Evolutionary Concept Analysis

Tajudeen Olusegun Rasheed ^{1*}, Chinomso Ugochukwu Nwozichi ²

¹ Department of Health, Safety & Environment Studies, Training & Research Institute, Economic and Financial Crimes Commission Academy, Karu, Abuja, Nigeria

² School of Nursing, Babcock University, Ilishan Remo, Ogun State, Nigeria

* **Corresponding Author:** Tajudeen Olusegun Rasheed, PhD, Department of Health, Safety & Environment Studies, Training & Research Institute, Economic and Financial Crimes Commission Academy, Karu, Abuja, Nigeria. E-mail: tajrash2005@gmail.com

Received February 5, 2021; **Accepted** March 1, 2021; **Online Published** March 6, 2022

Abstract

Introduction: Motivation Based Caring concept (MBC) extends to various areas, from simple and routine to the most complex nursing procedures in the clinical and community care settings. Motivation is often used as a concept in nursing to explain the pattern and relationships found in nursing phenomena. This study analyzed the concept of MBC using Rodger's concept analysis model in nursing practice.

Methods: Literature search was conducted without limiting the years of publication. Articles relevant to "Motivation Based Caring" and "Nursing" were identified. The articles that did not meet the selection criteria were excluded. Database searched included EBSCO, PubMed, Cochrane database, and CINAHL. Data collected were collated and analyzed in accordance with the steps of Rodger's evolutionary concept analysis method.

Results: The total articles sampled N = 22 were analyzed with the focus on MBC and nursing practice. Findings show that understanding the related factors, attributes, antecedents and consequences of MBC made it possible to infer that the application of the concept involve a cognitive skill, logical reasoning, critical thinking and problem solving ability to achieve effective nursing care.

Conclusion: The main implication and hypotheses generated from this study is that the MBC concept is a tool to improve and achieve wholeness patient care and implementation of the skillful nursing practice.

Keywords: Cognition, Motivation, Patient Care, Problem Solving

Introduction

The concept of MBC in nursing involves the activation of the cognitive and emotional forces of an individual to initiate and maintain positive behavioral change in nursing practice.¹ MBC extends to various areas, from simple and routine to the most complex nursing procedures in the clinical and community care settings.² According to Tahrekhani and Sadeghian (2015), motivation is one of the most important determinants of health outcome and could be influenced by the extrinsic and intrinsic factor which is known to be the most powerful driver of human behavior.³ The earliest and widely known theory that attributed human needs to a form of motivation was developed by Abraham Maslow in his paper in 1943 on "Hierarchy of Need Theory".⁴

In 1987, Herzberg developed a two factor theory, and called it "Motivation-Hygiene Theory". Although the theory was related to motivation, but, it was directed to job satisfaction and dissatisfactions in term

of salary as a motivator and not to nursing practice.⁵ Furthermore, researchers had included motivation or its components in many of their developed theories (for example the Rodgers Protection Motivation Theory).⁶ Rodger's stated that concepts are elements of a theory that significantly constitute to the evolution of a theory and a concept analysis is an important step in the scientific progress of a discipline.⁷

Since motivation is a commonly used concept in nursing practice considering the complexity of the illness, and consequently the required care, as well as the wholeness nursing care advocacy.^{8,9} Therefore, the lack of knowledge on the MBC concept constitutes a problem for nurses towards achieving persons holistic and wholeness care based on the premise that client/patient motivation is important in nursing practice. This analysis of the MBC concept is needed to provide a pathway towards problem resolution and decision-making in patient care. This will lead to efficacy in

nursing care with the evidence-based practice that is grounded in theoretical framework.¹⁰ Also, this concept analysis on MBC deserves attention due to dearth in literature on studies that focus on the theory-practice gap in nursing science.

