



Case Report

Application of Nightingale Nursing Theory to the Care of Patient with Colostomy

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Abstract: Nursing is distinct health care discipline and its practice is based on the paradigm of care. The theoretical foundation of discipline is rich of various, Grand and middle range theories and care models The clinical Domaine of discipline is a platform to test the theoretical aspect of discipline. Both theory and practice are reciprocal as theories generate from practice and return back to practice for testing. Florence nightingale was the pioneer nurse theorist and founder of modern nursing. Her theory of care which more than a century old is still appropriate for application to the care of patients undergoing a surgical operation colostomy. This paper is aimed to discuss the practical application of nightingale theory to the care of colostomy patient in hospital setting. Nursing process model of care was used to integrate nightingale theory to a clinical scenario. Successful attainment of care out comes achieved by application of nightingale theory to nursing care of patient with colostomy.

Keywords: Theory, Colostomy, Nursing

1. Introduction

Theory and practice are two sides of a coin in other words are reciprocal ends of nursing profession [1]. In fact, clinical Nursing practice derived light from theoretical foundation. Practice without integrating nursing theory is blind. Temple of theoretical wisdom direct nursing practice and research in right way [2]. Clinical nursing practice itself is the single most authentic platform to test the theory [1]

My selected theory for clinical application is the pioneer theory of modern nursing profession. selected theory of Florence nightingale will be applied to clinical scenario along with brief description of theorist and theory concerned followed by analysis and critique in reference to established criteria and concluded with practice outcomes.

2. Theorist Background

Florence Nightingale also known as “Lady with the Lamp” a persuasive and transformative character in nursing is the founder of modern nursing. She born in 1820 in Florence Italy. First nurse theorist, scientist, writer and philosopher of its kind who base the discipline of nursing on caring with wholeness

and spirituality [3]

She explores the basics of nursing in her famous piece of writing “Notes on Nursing: What it is, what it is not” (1860) which is primitive basis of nursing practice and research. Her philosophy of nursing was her belief that nursing to her is “calling from God” [2]

She emerged during Crimean war with her philosophy of nursing as calling from god. She introduced her theoretical philosophical concept of holistic approach in the era when medicine was greatly involved with biological and physical phenomena of health and disease [4]. Holistic nursing focus on healing of whole person rather than caring for a separate sphere of person health like physiological aspect, and nurses are the healing agent who facilitate mechanism of healing with honor to person’s individual subjective feelings [5]

Nightingale emphasis spirituality along with physiological determination of health disease subject, although her ideology of spirituality was not based on religious grounds rather her focus was nature and she largely argue the role of environmental alteration in health and disease process. Her pioneer theory mainly known by nightingale environmental theory [3]

Description of Theory

In watching disease, both in private homes and public hospitals, the thing which strikes the experienced observer most forcefully is this, that the symptoms or the sufferings generally considered to be inevitable and incident to the disease are very often not symptoms of the disease at all, but of something quite different— of the want of fresh air, or light, or of warmth, or of quiet, or of cleanliness, or of punctuality and care in the administration of diet, of each or of all of these. [2]

3. Major Assumptions of Nightingale Theory

Major assumptions in nightingale theory as illustrated by Victoria Fondriest and Joan Osborne in [1994] are that: health and sickness are governed by natural laws. Nursing is a distinct field and is not like medicine. It is a science and also an art. Disease process is not important for nursing rather nurses concern is with the individual in the environment. Environment plays important role in patients' health. Nurses should manipulate the surrounding to promote sufferer recovery. Furthermore, nurses should be skillful, vigilant and confidential, and their practice should be evidence base.

4. Concepts in Nightingale Theory

Pure air, Pure water, Efficient drainage, Cleanliness, Light, Noise, Nutrition and food, Variety, Personal cleanliness, Bed and bedding were major concepts in nightingale environmental nursing theory.

4.1. Metaparadigm of Nightingale Environmental Theory

4.1.1. Health

According to nightingale was not only absence of ailment or being well but to be able to use every power that a person poses (3)

4.1.2. Environment

Regarded by nightingale is that can be manipulated according to needs to keep patient in best form for nature to act upon. Both physical and psychological aspects of environment are addressed.

