

FROM ADHERENCE TO CONCORDANCE: A CONTEMPORARY CONCEPT FOR CONTEMPORARY NURSING OF PERSONS WITH CHRONIC ILLNESS

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Abstract

Adherence was a popular term describing the care activities of persons with chronic illness, particularly those with Chronic Kidney Disease. The concept of adherence was a response to the criticism of the term 'compliance' in which the perspective of care was towards appreciating patients as objects of care and the implication of the role of the patient as a passive participant. This paper will clarify the concept of 'adherence' and propose 'concordance' as a more contemporary and appropriate term described within the view of human science. Using Walker and Avant's (2005) concept analysis approach, an extensive review of literature from 2007 to 2010 was conducted. Using keywords to define the scope of the review, thirteen articles were selected, Defining related concepts, model cases, borderline cases, contrary cases, antecedents, consequences and empirical referents were presented to explain and describe the concept. There were more than 50 articles was retrieved. Those were examined and 30 articles were used to the next step. From 30 articles, finally 13 were selected to support this paper. There were published from 2007 to 2010. This paper also using 1 dictionary, 1 textbook, and 3 pages of related websites for analyzing the concept of adherence. From analyzing and synthesizing the concept of adherence, it was found that the contemporary term of 'concordance' is more appropriate to delineate the care of persons with chronic illness. Concept analyses should provide opportunities for developing contemporary nursing practice and engage in nursing practice to improve quality of nursing care of persons with chronic illness.

Keywords: Concept analysis, Chronic Kidney Disease (CKD), adherence, quality of life, concordance.

I. Introduction

Patients with Chronic Kidney Disease (CKD) have many problems with many systems in their body. Increasing number of uremic and other metabolism products in their body will causes decreasing body functions and emerging diseases in many systems such as pleuritis and pulmonary edema in respiratory system, uremic fetor and itching on skin, and pericarditis in cardiovascular system. Those will weaken their body and decrease their ability in doing their daily activities including work. One of the way to reduce amount of uremic and other metabolism products in their body is by undergoing hemodialysis or peritoneal dialysis. This paper would use terms hemodialysis rather

than peritoneal dialysis. Hemodialysis is a procedure to discard it by filtering patients blood in dialyzer and return it into their blood vessels. This procedure could help patients survive for many years. It also help patients to increase their ability in doing acitivites due to reducing amount of metabolism products in their body. Increasing their ability also encourage increase of their quality of life.

The other way to reduce metabolism products and encourage their quality of life is adhere restriction low-protein diet and fluid intake. These ways need patient's adherence in order to achieve highest level of their quality of life that they can achieve. Adherence is a popular terms for patients in which follow

advice from healthcare giver. But, nowadays concordance is more acceptable. Both of adherence or concordance and other terms sometime are used interchangeable. However, it needs to be cleared in terms of what differences between among the terms and how concept of adherence is applied in Chronic Kidney Disease.

II. Purpose and Method

The purpose of this paper is to clarify the concept of adherence related to quality of life particularly on patient with Chronic Kidney Disease. Walker and Avant's concept analysis approach was used in this paper. Supporting articles for this paper was retrieved from Proquest and CINAHL which was accessed from Prince of Songkla University's library website. There were more than 50 articles was retrieved. Those were examined and 30 articles were used to the next step. From 30 articles, finally 13 were selected to support this paper. There were published from 2007 to 2010. This paper also using 1 dictionary, 1 textbook, and 3 pages of related websites for analyzing the concept of adherence. This paper described differences between adherence, compliance and concordance, attributes and cases to make concept of adherence clearly related to quality of life.

III. Uses of The Concept

Definition

Based on Cambridge Learners's dictionary (2004), adherence is "when someone obeys a set of rules or principles". There are two others word that closely related to adherence. They are compliance and concordance. Compliance is the most common term for following treatment instructions. It describes the extent to which the patient's behaviour matches the health professional's recommendations (Haynes, *et al*, (1979) in Kaufman & Birks, 2009). It has been criticised for its negative connotations, in that it implies a passive role for the patient and suggests an

element of blame or recrimination for the individual who fails to comply with correct treatment instructions provided by an expert (Horne *et al* (2005) in Kaufman & Birks, 2009).