Considering the aforementioned, this study was conducted with the purpose of analyzing the concept of MBC in nursing practice using Rodger’s evolutionary model of concept analysis steps. So, as to increase nurses understanding that interventions designed to motivate clients during caring are not simply tasks, and that the processes involves integrating clinical aspects of the disease with the psychosocial, emotional and behavioral aspects to achieve individual wholeness care. This concept analysis reinforced that effective MBC is dependent upon the evolution of both the patient and the nurses, and that further analysis and understanding of this concept will impact nursing practices.

The analysis of MBC is to distinguish between the defined and the other characteristics. The justification for this study is to promote thinking nursing, and the clarification for the future studies in the context of MBC in nursing practice. The significance of this study is to bridge the theory-practice gap identified in

nursing practice, and adds to the body of knowledge on the development of conceptual framework in nursing, which is important to the progress of the discipline in the scientific world.

Materials and Methods

Resources, Sample Selection and Data Analysis

This study on the concept analysis of MBC was conducted in October 2020 after determining the significance of the concept in the nursing practice context. A range of domains and literature was searched without limiting the years of publication. Relevant articles on "Motivation Based Caring" and "Nursing" were identified. Databases searched included EBSCO; PubMed; Cochrane database; CINAHL; Willey online library; Directory of Open Access Journals; Science Direct; Web of Science; and Cochrane Library.

The keywords used for the search were "motivation based caring", "nursing", "Rodgers evolutionary concept analysis", "motivation theories", and "nursing care". The total number of identified articles were n = 138 but, N = 22 investigated based on the purpose of the study as shown in the chart in Figure 1. The collected data were analyzed in accordance with the Rodger’s evolutionary concept analysis method.

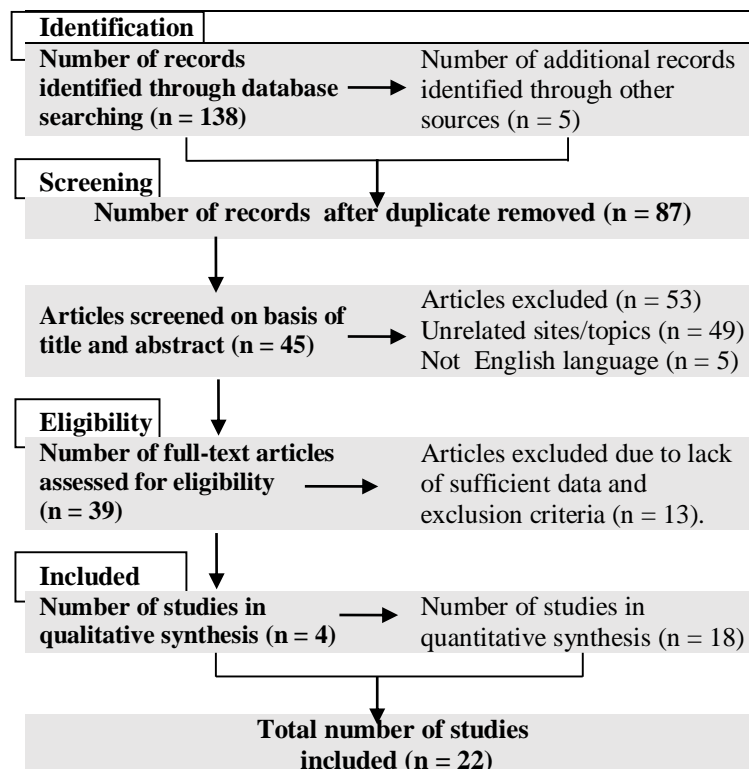


Figure 1. PRISMA Flowchart of Articles Selected for Analysis.