4.1.3. Patient (Person)

Is the holistic being in nightingale theory and is regarded as someone consisting physical, spiritual, emotional intellectual and social aspects.

4.1.4. Nursing

According to nightingale was "calling from God". Nurses assist nature and utilize in favor to heal sufferer [3].

Beside mention description nightingale philosophy advocate legacy for activism in care. Some author noted about her favor for feminism and wrote that she was champion of feminist ideology in care as quoted in reference [2]

I have an intellectual nature which requires satisfaction and

that would find it in him. I have a passionate nature which requires satisfaction and that would find it in him. I have a moral, an active nature which requires satisfaction and that would not find it in his life.

4.2. Analysis Nightingale Nursing Theory

According to reference [1] theories should be analyzed in systematic structured manner to know either it is ready enough to shape practice, develop hypothesis or research question as there is no unquestionable acceptance of theories in nursing. Analysis of theory is judge on the base of set criteria including Significance, Internal Consistency, Parsimony, Testability, Empirical Adequacy, and Pragmatic Adequacy [6]

4.2.1. Significance

The significance criteria met when theory justify its worthiness to the disciplined concerned by offering unambiguous paradigmatic and philosophical underpinning along with conceptual clarification of metaparadigm and appropriate antecedent knowledge citation [6].

Nightingale very simply and clearly describe the concept of environment and its role in disease and health continuum. She clearly describes the environment and its essential elements; fresh air, clean water, proper sanitation, cleanness and light. She considers illness as imbalance in these essential elements and believe that manipulation in environment makes client prone for acting of nature [7]. Nightingale was aware of germ theory and the role of hygiene in infection control. She emphasis on the proper disposal of excreta [8]

4.2.2. Internal Consistency

In the framework of theory evaluation in reference [6] mention that internal consistency attained when theorist is clear in his/her definitions of concept, construct and composition and congruency should be there in the define elements of theory. Nightingale kept the base of public health nurse and her philosophical underpinning significantly make foundation of modern nursing as distinct disciplined of health care although her theory main focus was home care and she focus on house environment at same time she device a foundation courses of nursing science at that mainly limited to women being largely involved in caring at homes thus nightingale work was congruent in reference to context and contents [1].

4.2.3. Parsimony

Parsimony described by [6] is focus on content and the criteria of parsimony fulfilled when theorist explain phenomena of interest clearly in concise way. Nightingale conceptual contents are free of jargons and utilized simple language, her story is her true experience, her theme is accompanied by demonstration [7]

4.2.4. Testability

Testability comes fourth in the framework devised by (Fawcett, 2006) to analyze a theory. In a grand nursing theory like nightingale environmental theory for criteria of testability met if the research carried out in qualitative and inductive way,

its research methodology is in congruence to the contents and philosophical stance of the theory, and the data collection methodology satisfied the essence of grand theory by showing researcher personal detail experience of used data collection mechanism [6].

Nightingale define in detailed construct and abstract concepts of her theory. Her concept of spirituality and wholeness is well explained in her theory and later on tested by the theorist and researcher to adopt in approach to patient care [7]

4.2.5. Empirical Adequacy

Empirical adequacy refers to the consistency between theoretical statement and empirical evidence which can be determine from findings of studies conducted under the direction of that theory [6].

Main concepts of her theory noise, spirituality and environment are testable hypothesis, moreover her empirical work and statistical analysis of nineteenth century guide the thinking of 21st century scientist [8]

4.2.6. Pragmatic Adequacy

According to Reference [6] pragmatic adequacy of nursing theory is concerned with the practical application and it is determining by the understanding of nurses to use theory in their clinical practice along with knowledge and psychomotor skills required to operationalize practically. Nightingale theory works as basis and is alive in the foundation of nursing education and practice, and her philosophy of environment is still playing central role in the ecosystem of man. Nurses across the world utilized nightingale theory in nursing education and care of patients at different clinical settings [1]

