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Health Focused Education and Counseling for a Patient Diagnosed as HIV Positive

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Abstract

AIDS is a chronic, life-threatening condition caused by the human immunodeficiency virus (HIV). Examined is a patient education and counseling model applied to a patient with AIDS. Offered is a model utilizing problem based questions, goals and objectives and applied theory that is summarized in an algorithm of care for the patient with AIDS. Stages of HIV infection are used to facilitate clinical evaluation and plan therapeutic interventions. The process of health-focused counseling involves a number of critical components: assessment, patient education, health focused counseling, treatment intervention, and follow-up. The use of the health focused education and counseling model has been found to be relevant and appropriate when considering the need to tailor patient education and treatment to evidenced based decisions for health professionals.

The major problem in my case study is Acquired Immune Deficiency Syndrome (AIDS). AIDS is a viral infection caused by human immunodeficiency virus (HIV) that has progressed to AIDS after the infected person developed an "opportunistic" infection (OI) or tumor (one that might not have developed if HIV had not been present) or a "helper" T-cell count in the blood of less than 200 cells/mm. Levels of CD4 (helper) and CD8+ (non-helper) subsets of T cells are used to evaluate immunologic competency in HIV/AIDS. HIV can be transmitted through exchange of bodily fluids during sexual contact, by receipt of infected blood through a blood transfusion or blood products, by sharing contaminated needles for intravenous drug abuse, or from an HIV-infected mother to newborn. Persons at higher risk include homosexual or bisexual males, hemophiliacs, intravenous drug addicts, heterosexuals with multiple partners, and infants of HIV-positive mothers (especially those who are breastfed). Worldwide, an estimated 38 million people are living with HIV, nearly half

of them women and girls between the ages of 15 and 24. An estimated 950,000 Americans are currently living with HIV/AIDS, up from 900,000 in 2001. Because it seems unlikely that a vaccine will be found soon, hopes for stemming the infection appear to lie for now in education, prevention and treatment.¹

After levels have been identified, stages of HIV infection are used to facilitate clinical evaluation and plan therapeutic interventions. There are four major stages of HIV: The first is Acute HIV Syndrome, where the virus rapidly spreads to organs, especially the lymphoid tissues, but it is not yet aggressive in causing disease or severe symptoms. The second stage is the Asymptomatic Stage, which is when the virus starts to grow and multiply in the lymph nodes, but the infection is latent. In the third stage, an individual has attained full-blown AIDS and begins to lose immune system function, mainly due to infection of CD4+ T-lymphocytes. The final stage is End-Stage Disease, where the virus continues to slowly destroy the

immune system for up to ten years. An opportunistic infection is the likely cause of death.

Malnutrition is often a physical side effect of AIDS and impairs one's ability to mount an adequate immune response. HIV targets the immune system and makes an infected person susceptible to infection and neoplasm. Malnutrition and its complications further impair the body. As patients with HIV develop advanced manifestations of AIDS, mutually detrimental interactions exist among nutrition, immunity, and infection. Though effective antiretroviral treatments are available, HIV-infected people face a lifetime of vigilant polypharmacy to control HIV and wasting.²

Depression is a major psychological side effect when discovering contraction of HIV/AIDS. Depression is a mental condition that is characterized by feelings of sadness or hopelessness over a period of time. It affects approximately 2-4% of the general population at any point in time. Depression can be triggered by a number of factors; one such cause can be the result of an unexpected and traumatic event, such as acquiring a life-threatening disease like AIDS. Receiving a diagnosis of any life-threatening illness is devastating. But the emotional, social and financial consequences of HIV/AIDS can make coping with this illness especially difficult. A person who has just been diagnosed with HIV/AIDS may experience depressive thoughts as they find it difficult to accept and adjust to their condition.³