Concept Analysis Procedure

Rodger's evolutionary method of concept analysis was adopted for this study. Concept analysis is an important part of the cycle of concept development and according to Rodger's, the cycle involve application, significance and use of a concept.⁸ The rationale for using Rodger's evolutionary concept analysis method include the following; the method uses inductive approach to develop concept, it applies rigorous steps in the process, and the method viewed the development of a concept in a cyclical manner.⁹

In Rodger's (2000) evolutionary concept analysis, the steps identified in the concept analysis procedure are specifically: 1) identify and name the concept of interest; 2) identify the surrogate terms and relevant uses of the concept; 3) select an appropriate realm (sample) for data collection; 4) recognize attributes of the concept; 5) ascertain the references, antecedents, and consequences of the concept, if possible; 6) identify concept related to the concept of interest; and 7) generate a model case of the concept. The analysis of the concept was based on its substitute term and related concepts, antecedents, and the implication in nursing.

The first step: The concept was identified and named concept of "Motivation Based Caring (MBC)". The substitute terms and expressions used for this concept were filtered from literature.

The second step: The concept analysis was performed through critical evaluation of the articles, and the specific descriptor for MBC was not found. The search was repeated with keyword *nursing* added to the descriptor; then works were identified when the search strategy of "*Motivation Based Caring in Nursing*" was inserted into the search engine without limiting the search by year of publication. A total of 38 studies were retrieved in the databases.

The third step: Data relevant to the concept of MBC were identified and reflection on the contextual basis of the concept was conducted and attributes of MBC were deduced.¹⁰

The inclusion criteria of this study included articles peer reviewed in English on motivation concept, theory in nursing, and those related to motivation care. The exclusion criteria included: duplicated studies, and articles not addressing the related aspect of the MBC concept. All the articles that did not have the above criteria were excluded from the study.

The fourth step: This step in the concept analysis is

concerned with the analysis of data and the identification of their characteristics.^{7,11} The title of the selected studies was read with the exclusion and inclusion criteria in mind for segregation purposes. The abstracts were read and the articles that addressed the concept of MBC in the context of nursing were selected and collated. Based on refinement, 39 studies were selected, including books and articles.

After reading the text in full was conducted, a sample of 22 studies were defined for analysis. The attributes of the concept were recognized through reading this question in mind; what are the attributes of MBC? Rodger's (2000) inductive process was employed to determine the attributes of MBC concept, mainly those attributes that appear with the highest number of frequency were identified for analysis in the concept development.⁷

The fifth step: The concept analyses ascertain the references, antecedents, and consequences of the concept, and the following question were addressed: 1) What are the condition/attributes associated with MBC? 2) What are the consequences of MBC? The consequences of the concept that appeared with highest frequency were identified. The phenomenon was organized together and logically stated with each characteristic listed separately, according to the number of frequency identified in the sample. The identified variables were logically organized and tabulated for analysis and interpretation of the results.

The sixth step: The concepts related to the concept of MBC were identified through hypotheses generated from the research questions raised. What are the implications and hypotheses that could be generated from the analysis of concept of MBC? The implication and hypotheses for continuity of the concept of motivation based caring were listed in the results and discussion session respectively.

The seventh step: In this step which is the final step in Rodger's evolutionary concept analysis, a model case of the concept of "MBC" was generated.

Results

The studies included and investigated in this concept analysis were conducted in various countries worldwide. The total number of articles included in this study was = 20 (90.90%), while book considered is n = 2 (09.09%). Articles that focuses on motivation in nursing care n = 14 (63.63%), with n = 3 (13.63%) on health motivation,

n = 3 (13.63%) on nursing activities, while, n = 2 (09.09%) on patient activity. The results were presented in tabular format and organized based on Rodger’s proposed substitute terms/related factors, the attributes, antecedents, consequences, and nursing implication/ hypotheses of the concept (Rodger’s, 2000).

The substitutes terms in the studies investigated were analyzed because identification of substitute’s term represents the first step in the concept analysis.¹² This enables the author to develop a concept to understand the origin, function and interconnection of a concept with similar words or expression. The substitutes terms identified for the concept of MBC were: goal-oriented care, wholeness care, holistic care, and self-care. Concept analysis provide researchers and theorist with a good understanding of the underlying attributes of a concept, and a clear definition of the problem since theories are developed to reflect the relationship that exist among the concepts.

