อยู่ดีมีสุข : การจัดการตนเองของผู้สูงอายุไทยที่เป็นเบาหวานชนิดที่ 2

Healthy Living: Self-Management of Elderly Thai People with Type 2 Diabetes Mellitus

บทความวิจัย
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บทคัดย่อ

การวิจัยนี้ มีวัตถุประสงค์เพื่อ ศึกษากระบวนการจัดการตนเองของผู้สูงอายุไทยในภาคตะวันออกเฉียงเหนือที่เป็นเบาหวานชนิดที่ 2 จำนวน 14 คน โดยสัมภาษณ์เชิงลึก สังเกตอย่างมีส่วนร่วม บันทึกภาคสนาม บันทึกเทป และวิเคราะห์ข้อมูลเชิงเปรียบเทียบข้อมูล

ผลการวิจัยพบว่า อยู่ดีมีสุข เป็นกระบวนการพื้นฐานทางสังคม ที่ใช้ในการจัดการตนเองเพื่อการมีชีวิตอยู่อย่างปกติ และมีคุณภาพชีวิตที่ดีของผู้สูงอายุ ประกอบด้วย 3 ระยะ คือ การรับรู้เบาหวาน การปรับวิถีชีวิต และการมีเครือข่ายในการจัดการการเจ็บป่วย ความเข้าใจกระบวนการจัดการตนเองของผู้สูงอายุที่เป็นเบาหวาน จะเป็นข้อมูลพื้นฐานให้ทีมสุขภาพเข้าใจและวางแผนในการดูแลผู้สูงอายุที่เป็นเบาหวาน ในการจัดการการเจ็บป่วยของตนเองอย่างเหมาะสมตามบริบทต่อไป

คำสำคัญ: อยู่ดีมีสุข การจัดการตนเอง เบาหวาน

Abstract

This study explored the self management of elderly people living with diabetes mellitus in a rural context. Fourteen elderly people diagnosed with diabetes mellitus and living in the northeastern part of Thailand were invited to participate and shared their experiences through in-depth interviews, participants' observations and field notes made during the field work. Interviews were recorded and transcribed.

Healthy living emerged from the data as the basic social process of elderly people living with diabetes mellitus. This comprises of three categories: knowing diabetes mellitus, modifying way of life and networking for illness management, which enables elderly people to manage their life with diabetes mellitus. This management process is a consequence of the desire to live with chronic illness and have a maximum level of well-being, performing normal functions and having a good quality of life. The findings are significant for understanding elderly peoples' self-management. This understanding should support the appropriate healthcare focus on the needs and expectation of clients. This should encourage elderly people with diabetes mellitus to participate and cooperate in illness management.

keywords: healthy living, self-management, diabetes mellitus

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Background and significance

The number of people with diabetes mellitus (DM) is increasing worldwide, with prevalence projections indicating that by 2030 the number of people with DM is likely to be 180 million[1]. In Thailand, the pattern of chronic disease among Thai elderly people is similar to that in developed countries. According to National Surveys and Community Studies indicated that DM is one of the most common and important health problems among Thai elderly people[2]. In 2008, the mortality rate of people aged over 60 years with DM was 73.3 per 100,000 population[3].

DM causes a large number of people in the northeastern part of Thailand to live with a chronic illness. The incidence and prevalence rates of DM have gradually increased and people living in the northeastern region had the highest mortality rate (19.2 per 100,000 in the population) [3]. The prevalence of DM in Kalasin Province was 164.1 per 100,000 in the population and in Yangtalad District, it was 237.8 per 100,000 in the population, which was the highest incidence of DM in Kalasin Province[4].

DM is a major health problem and leads to other diseases such as chronic kidney disease, cardio-vascular disease and stroke[1], causing chronic problems and early death. Complications associated with DM result in loss of physical capacity and quality of life[5]. In 2008, the total cost of DM and its complications in Thailand was 418,696 USD[6]. To reduce this burden, strategies to prevent DM complications need to be addressed. A number of studies have stated that the most important thing for DM care is to encourage participation and cooperation of people with DM, their family and community.

