REVIEW ARTICLE

Conceptual analysis of patient compliance in treatment

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Abstract

Background: Patients' compliance consists a complex and multidimensional health issue, globally. At least three terms are used to describe the behavior of medication- taking. Aim: The aim of the present study was to review a conceptual analysis of patients' compliance to treatment.

Method and Material: The methodology included research of studies published in electronic databases such as Pub Med, Medline, WHO, PsychInfo, Cochrane National Council on Patient Information and Education and Dovepress. The search covered the period 1970-2011.

Results: Literature includes terminology analysis of terms 'patients' compliance and non-compliance', 'patients' adherence and non-adherence' and 'patients' concordance'.

Approximately 115 articles were identified. The present sample comprises 43 articles analyzing the terminology of these terms. 11 of these are mentioned in the attitude of Nursing Science to the controversy about the terms.

Conclusions: Compliance can be defined in various ways. The interpretation of the term depends on the philosophical context in which the concept is settled. The patient-centered approach facilitates the creation of an alliance between patient-therapist.

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Keywords: Patient adherence, patient compliance patient non adherence, patient noncompliance, terminology

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Introduction

It is widely accepted that a disease implies significant changes in patients' lives and moreover patients experience many needs that influence the outcome of the disease. Assessment of patients' needs should be an integral part of treatment. More in detail, patients' compliance to the therapeutic regimen consists a significant need for the reason that it has beneficial effect on disease management.[1] Indeed, benefits of medication therapy will be achieved only if patients comply to the prescribed treatment regimens.[2,3]

Though compliance to therapy has received a great deal of attention by the majority of literature, however deep understanding of the term is not fully achieved. Interestingly, 'compliance' is a multi-dimensional term involving a self - perception which is different between therapist and patient.[2] For instance, many scientists claim that 'compliance' means obedience to doctors' authority. However, during recent decades that is remarked a shift from paternalism to patients' autonomy and participation to decisions regarding their therapeutic regimen,[1] the term 'compliance' is also held as 'treatment adherence', 'therapeutic alliance', or 'agreement'.[2,3] These definition also put emphasis on patients' responsibility to disease management in collaboration with health professionals and their active participation to the therapeutic regimen.[2,3]

The terms 'compliance' and 'adherence' are held as synonymous by nurses. Most use the definitions of Haynes[4] and World Health Organization (WHO)[5] to describe the terms 'patient compliance' and 'patient adherence',

respectively. It is worth noticing that the study of Haynes et al.,[4] becomes from medicine and was the first paper of the literature.

Aim

The aim of the present study was to explore the conceptual analysis of patient compliance to treatment.

Method and material

Data bases were searched for articles published in English during the period 1970-2011 using the keywords: patient compliance, patient noncompliance, patient adherence, patient nonadherence, terminology. The electronical databases were : PubMed, Medline (through PubMed), WHO, Psych Info, Cochrane, National Council on Patient Information and Education, Dovepress. The acceptance criteria of the studies were to be full text, written in English and be conducted during the period between 1970-2011. Each reviewing paper should study 'patient compliance' and 'non-noncompliance' as well as 'patients' adherence' and/or 'non adherence' and 'patients' concordance'.

Results

Search identified approximately 115 articles from the fields of Nursing Science, Mental Health, Medicine and Pharmacy. Finally, the present review studied ten articles [2-4,8-13,23] that analyze the concept of patients' compliance, four papers [3,10,11,14] analyzing the concept of noncompliance, twelve [2,3,13,15-23] that analyzing the concept of patients' adherence, three[24-26] that analyzing the concept of patient nonadherence" and 5 articles[25-29]analyzing the concept of patients' concordance. 11 articles[30,32-41] are mentioned in the attitude of Nursing Science to the controversy about the terms.