Rodger’s (2000) emphasized that it is important to note that any concept must have certain attribute that will differentiate it from other concepts. For the past two decades, the strategy and procedures in concept evolution

Table 1. Factors Related to Motivation Based Caring Concept Analyzed

Related factors/concepts	No of Studies	
	Freq.	%
Emotional intelligence	17	77.27
Patient empowerment	15	68.18
Problem resolution	12	54.54
Critical thinking	11	50.00
Performance based	8	36.36
Logical reasoning	7	31.81
Reflective thinking	5	22.72
Complex reasoning	4	18.18
Scientific method	3	13.63
Failure/achievement	2	09.09

Table 2. Attributes of Motivation Based Caring Concept Analyzed

Attributes	No of studies	
	Freq.	%
Interaction with patient	19	86.36
Goal-directed behavior in care	18	81.81
System oriented care	17	77.27
Positive/negative outcome of care	16	72.72
Dynamic/complex nature of person	15	68.18
Whole individual and not part	15	68.18
Non-fulfillment of basic care needs	13	59.09
Honesty about individual condition	11	50.00
Tranquility in care	09	40.90
Warmth/connecting with patient	07	31.81
Entering their world/empathy	07	31.81
Being resilient to possible uncertainties in each patient state of health	06	27.27
Courageous in the line of patient care	05	22.72

Table 3. Antecedents and Consequences of Motivation Based Caring Concept Analyzed

Concept Antecedents/Consequences	No of studies	
	Freq.	%
Antecedents		
Cognitive, attitudinal in patient care	21	95.45
Reflection, analysis and accept criticism	19	86.36
Acceptance of patient in totality	18	81.81
Listen attentively without interruption	16	72.72
Involve family in the care of patient	16	72.72
Assess quality of care being giving	13	59.09
Carry out patient request within the ambit of care	12	54.54
Ask patients what they need and answer questions	12	54.54
Respect Patient Bill of Right	09	40.90
Above all you have to possess right skill	09	40.90
Consequences		
Accomplishment of desire goal/task	20	90.90
Increase in initiation and persistent of activities	20	90.90
Increase individual willingness to maintain effort towards goal achievement	19	86.36
Improve individual positive health outcome	18	81.81
It boost morale of patient during care	17	77.27
Improve performance of individual in health maintenance	16	72.72
It helps in clarification of goals	16	72.72
Join forces between individual and nurses	15	68.18
Encourage patient to own their health and follow-up	07	31.81
Improve quality of life in patient	05	22.72

is receiving attention in nursing discipline.¹² Concept analysis leads to development, testing, and evaluation of a theory, and with analysis of a concept, it becomes comprehensive and more concrete. Concept analysis is also a step towards refining unclear concepts or theories,

and also to clarified concepts that are applicable to nursing especially those that are ambiguous and others that are being used inappropriately and excessively.¹²

The concepts related to MBC have been shown in Table 1. They have a closeness or link with a concept

of MBC but, are not synonymous with it. Table 2, shows the attributes of the MBC concept analyzed. Connecting with patients is a characteristic that involves critical thinking, knowledge, and experience. Actually, in order to achieve positive cognitive, behavioral and attitudinal changes in a patient it involve nurses possessing necessary skill and has been tactical in decision-making and disposition for MBC.