Barofsky (1978) in Kaufman & Birks, (2009) said that the term adherence has replaced compliance in accordance with the increased desire to emphasize the patient's role in decision making. The emphasis in using the term adherence is on the patient's freedom to decide whether or not to follow recommendations. The terms adherence or non-adherence describe the extent to which the patient's behaviour matches the agreed recommendations of the prescriber. Nowadays the term concordance, which describes a more patient-centred approach to prescribing and the taking of medicines, was therefore adopted. This term was originally defined as 'a new approach to the prescribing and taking of medicines' (Medicines Partnership (2003) in Kaufman & Birks, 2009). An agreement is reached after negotiation between a patient and a healthcare professional, which respects the beliefs and wishes of the patient when determining whether, when and how medicines are to be taken. However, nowadays, this term more widely used healthcare giver in describing relationship between healthcare giver and patients.

Related Concepts

Patients need to adhere medication, treatments, or any recommendations, because it plays important rule in achieve quality of life as high as they able to do. Many studies have conducted to analyze adherence on patients (Bissonette, 2008; Davis, 2007; Williams, Manias, Walker, 2008; Kip, Ehlers, Wal, Phil, 2008; Enriquez, Cheng, McKinsey, Stanford, 2009; Ruppert, Conn, Russell, 2008; Miakowski, Shockey, Chlebowski, 2007; Matinez, Aguilar, Pacheco, Martinez, 2007) in particular patients with Chronic Kidney Disease who undergo hemodialysis (Hain, 2008; Yokoyama, *et al*, 2009, Kim & Evangelista,

2010; Kammerer, Garry, Hatrigar, Charter, Erlich, 2007). There are many factors influence adherence of the patients, such as cognitive function (Hain, 2008), negative perceptions of illness related to their conditions (Kim&Evangelista, 2010), personal beliefs, and the need to exert some control over life direction (Christensen, Wiebe, Edwards, Michels, & Lawton, 1996; Karamanidou, Weinman, & Horne, 2008; Welch & Thomas-Hawkins, 2005 in Yokoyama, et al, 2009). Therefore, clinical outcomes in patients with CKD may differ according to the these factors and their degree of adherence to treatment.

The level of adherence depends ultimately on the adoption and maintenance of a range of therapeutic behaviors by both the healthcare giver and/or the patient that may include the patient's self-management of biological, behavioral, and social factors that influence health and illness. The World Health Organization more recent efforts have focused on the modifiable variables of psychosocial factors; in particular, much attention is now focused on social support as an important psychosocial factor related to adherence in patients on hemodialysis (Kammerer, Garry, Hatrigar, Charter, Erlich, 2007). Social support is defined as support by social and interactional activities from sources such as family, friends, colleagues, and medical staff (Kovac,Patel, Peterson, & Kimmel, 2002 in Yokoyama, et al, 2009).

Martinez, Aguilar, Pacheco, Martinez (2008) identified an association between most quality of life domains and the combination of medical prescription knowledge and attitude toward treatment adherence in type 2 diabetic patients. They considered it important to explore psychological precursors of treatment adherence behaviour in type 2 diabetic patients and to carry out interventions that change negative attitude toward treatment adherence and promote medical prescription knowledge, which may help to improve the quality of life of such patients. Those factors can be the others

concept which are closely related to adherence and influences achievement of quality of life on the patients with CKD.

Quality of life is often regarded in terms of how it is negatively affected, on an individual level, a debilitating illness that is not life-threatening, life-threatening illness that is not terminal, terminal illness, the predictable, natural decline in the health of an elder, an unforeseen mental/physical decline of a loved one, chronic, end-stage disease processes (Martinez, et al, 2008). Researchers at the University of Toronto's Quality of Life Research Unit define quality of life as "The degree to which a person enjoys the important possibilities of his or her life" (. Quality of life in relation of adherence considers who one is, how one is connected to one's environment, and whether one achieves one's personal goals, hopes, and aspiration. Any tools have developed by researchers to measure it, such as Quality of Life Inventory (QOLI) by Frisch (1990) or WHO Quality of Life-BREF (WHOQOL-BREF) by WHO (2004). Frisch categorize quality of life in terms of areas of life including health, self-esteem, goals and values, money, work, play, learning, creativity, helping, love, friends, children, relatives, home, heighborhood, community (Frisch, 1990). World Health Organization (WHO) Through WHOQOL-BREF instrument measures the following broad domains: physical health, psychological health, social relationships, and environment (WHO, 2004).