Methodology

Single Case Study Design

The patient is a 22-year-old female from an upper middle class community in northeastern United States. She is a 7th semester college dropout who is currently living at home with her parents and two younger sisters. Her family is very supportive and they are all extremely close. Within her community, kids began experimenting with drugs at an early age. The town is a very rural area where the kids find themselves with little to do, especially in the summers. When this patient was in 8th grade, she began experimenting with marijuana with her friends. The following year, she began attending high school at a private school near her town. While in high school, she found a group of friends who were also into experimenting with drugs. They began smoking marijuana every day after school and also experimenting with other drugs, such as mushrooms and cocaine. Despite her association with drugs during high school, she was active in athletics. She began swimming her freshman year and soon after found she had a real talent for the 100 meter freestyle. During her senior year, she experienced a major upset when she caught the flu a few days before the state championship meet. Due to dehydration, she performed disappointingly at

the meet and as a result, began to develop a negative attitude towards the sport.

Because of the fact that she maintained good grades during high school and was an All-State swimmer, her parents were never aware that she was using drugs. Despite the major upset she experienced in her senior year, she was offered a chance to walk onto the swim team at the university of her choice. To her parent's dismay, she decided not to swim in college because of her lack of enthusiasm for the sport since the major upset at the championship meet. As a result, she found herself suddenly having a lot more free time and experiencing feelings of inadequacy because she was no longer a respected athlete on a team. She felt she somehow needed to fill this void. As a freshman in college, she began using cocaine frequently with her friends. Within the next two years, she experimented with crack cocaine, methamphetamine, sniffing heroin, and continued the use of cocaine.

In the summer before entering into her sophomore year of college, she injected heroin for the first time. It was not until the summer before her senior year that she became a full-blown heroin addict. She hid her addiction from everyone, including her closest friends. It was then that her life began to slowly go downhill. Her parents began to notice a change in her and on July 7, Amelia was arrested for possession of narcotics. She would not admit to having a problem with heroin, instead she told her parents it was cocaine in order to lessen the shock value. A few days later her parents got her admitted to an outpatient drug treatment facility. They were still unaware that her addiction was to heroin, not cocaine. After skipping too many meetings, Amelia was kicked out of the program due to lack of cooperation. She continued heavily using heroin for the remainder of the summer. Her parents desperately wanted her to enter into her final year of college and finish. As her first semester of her senior year began, she became deeply engulfed in her heroin addiction. She was no longer attending classes and was spending all the money she had on heroin. She was slowly losing friends and things were becoming worse for her.

As a result of having been arrested in the summer, she was issued a certain number of community service hours. In order to complete her hours, she went to the peer-education program on campus for alcohol and other drugs. She admitted to her addiction to heroin and later that day confessed to her parents for the first time during a meeting held in my office. She entered the hospital that evening for detoxification. After 7 days, she returned and I informed her it would be best if she were to get tested for HIV since she had been sharing intravenous drug paraphernalia. It was not until then that she discovered she was infected with HIV; it would disturb her and her family even more to find

out that she was infected nearly 3 years earlier as a result of her drug use and risk taking behaviors.

The patient is now in the first stage of HIV and is yet to experience any severe symptoms. As a result of both her drug addiction and recent news of HIV infection, she has had to drop out of school. She has since moved back in with her family and is arranged to enter into an in-patient drug treatment facility in Massachusetts. As a result of the drug withdrawals and coping with the news of her illness, she has developed generalized anxiety disorder. She has been experiencing severe anxiety attacks as a result of dealing with the current circumstances. Through the bi-weekly visits, and with the help of the physician and psychologist, she will be given the opportunity to learn how to deal with the infection and to live life each day as anyone else would. Her family is also offering strong support and encouragement for her rehabilitation. As her care specialist, the following model became important in tailoring a model of education and counseling for this patient.

Her care specialist is working with her to increase weight and promote adequate nutrition through increased caloric intake and implementation of vitamins and minerals. The main goal is to get her at a healthy weight for her height and to be well nourished so that she can combat other complications brought on by the virus. This will be accomplished through educational meetings and activities to illustrate the importance of eating a well-balanced diet with adequate vitamins and minerals to be strong and healthy. An emphasis will be placed on fresh fruits and vegetables, whole grains and lean protein. Healthy foods will help keep her strong, give her more energy and support her immune system. Also, because her nutritional needs are extremely high and she may not be digesting food well, the dietician will connect with her doctor about appropriate vitamin and mineral supplements.