Table 3 shows that the antecedents of the MBC concept and the consequences are the contextual basis condition in MBC in nursing. They are consistent with socio-cultural, behavioral change, temporal, situational

and the patient needs in the present time.¹⁴ The antecedents are the phenomena that precede the concept being analyzed, while the consequences are situations which result from the occurrence of the concept under analysis.¹⁴

In accordance with the frequency ascertained in the investigated studies, the nursing implications and hypotheses of a concept of MBC were highlighted in Table 4. The implication and the hypotheses represent the results and possibilities to be achieved from the application of this concept respectively.¹⁵ If the concept of MBC is applied in nursing, these hypotheses are the most important aspect of the concept developed.¹⁶

Table 4. Implication and Hypotheses of Motivation Based Caring Concept Analyzed

Concept Implications/Hypotheses	No of studies	
	Freq.	%
1. Achieving individual willingness to maintain their health resulting in positive health outcome.	21	95.45
2. Improving the quality of life of individual with effective care provided by the nurses.	19	86.36
3. Development of effective coping strategy in person care and ability to synchronize competing preferences.	18	81.81
4. Encouraging healthy behavior by taking ownership of one care and willingness to follow-up.	15	68.18
5. Patient establishing trust in nursing personnel towards their health management.	15	68.18
6. Achieving effective results in care of person, family and community.	14	63.63
7. Safety of patient and improvement in the quality of care with adequate interaction.	13	59.09

Discussion

This study was conducted with the purpose of analyzing the concept of MBC in nursing practice using the perspective of Rodger's evolutionary model of concept analysis. This concept serves as a guide on how to apply MBC in nursing practice, as it communicates essential information about caring to nurses in a professional language that ascertains uniformity and ensures the same message of care. Currently, nurses are encountering difficulty in the application of ambiguous concepts that are foreign to nursing practice.

Related Factors and Substitute Terms

The analysis of the concept of MBC suggested that there is little or no clarification on this concept in the nursing literature based on the empirical studies investigated. A number of identified close words or expressions showed that there is likelihood no exact expression that represents the analyzed concept. Thus, there is probability that substitute terms with similar meaning to the concept analyzed may not have been identified in nursing practices. For example, the substitute like wholeness patient care is often interchanged inappropriately with holistic care but, are not synonymous in their real meaning. MBC involve skill and attitudes which are pertinent to the development of wholeness care in

nursing¹⁴.

Similarly, goal-oriented care is contrary to self-care in nursing. Therefore, in order to achieve wholeness care, holistic care, goal-oriented care, and self-care, nurses need to partner with individuals, families and connect with the clinical and community settings possibly through application of the MBC concept.¹⁵ The identified related factors are necessary for understanding the steps that are involved in nursing process like emotion, reflective thinking, problem solving and complex reasoning.⁴

The relationships have a cause-effect as demonstrated in one of the analyzed studies.¹⁴ Motivation based caring involves cognitive skill and attitude necessary for achieving goal of positive behavioral and attitudinal change towards a healthy outcome.¹⁷ MBC will lead to wholeness of person care. Cowden and Cummings (2012) argued that this will assist the nurse in better understanding of the application of the concept of MBC in the context of nursing practice, efficacious and decision-making.¹¹

Attributes of the Concept of MBC

Proper identification of the attributes in an analyzed concept is important because attributes bring together a real definition of a concept which is different from the

meaning provided by the dictionaries.² Hence, attributes are a very important integral part of a concept and they are equally known as characteristic of a concept⁶. For the concept of MBC, the attributes have been presented in Table 2.

Considering this explanation, improvement in the attributes of MBC by the nurses in a careful and rational manner will improve the cognitive and attitudinal aspect of care which is inherent in patient personal activities when delivering nursing care.¹⁸ So, MBC is a practical activity based on critical thinking to achieve positive health outcomes. Therefore, it is essential for nurses to have a positive attitude for carrying out the task.¹³ The importance of the concept of MBC is to ignite the cognitive skill of the nurses necessary as a pathway towards achieving wholeness care in nursing.

