Using the Common Sense Model in Daily Clinical Practice for Improving Medication Adherence

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ABSTRACT

• **Objective:** To review the Common Sense Model, a framework that can be used for understanding patients’ behavior, including taking or not taking medications as prescribed.

• **Methods:** Descriptive report.

• **Results:** Medication adherence, a critical component of achieving good patient outcomes and reducing medical costs, is dependent upon patient illness beliefs. The Common Sense Model holds that these beliefs can be categorized as illness identity, cause, consequence, control, and timeline. Effective communication is necessary to understand the beliefs that patients hold and help them understand their condition. Good communication also can allay fears and other emotions that can be disruptive to achieving good outcomes.

• **Conclusion:** Clinicians should seek to understand their patients’ illness beliefs and collaborate with them to achieve desired health outcomes.

Clinical practice is based on scientific evidence, by which medical problems are diagnosed and treatment recommendations are made. However, the role of the patient may not be completely recognized as an integral part of the process of patient care. The impact of failing to adequately recognize the patient perspective is evident in medication nonadherence. Health psychology research can provide clinicians insight into patients’ perceptions and behavior. This paper reviews the Common Sense Model (CSM), a behavioral model that provides a framework that can be used in understanding patients’ behavior. In this paper I will discuss the model and how it can be a possible strategy for improving adherence.

**Making the Case for CSM in Daily Practice**

It can be difficult to realize that persons seeking medical attention would not take medications as prescribed by a physician. In fact, studies reveal that on average, 16.4% of prescribed medications will not be picked up from the pharmacy [1]. Of those patients who do pick up their medication, approximately 1 out of 4 will not take them as prescribed [2]. Such medication nonadherence leads to poor health outcomes and increased health care costs [3,4]. There are many reasons for medication nonadherence [5], and there is no single solution to improving medication adherence [6]. A Cochrane review of randomized controlled trials evaluating various interventions intended to enhance patient adherence to prescribed medications for medical conditions found them to have limited effectiveness. Interventions assessed included health and medication information, reminder calls, follow-up assessment of medication therapy, social support, and simplification of the treatment regimen [6]. In an exploratory study of patients with chronic health conditions, Kucukarslan et al found patients’ beliefs about their illness and their medication are integral to their health care decisions [7]. Their findings were consistent with the CSM, which is based on Leventhal’s theory of self-regulation.

Self-regulation theory states that rational people will make decisions to reduce their health threat. Patients’ perceptions of their selves and environments drives their behavior. So in the presence of a health threat, a person will seek to eliminate or reduce that threat. However, coping behavior is complex. A person may decide to follow the advice of his clinician, follow some other advice (from family, friends, advertising, etc.), or do nothing. The premise of self-regulation is that people will choose a common sense approach to their...
health threat [8]. Therefore, clinicians must understand their patients’ viewpoint of themselves and their health condition so they may help guide them toward healthy outcomes.

The Common Sense Model

The CSM is a framework for understanding patient behavior when faced with a health threat. It holds that patients form common sense representations of their illness using information from 5 domains [8]: (1) the identity of the illness (the label the patient gives to the condition and symptoms); (2) the cause of the illness; (3) the consequences of the illness (beliefs about how the illness will impact the patient’s well-being); (4) whether the illness can be controlled or cured; and (5) timeline (beliefs about how long the condition will last). A patient may either act to address the health threat or choose to ignore it. Patient emotions are proposed to have a role on patient behavior along with the 5 dimensions of illness perception.

Illness Identity

Illness identity is the label patients place on the health threat; it is most likely not the same as the signs and symptoms clinicians use. Therefore, the first disconnect between physician and patient may be in describing the illness. Chen et al studied illness identity as perceived by patients with hypertension [9,10]. Illness identity was defined as (1) hypertension-related symptoms, (2) symptoms experienced before and after their diagnosis; and (3) symptoms used to predict high blood pressure. Although hypertension is asymptomatic, patients do perceive symptoms such as headache associated with their hypertension. The researchers found those patients who identified more symptoms were more likely to believe that their symptoms caused the hypertension and were correspondingly less likely to use their medication. For them, when the headache subsides, so does the hypertension.

Physicians should find out how patients assess their health condition and provide them tools for evaluating their response to medication. In the case of hypertension, the physician could have the patient check their blood pressure with and without the headache to demonstrate that hypertension occurs even when the patient is not “symptomatic.” The point is to converse with the patient to learn how they view their condition. Clinicians should resist the “urge” to correct patients. Taking time to help patients better understand their condition is important. A misstep:

Patient: I can tell when my blood pressure is high. I get a pounding headache.

Doctor: High blood pressure is an asymptomatic condition. Your headaches are not caused by your high blood pressure.

Patients may choose to ignore the clinician if they feel strongly about how they define their illness. It is better to listen to the patient and offer steps to learn about their health condition. Here is a better response from the physician:

Doctor: You are telling me that you can tell when your blood pressure is high. So when your headaches your pressure is high, right?