IV. Defining Attributes

Determining the defining attributes is an effort to try to show cluster of attributes that are most frequently associated with the concept and can be a list of characteristics of the concept that appear over and over again (Walker & Avant, 2005). Based on this approach, Defining Attributes of adherence are:

1. Ability to make decision to adhere all treatments, medication or recommendations based on their ability in terms of money, time,

opportunity, and so on. Not all of the patients can get it because of lack of money, time, or opportunity, but the most important is they should have a decision, willingness and an effort to adhere these.

2. beneficial to the persons. They recognize and feel benefit of adhere to medication, treatments, or other recommendations from healthcare giver. For example, they feel stronger after hemodialysis treatment or their edema reduced after they restrict fluid intake.

3. Acceptance of their conditions. They are not deny or complain with their conditions.

4. Ability to perform daily activities as far as they can do. It means that they do anything that they should do as well as what people usually do in the same setting, based on their ability.

V. Model Case

A model case is an example of the uses of the concept that demonstrates all the defining attributes of the concept, can be from real life, found in literature, or self constructed (Walker&Avant, 2005). The model case appears below:

Paul, a 65 years-old man has been suffering from CKD since five years ago. He was asked by his doctor to undergo hemodialysis three times a week, and restrict fluid intake only 900 ml/24 hours and eat low-protein food. He comes to hospital for hemodialysis treatment three times a week based on the schedule, he restricts fluid intake, and also ask to her wife to cook low-protein food for him and also remind him if he forget to adhere these recommendations. He feels stronger and satisfied after to adhere those. His edema less than before. Day after day he realize about his current condition with many limitations, but he can accept it as part of his life. Eventhough he is suffering from CKD, but he is still working everyday as a government officer. He always try to do anything independently. He almost never ask help from his wife or his children unless he really can not do it. He said that he will do his best until he die. His wife and his

children always support him in any ways. They proud to him, as a good husband for his wife and good father for his children.

All of the attributes are noted in this case. This case shows how adherence give positive influence to quality of life of this person. Adherence to the treatments or recommendation from healthcare giver is important to achieve the highest level of quality of life that possible to be achieved by the person.

VI. Borderline Case

Borderline case is an example or instances that contain most of the defining attributes of the concept being examined but not all of them. (Walker&Avant, 2005). A borderline case of this concept follows:

Jean, a 40 years-old woman routine undergo hemodialysis three times a week as scheduled, adhere to any advices from her doctor and nurse. She also gain feel benefit from hemodialysis treatment and other recommendations. Her edema decreased, and amount of uremic in her blood also decreased. However, she can not accept her condition. She denied with her current condition. Jean thinks she will be an useless woman. She sometimes does not believe that she get this illness. Her husband was death 10 years ago and her children are still young. They need love from her. She works to get money for her treatment and for her children. She goes to work in the morning and back in afternoon. She works everyday as a Human Resources Department manager in a private company. She also cooking food in the morning for her children, help them to finish their homework, and others household work. She committed to serve and love her children as far as she can do.

This case showed that one of the defining attributes, realize and accept her condition, was not included and others defining attributes was applied. The woman made decision to adhere those treatments or recommendations, gain and feel benefit, and do

her job as a single parent, but actually she could not accept her current condition. However, her love to her children give her spirit to do her duty as a mother and also as a father at the same time.