Although the patient is motivated and determined to get better, there is no cure for AIDS. This is a disease that she will have to learn to cope with and, at times, will struggle through. The patient has been recently showing signs of severe depression and is often sad and withdrawn. She is hesitant towards recovery because she says that she feels like there is no use in trying to overcome the battle, it is uncontrollable. Through the bi-weekly visits, and with the help of the physician and psychologist, she will be given the opportunity to learn how to deal with the infection and to live life each day as anyone else would. Her family is also offering strong support and encouragement for her rehabilitation. For her care specialist, the following model became important in tailoring a model of education and counseling for this patient.

Problem Based Questions

Health focused counseling is often facilitated through the use of problem based questions.³ For this patient, the following are a sampling of the appropriate questions and answers that the counselor should be address with this patient.

1. What is HIV/AIDS?
2. How does someone acquire HIV?
3. How is HIV/AIDS treated?
4. What are some signs and symptoms associated with HIV/AIDS?
5. What are some signs and symptoms that develop once the immune system has been severely damaged?
6. What does 'malnutrition' mean?
7. How does malnutrition play a role in HIV/AIDS?
8. How can malnutrition be treated?
9. What is depression?
10. Is there a link between depression and other mental illnesses?
11. What are some symptoms of depression?
12. What are the treatment options for depression?

Goals and Objectives

The health-focused counselor should develop goals and objectives that involve the patient and are measurable. Examples of such goal setting are a part of patient education.

Goal: Educate the patient about HIV/AIDS and the active role she must engage in for self care.

Objective: Have her visit websites such as

- www.mayoclinic.com,
- www.healthfinder.gov,
- www.webmd.com,
- www.aidsinfo.nih.gov

and create a summary of the information learned from the web site.

Objective: Administer an education evaluation every two weeks to ensure that she is learning to implement adequate self-management plan into her daily lifestyle eating habits.

Applied Theory and Practice

Once the patient has a better understanding of the diagnosis and disease entity, the critical issues, and the goals and objectives, it is important to move from the health education phase to the health-counseling phase of treatment. The importance of relevant and useful counseling theory can draw upon one or more models. In this case the counselor selects four methods. These include the *Transtheoretical Model*, a cognitive behavior intervention model, a stress and coping model, and a

model that best explains the process variables with this type of disease or condition.^{4,7} The first of these models addresses the level of readiness for education, counseling, and change. This is the *Transtheoretical Model: Stages of Change*.

In counseling, the use of the *Transtheoretical Model* can aid in understanding the stage at which she is currently functioning i.e. contemplation, as well as aid her in learning to live a longer, healthier, happy life with this disease. It is important to focus on client-based care that addresses the social and psychological needs of the patient as well as her physical and medical requirements. To address her depression, develop a plan for her relevant to her expressed interests.

These short-term goals and objectives will help increase the effectiveness of my role in the client's treatment processes of change (*the mechanisms people use*) and can be applied to the level of her experience or environment to produce a change in behavior: *consciousness raising, social liberation, emotional arousal, self-reevaluation, commitment, countering (or counter conditioning), environmental control, reward, and helping relationships*.