Patient: Yes.

Doctor: Let me tell you more about high blood pressure. High blood pressure is also present without headaches...

Illness Causes

There are multiple causative factors patients may associate with their disease. Causes attributed to disease may be based on patient experiences, input from family and friends, and cultural factors. Causes may include emotional state, stress or worry, overwork, genetic predisposition, or environmental factors (e.g., pollution). Jessop and Rutter found patients who perceive their condition as due to uncontrollable factors, such as chance, germs, or pollution, were less likely to take their medication [11]. Similar findings were published by Chen et al [9]. They found psychological factors, environmental risk factors (e.g., smoking, diet), and even bad luck or chance associated with less likelihood of taking medications as prescribed. Clinicians should explore patients’ perceptions of causes of a condition. Patients strive to eliminate the perceived cause, thus eliminating the need to take medication. In some cultures, bad luck or chance drives patients’ decisions to not take medication, or they believe in fate and do not accept treatment. Whether they feel they can control their condition by eliminating the cause or have a fatalistic view that the cause of their condition is not within their control, the clinician must work with the patient to reduce the impact of misperceptions or significance of perceived causes.
Illness Consequence
Consequence associated with the health condition is an important factor in patient behavior [12]. Patients must understand the specific threats to their health if a condition is left untreated or uncontrolled. Patients’ view of illness consequence may be formed by their own perceived vulnerability or susceptibility and the perceived seriousness of the condition. For example, patients with hypertension should be informed about the impact of high blood pressure on their bodies and the consequence of disability from stroke, dependency on dialysis from kidney failure, or death. They may not consider themselves susceptible to illness since they “feel healthy” and may decide to delay treatment. Patients with conditions such as asthma or heart failure may believe they are cured when their symptoms abate and therefore believe they have no more need for medication. Such patients need education to understand that they are asymptomatic because they are well controlled with medication.

Illness Control
Patients may feel they can control their health condition by changing their behavior, changing their environment, and/or by taking prescribed medication. As discussed earlier, cause and control both work together to form patient beliefs and actions. Patients will take their medications as prescribed if they believe in the effectiveness of medication to control their condition [11,13–15]. Interestingly, Ross found those who felt they had more control over their illness were more likely not to take their medication as prescribed [12]. These persons are more likely to not want to become “dependent” on medication. Their feeling was that they can make changes in their lives and thereby improve their health condition.

Physicians should invite patients’ thoughts as to what should be done to improve their health condition, and collaborate with the patient on an action plan for change if change is expected to improve/control the health condition. Follow-up to assess the patient’s health status longitudinally is necessary.

In this exchange, the patient feels he can control his hypertension on his own:

Doctor: I recommend that you start taking medication to control your blood pressure. Uncontrolled high blood pressure can lead to many health problems.

Patient: I am not ready to start taking medication.

Doctor: What are your reasons?
Patient: I am under a lot of stress at work. Once I get control of this stress, my blood pressure will go down.

Doctor: Getting control of your stress at work is important. Let me tell you more about high blood pressure.
Patient: Okay.

Doctor: There is no one cause of your high blood pressure. Eliminating your work stress will most likely not reduce your blood pressure....

Timeline
Health conditions can be acute, chronic, or cyclical (ie, seasonal); however, patients may have different perceptions of the duration of their health condition. In Kucukarslan et al, some patients did not believe their hypertension was a lifelong condition because they felt they would be able to cure it [7]. For example, as illustrated above, patients may believe that stress causes their hypertension, and if the stress could be controlled, then their blood pressure would normalize. Conversely, Ross et al found that patients who viewed their hypertension as a long-term condition were more likely to believe their medications were necessary and thus more likely to take their medication as prescribed [12]. A lifelong or chronic health condition is a difficult concept for patients to accept, especially ones who may view themselves as too young to have the condition.

Emotions
After being informed about their health condition, patients may feel emotions that are not apparent to the practitioner. These may include worry, depression, anger, anxiety, or fear. Emotions may impact their decision to take medication [12,14]. Listening for patients’ responses to health information provided by the clinician and letting patients know they have been heard will help allay strong negative emotions [16]. Good communication builds trust between the clinician and patient.

Conclusion
Patients receive medical advice from clinicians that may be inconsistent with their beliefs and understanding of their health condition. Studies of medication nonadherence find many factors contribute to it and no one tool to improve medication adherence exists. However, the
consequence of medication nonadherence are great and include worsening condition, increased comorbid disease, and increased health care costs. Understanding patients’ beliefs about their health condition is an important step toward reducing medication nonadherence. The CSM provides a framework for clinicians to guide patients toward effective decision-making. Listening to the patient explain how they view their condition—how they define it, the causes, consequences, how to control it, and how long it will last or if it will progress—are important to the process of working with the patient manage their condition effectively. Clinicians’ reaction to these perceptions are important, and dismissing them may alienate patients. Effective communication is necessary to understand patients’ perspectives and to help them manage their health condition.

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References