5. Application Nightingale Theory to Practice

Scenario:

I was on evening duty in surgical unit a patient was brought to surgical unit through causality. Patient was Mrs. X with post op colostomy. patient was operated for intestinal obstruction due to unknown etiology accompanied by her mother in law and three children MRS X was a widow her husband was killed in the war turn northern province of Afghanistan three years back. Patient was extremely pale with septic wound; colostomy bag was not covered properly rather it was covered by plastic bag. entire skin of abdomen was red and lacerated on examination she was febrile with 103f temperature Blood Pressure was 100/70 and pulse was 96/min weight was 38 kg. lab findings were hemoglobin 8.5 with moderately leukocytosis. during history taking patient attendant told that they live in a small house patient room was also shared by 5 children mother in law and two Cattles. patient economically poor living on less than 1 dollar per day. on previous medical history there was intestinal infestation they were used to drink water from nearby well. According to patient attendant

5.1. Application of Nightingale's Theory to Nursing Care of Mrs. X

Person Mrs. X is in need of nursing care through nature reparative process. my (Nurse) goal is to promote nature in the process with application of nightingale theory with nursing process model.

Assessment:

5.1.1. Physical Environment

Nightingale theory suggest assessment of environment through 13 canons:

According to verbal statement of Mrs. X, and her attendant the house where they live is injurious to Mrs. x health as their room is overcrowded and shared by domestic castles. They used well water and use nearby field for toileting purpose which is the worse form of sanitation and most common Cause of contamination of water which leads to gastro enteric pathology [9]

Currently Mrs. x is lying on bed in surgical unit with a colostomy bag not appropriately attached rather over tied by a plastic shopping bag. The leakage of feces contents badly infected the stoma and lacerate the abdominal skin.

5.1.2. Nursing Diagnosis

Infection related to the contamination of the wound with feces
Impaired Skin Integrity related to skin contamination with feces

5.1.3. Interventions

It is planed that Mrs. x and her attendant well be fully educate regarding importance and methods of cleaning drinking water. Proper disposal for house excreta and source of social aid will be searched for financial support to Mrs. x in this connection.

Mrs. X Was provided a side room in the unit. Her stoma was cleaned with antiseptics and colostomy bag was appropriately applied. The surrounding skin was washed with saline and soothing anti-infective ointment was applied. A pad (gauze) putted to absorb the flow of feces Demonstration regarding stoma care and change of bag provided to patient. Room windows were kept open for ventilation. Prescribed medication were given.

5.2. Psychological Environment

Mrs. X was very much anxious regarding her health and kids as she is a widow and have financial Burdon as well as she is feeling little bit concern due to non-national and therefore have limited approaches to local resources currently. She has problem to adopt to new life style with stoma and have difficulty in falling asleep due to fear of opening bag during sleep time.

5.2.1. Nursing Diagnoses

Anxiety related to fear of isolation from native country and culture

Disturbed Sleep Pattern related to the fear of the state of the stoma

5.2.2. Nursing Intervention

Mrs. X was reassured that she will soon adopt to society. Her special deserving case in financial terms was forwarded to hospital administration for free treatment and a non-government organization was contacted to help her in easing financial burden.

Environmental factors were evaluated to avoid disturbance in her sleep. Her visitors were informed regarding importance of rest and sleep in her recovery they were counselled to minimize rush in sleeping hours and avoid unnecessary interruption in the room environment of Mrs. x.

Mrs. X was explained that her stoma bag will not open during sleep as it is closed mechanically.

5.3. Nutritional Status

Mrs. x was underweight she lost weight significantly in the last three weeks. Due to fear of colostomy problem she was afraid of eating as according to her attendant she avoids eating as after eating she develops emptying problem.

5.3.1. Nursing Diagnosis

Imbalanced Nutrition Less Than Body Requirements related to ignorance against the needs of food.

5.3.2. Interventions

Nutritionist was consulted regarding food menu appropriate for Mrs. X condition

Adequate nutrition was provided: containing foods rich in nutritious values and less in gastro enteric troubles.