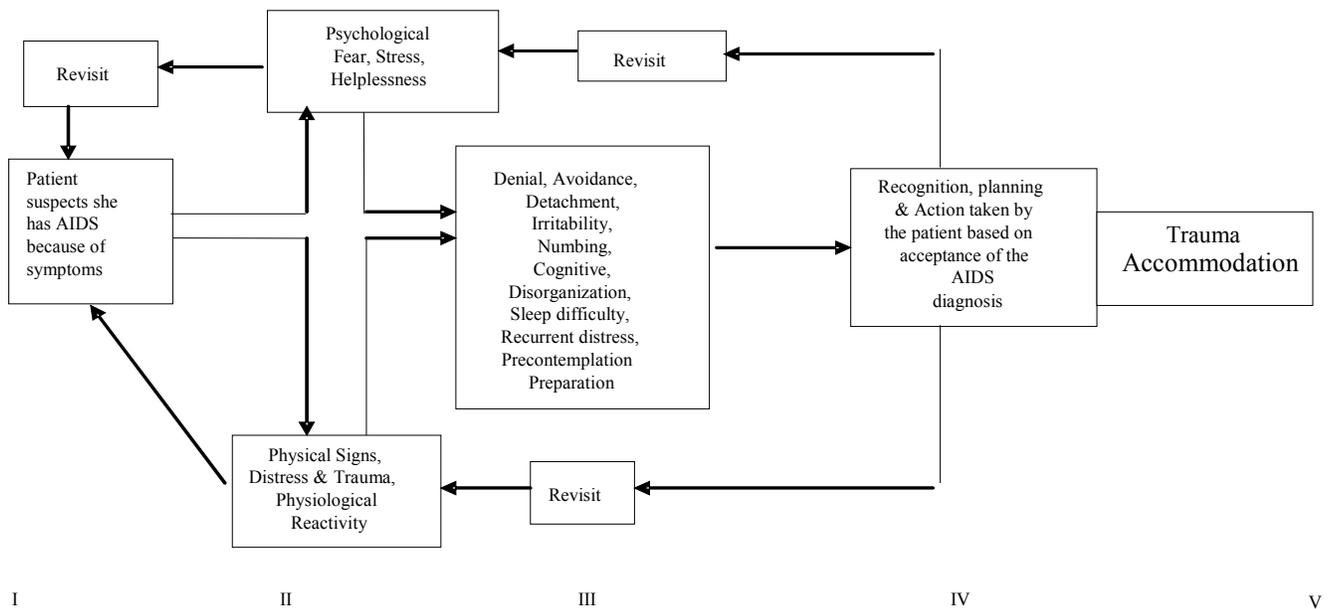
An intervention model for this patient may utilize the *Rational Emotive Behavior Therapy*.⁵ With this theory, emotional and behavioral problems are viewed as a result of irrational thoughts, assumptions and beliefs, and the therapy is geared toward identifying those problematic and erroneous ideas as well as replacing them with more rational, reality-based perspectives. By gaining and maintaining realistic perspectives, she can achieve greater self-acceptance and life satisfaction. The health-focused counselor should actively participate in sessions, teaching her to exchange negative, self-defeating thoughts, feelings and behaviors for newer, healthier ones. Work on confronting irrational beliefs (i.e. 'AIDS will take my life, why try to stop it' or 'What is the point in trying to get better when there is no cure') and come up with alternatives that make more sense when examined logically and factually (i.e. 'if I can make my life last longer by improving my diet and medications to strengthen my immune system, then I will try my best to do that'). The focus is on the present and using scientific thinking, so she and I will not be concentrating on those drug nightmares she experienced back in college, but will focus more on how she can take care of her body through pharmaceutical medications and

diets that will contribute vitamins and minerals to enhance immune power. She will be taught and encouraged to accept personal responsibility for her own thoughts, feelings and behavior, and empowered to change beliefs and reactions that are maladaptive, distorted, interfere with their goals and functioning, and thwart her enjoyment of life. With practice, these new ideas will become part of her, integrated into her way of being. The goal is freedom from emotional upheaval and a more authentic and joyful engagement in life.

The *Stress and Coping Model* argues that when faced with a stressor, the patient will evaluate the potential threat (primary appraisal).⁶ *Primary appraisal* is her judgment about the significance of acquiring HIV as stressful, negative and challenging. Facing a stressor, the *second appraisal* follows, which is an assessment of her coping resources and options. Secondary appraisals address what she can do about the situation, like trying to improve the strength of her immune system through the use of nutrition and prescribed medications. Actual *coping efforts* aimed at regulation of the problem give rise to *outcomes* of the coping process. Stress does not affect all people equally, but stress can lead to illness and negative experiences. Coping with stress is therefore an important factor, it affects whether and how people search for medical care and social support and how they believe the advice of the professionals.