MBC Concept Antecedents

The challenges associated with patient care are enormous from the patient to the family and the community.¹⁹ Nurses respond to the demand of society at large which is in a constant transformation in relation to patients' needs, and seek better outcomes in nursing practice through provision of quality healthcare.¹⁶ Based on Table 3, the categories of antecedents highlighted and emphasized are instrumental to the development of MBC in nursing practice.²⁰ There is need for policies to shift from the mechanistic nursing care to wholeness care through the application of MBC concept in nursing practice in order to improve patient care.¹⁵

The competencies' and skill already acquired by a nurse should be demonstrated in response to patient care. This will enable nurses to remain effective and relevant in patient care considering the rapid technological advancement with dynamic healthcare service delivery.²¹ So, expansion is required in nursing knowledge so as to be able to cope with the demand of care which often involves critical thinking and problem solving approach.¹⁹

Consequences of MBC Concept

The consequences of MBC concept are related to the antecedents and those consequences that occur frequently. The consequences of the MBC analyzed concept include quality of care, initiation and persistence, performance care improvement and morale boosting of patient.¹ Quality of life is the central point in delivering care and if a care could not result in a quality of life, the purpose of rendering the care is defeated.^{4,10} The

improvements in performance during care of patient and morale booster are pertinent, and results in quality of life which is an expected outcome of nursing care.¹³

Based on this premise, it is fundamental in the nursing practice to embrace MBC which is rooted on knowledge and skill.²⁰ MBC covers an attitude of being disposed to consideration for problem solving approach in the care of patient.³ For MBC to be effective, an effort is required for examining every situation with a view of treating them separately because of the peculiarity of human nature, and in the light of knowledge and evidence-based nursing practice.¹⁹ It is important to emphasize that the first four consequences identified as related concept in this analysis appear are in Table 1, they reinforced the interrelationship with MBC.

Implication/Hypotheses of Concept of MBC for Nursing Practice

Based on the studies investigated, it has been proven that MBC is highly relevant to nursing practice and should be adopted by nurses to improve nursing care, patient satisfaction, and above all patients autonomous in the process of caring. Based on this analyzed concept, it certain that the implementation of motivation caring by nurses will boost patient morale, and encourages them to own their health.^{13,18}

Hence, MBC is a structural element to assist nurses in improving the quality of life of patients.⁴ The main implication and hypotheses inferred from this study is that MBC is a mediating tool in the improvement of nursing care and execution of skillful nursing care practice. So, it is pertinent to consider MBC as a process that is dynamic and requires improvement, and it is recommended nurses adopt it in nursing practice.^{11,22}

Conclusion

The analysis of the concept of MBC using Rodger's evolutionary model allows good understanding of the concept and the clarification of the phenomenon with the implication for knowledge, skill and nursing practices. The understanding of the related factors, attributes, antecedents and consequences of MBC made it possible to infer that the analyzed concept involve a cognitive skill, logical reasoning and resolution of problem to achieve quality life and positive health outcome. This concept of MBC is evolving in nursing practice and has not been clarified in different settings. Further

studies are recommended overtime to clarify the concept in nursing discipline.

Funding/Support

None.

Conflict of Interest

The authors declare that they have no conflicts interest.