The review of literature highlights the importance of compliance and the associated benefits. As a matter of fact , non adherence to the therapeutic regimen is strongly associated with re-hospitalization, morbidity, mortality, deterioration of patients' general health and increase of expenditure. More in detail, management of chronic diseases such as diabetes mellitus, cardiac or renal insufficiency, compliance may decrease fatality rates.[6] Failure to follow health instructions has direct and indirect impact on both the individual and the society. Specifically, non-compliance, increases mortality or the use of health services, thus leading to a decrease in productivity through lost working hours and increase of the cost in health services.[7]

Evolution of compliance terminology

The attempt to give a definition of the term compliance has started by physicians Sackett and Haynes in the late 1970's. The researchers reviewed the literature and the printed publications about 'compliance' and in a symposium that took place, many disagreements were expressed about the definition of the term. [8]

Though Sackett[7] suggested the terms 'adherence' and 'therapeutic alliance' however these terms were not adopted and the participants accepted the term 'compliance' which could be defined as: 'the extent to which the patient's behavior (in terms of taking medications, following diets, or following other lifestyle changes) coincides with medical advice'. This definition continued to sway for about two decades later. As explained by Sackett : 'the term fits and it amply describes the extent to which the patient *yields* to health instructions and advice, whether declared by an autocrat, authoritarian clinician or developed as a consensual regimen through negotiation between a health professional and a citizen'.

Indeed, compliance is considered to be a situation that exists as present or absent or that exists in more or less level and finally exerts either a beneficial or a deleterious effect on the outcome of a disease. Luscher et al.,[9] reported that 80% compliance to hypertensive drugs was associated with reductions of blood pressure

within normal whereas compliance of 50% or less was not associated with reductions to blood pressure. Furthermore, compliance is also defined on the basis of the results. Kyngas et al.,[3] noted that a patient may comply only with a part of the therapeutic regimen. Therefore, compliance should be assessed in the individual needs of each patient.

Compliance means that the patient has to follow the instructions of therapist which indicates a relation between therapist - patient where the patient is the receiver of instructions.[10,11] Anon[12] argues that this also includes the sense of 'punishment'. Failure to comply with the therapeutic regimen can be viewed as 'disobedience' of the patient.[13] According to Delamater,[11] non-compliance means that patients disobey the advice of their health care providers. The term of 'compliance' has been criticized because of the negative dimension that suggests in relation between therapist-patient.[3]

Non- noncompliance may be attributed to personal characteristics, such as dementias, lack of willingness or low educational level. Kleinsinger[14] noted that noncompliance includes a series of behaviors that fall on a continuum of severity, ranging from the trivial to the catastrophic. Due to the complexity of the concept of 'noncompliance', it is difficult to define a patient as complying or not.[3,10]

Trying to emphasize the concept of compliance, Ingram[10] lists some examples of patient reactions to the recommendations related to the diet, exercise, medication and appointments:

a) 'Exemplar case' Patient: “Do I really need to do all of these things that are listed on this paper every day?”. 'Exemplar case' emphasize the role of passive patient but, also, expresses his/her concerns so that to follow the treatment.

b) 'Contrary case' Patient: “You are crazy if you think I am going to get out of bed an hour early to exercise and use all of my energy for the day!” No one of the characteristics of the concept of compliance is shown above.

c) 'Borderline case' Patient thanks his/her provider, promised to comply with medication but no to comply with diet and exercise program. Patient will comply with a part of the treatment.

d) 'Related case' Provider discusses with patient about the importance of the treatment regimen and asked to meet with a family member in order to work as a team. Patient agrees to take medications but he/she is not sure if the family member can meet with them because of business. The 'related case' highlights the active patient and the collaboration between two parties.

Adherence

The National Council on Patient Information and Education (NCPIE) in its report on 1995 defined adherence as 'following a medicine treatment plan developed and agreed on by the patient and his/her health professional(s)'.[15] WHO in an effort to reduce the paternalistic nature of the term 'compliance' introduced the term 'adherence'.

The term 'adherence' has been adopted mainly by the field of psychology and social sciences as an alternative to the term 'compliance'. Moreover, this term highlights that adoption of recommendation or not, it depends on patients' decision. Christensen et al.,[16] noted that the term 'adherence' is used by behavioral scientists whereas 'compliance' is used by medicines. Other authors from the psychology literature used both terms interchangeably.[17-20]

The definition of the term 'adherence' includes 'compliance' definition, stressing the need for patient agreement.[3] Kyngas et al.,[2] claimed that the term 'adherence' offers greater liability to therapist in order to build a trusting interaction between therapist and patient. The term 'adherence' respects patient beliefs and reflects that only receiving medication is not always beneficial.[13] Furthermore, adherence prerequisites an active role of patients who construct an therapeutic relation with health

professionals. Interestingly, failure to be adherent shouldn't be an excuse to blame only the patient.[21,22,17]