Finally, the *Trauma Accommodation Model in Disease, Illness, and Injury* applies to the processing of the onset and trauma realized in being diagnosed with AIDS. In this model, the patient experiences different stages beginning with the initial diagnosis of a disease, illness, or injury and ending with a feeling of acceptance, accommodation, and resolution to living her life as normally as possible with such a condition.⁷ However, throughout the various stages, she constantly revisits previous stages and uses these experiences to ultimately get to the final stage. In her case, she experienced a sudden life-altering diagnosis when she donated blood and found out that it was contaminated with the HIV virus. In addition to dealing with the trauma of her own disease state, she is also dealing with malnutrition and depression.⁷

The *Trauma Accommodation Model* accurately outlines the stages that she went through when dealing with her diagnosis.

Figure 1: Trauma Accommodation Syndrome and the Accommodation and Acceptance of Being Diagnosed with AIDS

Stage 1 (Diagnosis): The patient is diagnosed with HIV. She donated blood at an American Red Cross blood drive and had no idea that her blood was contaminated with the virus. In this case, she experienced a very sudden trauma that completely changed her life.

Stage 2 (Psychological Stress/Physical Change): She experiences many psychological stresses and physical changes as a result of her diagnosis. She shows signs of depression and does not feel like her life is worth living. She has to deal with the fact that she will die before most people of her age and maybe even before her own parents.

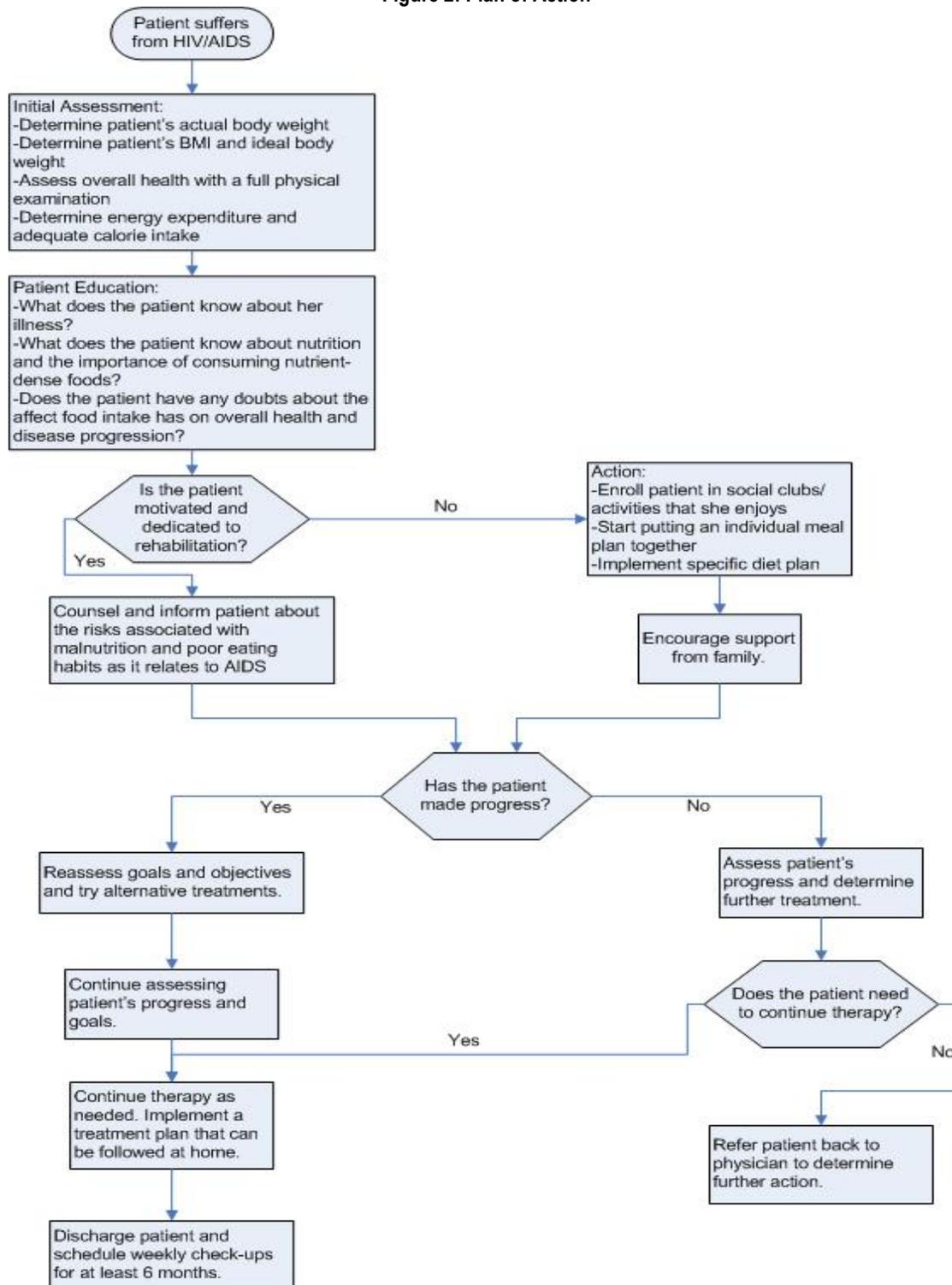
Stage 3 (Denial/Avoidance/Cognitive Confusion): She also experiences feelings of denial and avoidance. She does not want to believe that this has happened to her. She finds it hard to accept the reality of her injury and cannot imagine only having a few more years to live.