VII. Related Case

Related cases are those cases that demonstrates idea that are very similar to the main concept but that differ from them when examined closely (Walker&Avant, 2005). The following case is one of the example:

A nurse found Cheryl, a 45 years-old woman lying unconscious on the floor in front of a rest room of a hospital. He immediately asked other nurses to take her to emergency room. Based on the result of physical and diagnostic examinations, she had to undergo hemodialysis due to Chronic Kidney Disease. After hemodialysis she felt better and nurses asked her to restrict fluid intake and eat low-protein food. She went back to home. She has tried to understand her current condition due to her illness. Her husband also help her to realize and recognize her condition. He also gives her support to adhere any treatments and recommendations from nurses. She realized and finally recongnized her current condition. She did all of the recommendation were given by nurses. She finally understand and could accept her current condition due to her illness.

This case showed that it related to the concept in some way, but differ from it. This case started from incidental events that might be did not predicted before, that made she had to make a decision to adhere to the defining attributes of the concept. She finally understand and adhere all treatments after recognized her current condition.

VIII. Contrary Case

According to Walker&Avant (2005), contrary cases are clear examples of "not the concept". It means that contrary case doesn't meet all of the defining attributes. For example: Gordon has been suffed from CKD since 1 years ago. But he does't adhere treatments or

recommendations form healthcare giver. Sometimes he come to hospital for hemodialysis treatment, but almost never fit with his schedule. Nurses ask him to restrict fluid intake. He was allowed to drink up to 900 ml/24 hours, but he almost drink 2000 ml/24 hours everyday. Nurses also ask him to reduce eat high-protein food, but he eat high-protein food everyday. That's why he can not feel and gain the benefit of adherence, because he doesn't adhere to the recommendations. He can not accept his condition. Sometimes he doesn't believe that his feet and abdomen are bigger than before due to edema of his illness. He resigned from his job as a teacher and now he just stay at home. Everyday his activities just sleep, eat and watch television. He often angry to his wife and his children as one of his responds of his lack of ability. Sometimes he can not control himself, and his wife and his children have to be patient facing his behavior.

This case showed that none of defining attributes include in it. This is contrast with model case where all of the defining attributes include in the case. Contrary case help us to understand how importance of defining attributes in this concept related to quality of life.

IX. Antecedents and Consequences

Antecedents are those events or incidents that must occurs prior to the occurrence of the concept (Walker&Avant, 2005). Based on this definition, antecedent of this concept is occurence of Chronic Kidney Disease on a person that can be caused by many things, such as Kidney Stones, Infections in Kidney, ureter or Uretra Stricture, or Benign Prostate Hyperplasia (BPH). Those are play an important rule on starting occurrence of the concept.

Consequences are those events or incidents that occurs as a result of the occurrence of the concept, in other word, the outcomes of the concept (Walker&Avant, 2005). Consequence in this concept is he or she

will achieve the highest level of quality of life that he or she can achieve. It will make his or her life become more meaningful even though he or she suffers from the disease.

X. Empirical Referents

Walker and Avant (2005) define empirical referents as classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept itself. Empirical Referents of this concept are occurrence of adherence that can be measured by interviewing or observing how they follow treatment protocols or recommendations. It also can be measured by using instruments, such as Quality of Life Inventory (QOLI) was created by Frisch (1990), or WHO Quality of Life-BREF (WHOQOL-BREF) from WHO (2004). Frisch's tool assesses life satisfaction and outcome based on areas of life including health, self-esteem, goals and values, money, work, play, learning, creativity, helping, love, friends, children, relatives, home, neighborhood, community (Frisch, 1990). The WHOQOL-BREF instrument measures the following broad domains: physical health, psychological health, social relationships, and environment (WHO, 2004). Empirical referents from this concept include occurrence of adherence of treatments or recommendations, and any indicators for measure the concept that offered by those tools above.

XI. Conclusion

Adherence related to quality of life is a complex concept. It involved both physically, psychologically, and any aspects, inside or outside of human being. This paper has clarified this concept regarding difference it with other terms, compliance and concordance, and also offered defining attributes, model, borderline and contrary case were given in order to make this concept clearer. Antecedent, consequence and empirical referents have

explained. However, concordance as newer term has been widely using in clinical setting to replace its position. Those are useful but still need to be explored further and the most important, it should be not only be a part of academic writing, but should be developed in the context of improving nursing practice.

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