Client was motivated for eating and reassured not spare food due to fear of causing trouble.

Beside systematic care given through nursing process under the influence of nightingale theoretical stance her remaining canon are related to observation of patient condition and petty management [10] which focus on continuity of care. In case of Mrs. I observe her condition critically and after keen observation of case her attendant was demonstrated and trained regarding colostomy dressing, cleanness of stoma with antiseptic moisturizing medication, patient diet need and variety along with observation of skin color near stoma was explained in detail.

6. Contradictions of Nightingale Theory to Current Day Health Care System

Some beliefs of nightingale are interesting and though I fell would be contradicted in today's healthcare:

In her concept noise in the theory suggest that patient sleep should not be disturb at night on any cost, she emphasis oppose standardization through licensure examination rather focus on moral characteristics and spirit of working for nurses, she preferred the ideal nurse as self-sacrificing, distinguished, and an "angel of mercy," as compared to an educated, skillful professional nurse [2]

Her philosophy of variety suggests changes in walls color and setting changes [4]

Contradiction: in today health care settings nurses needs to

awake patients for medications, procedures and vital sign recordings. Without passing license exam practice is not possible [4]

7. Outcomes of Care Plan

Successful attainment of care out comes achieved by application of nightingale theory to nursing process of Mrs. X. As patient verbalize Adjustment to perceived/actual changes, sign of improvement are evident on skin around stoma, client demonstrate behavior regarding health promotion and prevention of skin breakdown complications. Weight is maintaining and demonstrate progression in weight gaining. Patient Report increased feeling rested and sense of wellbeing she also verbalizes better sleep and rest comparatively and less disturbance.

8. Conclusion

Colostomy is a major surgical condition in which the colon is surgically incised for removal of ill or damage part the remaining end is brought to abdominal surface with an orifice for drainage of gut. The condition required effective nursing care and Florence nightingale theory is very appropriate for application to the care of such patients, beside the fact that theory is more than a century old it is still alive, easy to applicate in the fundamental undertaking of nursing interventions. Although nursing science is progressively advancing with higher degree of learning, research and invention of suitable technology, nightingale caring model is functional in the era globally because her philosophy fits to the basics of nursing and basics remains same.

References

- [1] Mckenna H. Nursing Theories and Models. 2005. 85-221 p.
- [2] Parker & smith, 2010. Nursing theories and nursing practice, 3rd (ed).
- [3] Alligood MR. Nursing Theory Utilization and Application. Mosby, an imprint of Elsevier Inc. 2014. 1-492 p.
- [4] Kamau SM, Rotich RJ, Cheruiyot BC, Ng'eno LC. Applying Florence Nightingale's Model of Nursing and the Environment on Multiple Drug Resistant Tuberculosis Infected Patients in the Kenyan Setting. OALib [Internet]. 2015; 2 (8): 1-10. Available from: <http://www.oalib.com/paper/pdf/3149116>.
- [5] Dossey B. Florence Nightingale and holistic nursing. Imprint. 1910; 52 (2): 58-60.
- [6] Fawcett J. Analysis and evaluation of contemporary nursing knowledge. Aquichan. 2000; 5 (1): 32-43.
- [7] Medeiros AB de A, Enders BC, Lira ALBDC. The Florence Nightingale's Environmental Theory: A Critical Analysis. Esc Anna Nery - Rev Enferm [Internet]. 2015; 19 (3): 518-24. Available from: <http://www.gnresearch.org/doi/10.5935/1414-8145.20150069>.

- [8] McEwen, Melaine; Willis E. Theoretical Basis for Nursing [Internet]. Vol. 104, Lippincott Williams & Wilkins. 2011. 10335-9 p. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1965514&tool=pmcentrez&rendertype=abstract>.
- [9] Pond K. Water Recreation and Disease: Plausibility of Associated Infections: Acute Effects, Sequelae and Mortality. World Health Organization. 2005. 1-231 p.
- [10] Snyder M. Theoretical Nursing: Development and Progress. Vol. 18, Journal of Neuroscience Nursing. 1986. 157 p.