According to WHO [5] 'adherence' is: the extent to which a person's behavior (taking medications, following a recommended diet and/or executing life-style changes) corresponds with the agreed recommendations of health professionals. Nevertheless, the literature does not indicate how agreement can be reached by both sides.[3] Other definitions cited in bibliography is: 'the extent to which patients follow instructions' [23], ' the extent to which a person's action or behavior coincides with advice or instructions'.[16]

Reach[24] describes non-adherence as a 'disorder' and specifically as a manifestation of the syndrome of 'weakness of will'. Nose[25] defined non-adherence as the failure to follow a treatment regimen, early termination of treatment and poor implementation of instructions while Nichols-English[26] noted that non adherence can occur in various forms, such as not having a prescription, not taking the correct dose, or taking at the wrong time, forgetting to take doses, or shortening the therapy.

Concordance

The term 'concordance' suggests that patients should take more responsibility even if everyone is not willing to do this. Marinker[27] defined concordance as: 'a new approach to the prescribing and taking of medicines. It is an agreement reached after negotiation between a patient and a health care professional that respects the beliefs and wishes of the patient in determining whether, when and how medicines are to be taken. This is an alliance in which health care professionals recognize the primacy of the patient's decisions about taking the recommended medications'.[26] The agreement may arise after an interaction procedure.[28,29] Nevertheless, no one could know if patient wish to take part to this interaction and if this could lead to useful outcomes.[27]

In the literature of health sciences, it is cited that the term 'concordance' is limited while it is not clear whether patient's agreement or common decision-making process leads to behavior change.[3] The term 'concordance' doesn't take into account the cases where some patients refuse treatment either because they do not know about cost and benefits or prefer to be hurt .[30] Horne et al.,[30] showed that 'compliance' and 'adherence' indicate patient behavior while the term 'concordance' is not associated with behavior.

Compliance from the nursing science perspective

Marston was the first nurse who put forth the concept of compliance, publishing a review about patients' compliance in treatment regimen. Marston[31] emphasized that nursing staff should adopt an overall view of compliance and supported that there are still much to learn about helping people to take care of their health when they are not under the direct surveillance of physicians or nurses". Marston[31] argued that it is difficult to study compliance as measurable variable because there is no possibility for objective measurements.

In 1973 the First North America Nursing Diagnosis Association (NANDA) classified non-compliance as a nursing diagnosis. From 1973 onwards, the NANDA members rejected non-compliance by the classification of nursing diagnoses and claimed that patients should not be partners but have blind obedience to the instructions.[32] According to the definition of Hentinen et al.,[33] compliance is an active, responsible process of care, in which the individual works to maintain his / her health in close collaboration with the health care personnel.

Brown et al.,[34] looked at the issue from a different perspective: "correct use of medication, observance of appointment with the therapist". Edel[35] noted for compliance: "the major element of the relation between those who have power

and those over whom they exercise power". Dracup and Meleis[36] defined compliance as the extent to which an individual chooses behaviors that coincide with a clinical prescription. The regimen must be consensual, that is, achieved through negotiations between the health professional and the patient. Burckhardt[37] and Hess[38] used the Webster's term who defined compliance as: 'the act or process of complying to a desire, demand, proposal or coercion…adapt (ing) one's actions to another's wishes, to a rule, or to a necessity'. Hess[38] also supported that patient have to pay attention to treatment regimen and to collaborate with therapists. Hussey and Gilliland[39] defined compliance as: 'the positive behavior that patients exhibit when moving toward mutually defined therapeutic goals'. McGann[40] commented that: 'This definition disregards the ways in which a prescribed regimen affects an individual's life and assigns the health care provider the role of "expert'. Vivian[40] claimed that between nurse-patient there is a mutual supportive relation where nurses should help patients to promote compliance while patients should participate in the process.