Stage 4 (Recognition/Preparation/Action): The patient recognizes the reality of her disease and realizes that she has to be motivated about strengthening her immune system if she wants to live a normal life. She goes to different therapists, including a dietician to help her adjust her diagnosis and prolong the onset of full-blown AIDS, and a clinical psychologist to help her with the depression. She also joins a book club that promotes a social atmosphere where she can meet people and live more normally without concentrating on her disease.

Stage 5 (Accommodation/Acceptance/Maintenance): After a while, she accepts that her life is now different as a result of contracting HIV. She has learned to accommodate to her condition through use of medications and incorporation of a healthier diet. Through therapy, she has learned how to live with such a disease and how to live as independently and happily as possible. It is important to note that in this model the patient frequently revisits previous stages due to certain circumstances. All patients experience hardships and setbacks during their rehabilitation dealing with an illness or injury. However, they use these experiences to help them reach the final goal of this model – Accommodation and Resolution. The health focused counselor then formulates a “plan of action” for the patient. The plan of action reviews the diagnosis, patient education, theoretical basis of

treatment, intervention, prevention education and follow-up. It may be summarized in an algorithm using evidence-based decision-making to standardize the intervention. Figure 2 summarizes this process by applying the critical components to an algorithm for patient education and counseling. Note that it includes an initial assessment of the patients educational and counseling needs, the patient education component, specific needs related to dietary needs, counseling the patient about risks of malnutrition all utilizing the applied theories appropriate to the patient.

Figure 2: Plan of Action



PRACTICE IMPLICATIONS

The practice of health-focused counseling involves a number of critical components: patient education, applied counseling theory, and algorithm for implementation for this educational model of health care. Courtenay, McCreary and Merighi (2002) have provided data relating to the fact that there is a great difference in males and females in regards how they perceive health related issues and how they deal with high level health and wellness. The Elaboration Likelihood Model (ELM) provides a theoretical rationale for tailored communication in exploring a psychotherapeutic approach.⁹ According to this model, individuals are more likely to actively and thoughtfully process information by engaging in what the authors refer to as "central-route processing" if they perceive it to be

personally relevant. ELM is based on the premise that under many conditions, people are active information processors-considering messages carefully, relating them to other information they have encountered and comparing them with their own past experiences. Research has shown that messages processed in this way tend to be retained for a longer period of time and are more likely to lead to permanent change in health behaviors.¹⁰⁻¹⁴

Examined herein has been a health focused educational model of health care with a single case study design for health professionals in providing patient education and counseling to patients with Acquired Immune Deficiency Syndrome (AIDS).

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