References

- Asadi N, Memarian R, Vanaki Z. Motivation to care: A qualitative study on Iranian nurses. *J Nurs Res*. 2019;27(4):e34. doi:10.1097/jnr.0000000000000294
- Moody RC, Pesut DJ. The motivation to care: Application and extension of motivation theory to professional nursing work. *J Health Organ Manag*. 2006;20(1):15-48. doi:10.1108/14777260610656543
- Tahrekhani M, Sadeghian Z. Intrinsic motivation comparative investigation between nursery, midwifery, and medicine students during internship in Iran. *Procedia Soc Behav Sci*. 2015;185:185-9. doi:10.1016/j.sbspro.2015.03.447
- Aiken LH, Sermeus W, Van den Heede K, Sloane DM, Busse R, McKee M, et al. Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *Bmj*. 2012;344:e1717. doi:10.1136/bmj.e1717
- Byrne M. The implications of Herzberg's "motivation-hygiene" theory for management in the Irish health sector. *Health Care Manag*. 2006;25(1):4-11. doi:10.1097/00126450-200601000-00002
- Maddux JE, Rogers RW. Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *J Exp Soc Psychol*. 1983;19(5):469-79. doi:10.1016/0022-1031(83)90023-9
- Rodgers B L. Concept analysis. An evolutionary view. In: Rodgers BL and Knaf KA Editors (eds). *Concept development in nursing: Foundational techniques and applications*. 2000; (2nd ed.). Philadelphia, PA: W.B. Saunders, 77-102.
- Rodgers BL. Concepts, analysis and the development of nursing knowledge: the evolutionary cycle. *J Adv Nurs*. 1989;14(4):330-5. doi:10.1111/j.1365-2648.1989.tb03420.x
- Walker LO, Avant K C. *Strategies for theory construction in nursing*. 1995; 3rd ed. Norwalk: Appleton & Lange.
- Alhassan RK, Spieker N, van Ostenberg P, Ogink A, Nketiah-Amponsah E, de Wit TF. Association between health worker motivation and healthcare quality efforts in Ghana. *Hum Resour Health*. 2013;11(1):37. doi:10.1186/1478-4491-11-37
- Cowden TL, Cummings GG. Nursing theory and concept development: a theoretical model of clinical nurses' intentions to stay in their current positions. *J Adv Nurs*. 2012;68(7):1646-57. doi:10.1111/j.1365-2648.2011.05927.x
- Parisa B, Reza N, Afsaneh R, Sarieh P. Cultural safety. *Holist Nurs Pract*. 2016;30(1):33-8. doi:10.1097/HNP.0000000000000125
- 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 Serv Res*. 2014;14(1):249. doi:10.1186/1472-6963-14-249
- Franco LM, Bennett S, Kanfer R, Stubblebine P. Determinants and consequences of health worker motivation in hospitals in Jordan and Georgia. *Soc Sci Med*. 2004;58(2):343-55. doi:10.1016/S0277-9536(03)00203-X
- Garcia-Goni M, Maroto A, Rubalcaba L. Innovation and motivation in public health professionals. *Health Policy*. 2007;84(2-3):344-58. doi:10.1016/j.healthpol.2007.05.006
- Jooste K, Hamani M. The motivational needs of primary health care nurses to acquire power as leaders in a mine clinic setting. *Health SA Gesondheid*. 2017;22(1):43-51. doi:10.4102/hsag.v22i0.961
- Alhyas L, Nielsen JD, Dawoud D, Majeed A. Factors affecting the motivation of healthcare professionals providing care to Emiratis with type 2 diabetes. *JRSM Short Rep*. 2013;4(2):1-3. doi:10.1177/2042533313476419
- Jamieson I, Kirk R, Wright S, Andrew C. Generation Y New Zealand Registered Nurses' views about nursing work: A survey of motivation and maintenance factors. *Nurs Open*. 2015;2(2):49-61. doi:10.1002/nop.2.16
- Shahsavari Isfahani S, Hosseini MA, Khoshknab MF, Peyrovi H, Khanke HR. What really motivates Iranian nurses to be creative in clinical settings?: A qualitative study. *Glob J Health Sci*. 2015;7(5):132-42. doi:10.5539/gjhs.v7n5p132
- Stoltz P, Andersson EP, Willman A. Support in nursing—An evolutionary concept analysis. *Int J Nurs Stud*. 2007;44(8):1478-89. doi:10.1016/j.ijnurstu.2006.07.014
- Negarandeh R, Dehghan-Nayeri N, Ghasemi E. Motivating factors among Iranian nurses. *Iran J Nurs Midwifery Res*. 2015;20(4):436-41. doi:10.4103/1735-9066.161011
- AllahBakhshian M, Alimohammadi N, Taleghani F, Nik AY, Abbasi S, Gholizadeh L. Barriers to intensive care unit nurses' autonomy in Iran: A qualitative study. *Nurs Outlook*. 2017;65(4):392-9. doi:10.1016/j.outlook.2016.12.004