Murphy et al., [42] showed that nurses- authors are viewing the concept from three different perspectives: a) evaluative: authors are interested in the issues arising from 'compliance' such as 'paternalism' and 'consensus'. They conclude that the term does not match the nursing profession b) rationalization: The authors acknowledge the issue of the shaded connotation of term. However they continued to use the term when appropriate c) acceptance: Nurses–authors use the word 'compliance' without any comment on the controversy **about.**

Patient- therapist interaction

Until recently, health care provided with in a 'disease-centered model' according to which decisions about patient treatment were taken by health professionals with little participation of the patient.[43] According to this model the interest focused more on illness individually rather than on patient as a whole.[44] There was the perception that patients who seek health advice would follow or will comply with the recommendations. Therefore, the likelihood of disagreement with the recommendations of health professionals or the likelihood of ambiguity and imprecision of the recommendations, such as those presented by health professionals, are not dealt with.

With the evolution in terminology and the use of term 'adherence', there had been remarked a change towards approach to patient care (patient-centered). Patients have the right to express a different opinion regarding diagnosis and treatment regimen. According to Playle et al.,[45] patients evaluate instructions about treatment and they make up their mind after having being informed. The 'patient-centered- model' has been shown to offer greater satisfaction to the patient and yield better results. According to this approach, patients are treated as collaborators, are deep informed about their health issues, are more involved in planning and decision-making and encouraged to take responsibility in taking care of their health. Moreover, the 'patient-centered' approach facilitates the patient-therapist interaction and help patient to be aware of the therapeutic regimen.[46-48]

Given the beneficial effect that the 'patient-centered' approach has had on health care one would expect that non-compliance would be a rare phenomenon. Nevertheless, non-compliance is a complex and multi-dimensional problem that includes a number of dynamic behaviors and circumstances.

Discussion

This article analyzes the terminology of 'compliance', 'adherence' 'concordance' while disclosing the deficiencies of a suitable definition of this phenomenon. What is the difference between compliance, adherence, and concordance? Compliance suggests a

unintentional act of subjection to authority, whereas adherence relates to an intentional act of subscribing to a point of view. Compliance had became unpopular because of its critical complexion. So alternative terms were sought. 'Adherence' was introduced and was used as an alternative to 'compliance'. Terms 'noncompliance' and 'non-adherence' make no distinction between someone who takes some or none of his prescribed treatment. 'Concordance' means a shared responsibility between the two parties. The difference is not just semantic but also reflects the relation between health professionals and patients. Fraser[49] in his editorial article supported that 'it doesn't matter what you call it as long as the patient takes the correct medication at the correct time and at the correct dose'.

Nurses, even in their efforts to implement the patient-centered approach may not have yet understood the complexity of compliance thus being unable to develop strategies that would help patients to achieve better results. According to Kyngas et al.,[3] the concept of compliance can be defined using four features: self-care behavior, collaboration, active and responsible role of the patient.[2] Nurses may be able to influence patients to be adherent to the therapeutic regimen and effectively use this authority for changing health behaviors and promote treatment.

Patient-centered care considers patients as an integral part of health care team. Effective communication between personnel and patients is essential. Patients have the chance to make decisions about their care and treatment after being informed and in partnership with medical staff. [1,2] Treatment should meet the patients' needs. In contemporary times, where the paternalistic model of care is gradually fading whereas patients' active participation in the process of decision-making, and the needs of patients has emerged to the fore,[50] evaluation of 'compliance' is a matter of great importance. More attempts are needed to find a definition that reflects the patient- center approach and patients' active participation in decision making. To do that, it is significant for nurses to evaluate and assess compliance in the context of Nursing Science.

Implications for practice

Nursing staff in order to achieve patient – centered approach and increased compliance should:

- Develop a therapeutic, trusting relationship with patient
- Include patient in health care plan and decision- making
- Plan more frequent contact (telephone calls, visits at home, appointments)
- Plan educational programs structured by nurses for patients.

Conclusions

The definitions of compliance and related terms, such as those highlighted in this study, need to be redefined in nursing practice. Term 'compliance', as revealed by the literature, underlies the passive role of patients. Term 'adherence', underlies that patient have the right to choose the recommended regimen and respect patient's knowledge, seems to be an attainable term. Term 'concordance', which describes patient-therapist collaboration, remains rare and cannot be achieved in more circumstances. Therefore, compliance should be reconceptualised, studied and understood.

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