Self-management is defined as "the individual's ability to manage the symptoms, treatment, physical and psychological consequences and lifestyle changes inherent in living with a chronic condition." DM self-management includes dietary and physical activity behavior, medication regimens and self-monitoring of blood glucose levels[7]. It is evident that care focused on clinic-based treatments leads to ineffective DM self-management, while community-based interventions lead to improved health behaviors and health out-comes[8, 9]

According to Hernandez, Antone and Cornelius[5] indigenous people with DM prefer to share information and learn from someone with DM rather than believe the information or follow the advice of health professionals. This phenomenon is related to the difference in meaning of DM and its management between health professionals and lay persons. In Thailand, the cultural aspect is also a major factor to integrate and provide effective illness management in the community[10].

Understanding the perception of people toward DM and how they manage the illness is essential for nurses to develop proper nursing care to support and maintain continuing illness self management. Hence, information obtained from the study can be the foundation to develop appropriate healthcare to fit with the rural community context.

Research Objective

This study explored the ways elderly people living with DM manage their health and lives from their point of view.

Research Method

Grounded theory was used in this study to explore the management processes of elderly Thai people living with DM. It is a research method that aims to generate a substantive theory from the data of participants' point of view.

Research setting and participants

This study was conducted in a community hospital in the northeastern part of Thailand. Following human ethics approval, elderly people with DM were invited to participate in this study by purposive sampling and snowballing. The participants were 14 Thai people who have lived with Type 2 DM for over 5 years. They lived at home and attended the diabetic clinic at the community hospital. The inclusion criterions were: 1) diagnosed with Type 2 DM, 2) able to communicate in and understand the Thai language, and 3) be willing to participate in this study.

Research Implementation

1. The research proposal was submitted to and approved by the Nursing Faculty, Mahasarakham University. Permission was obtained by the director of the community hospital. The researchers also met participants to explain the procedure of the study.

2. Data collection included in-depth interviews, direct observations and field notes, which were made during home visits between July 2009 and February 2010. At the time of the interview, all participants readily agreed to audio recording of the interviews.

Data analysis

The researcher gathered data from first interviews, observations or field notes and then used the initial emerging ideas to develop further interviews, observations and field notes. This means the gathering of data becomes more focused and specific as the process develops. Interviews were transcribed and the transcripts were reviewed by the researchers. The transcripts were read line by line and transcribed into code. Data saturation, where themes occurred and recurred, was reached after fourteen people were interviewed. Themes generated by the analysis were checked and rechecked. The themes were inducted relevant to the participants' view.

Research Findings

The basic social process (BSP) is a core category which emerges from grounded theory study[11]. In this study healthy living, is viewed as a progressive movement process involving three phases: 1) knowing diabetes mellitus, 2) modifying way of life, and 3) networking for illness management. Figure 1 illustrates the interactive dynamic processes of the three phases of BSP theory.

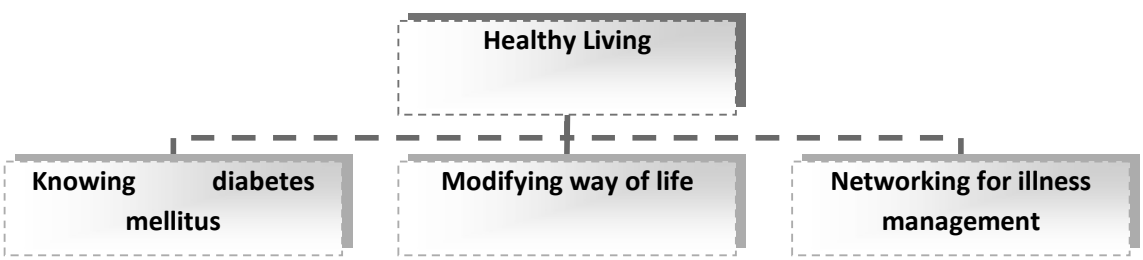

Figure 1 Basic Social Process (BSP) and Core Categories

Healthy living

Healthy living is the core variable that draws together the stages of the process reflected in the core categories and illuminates the strategies used by elderly people to manage living with DM. One participant clearly described healthy living as an important component of illness management. In this study a substantive theory reflects the views of elderly people living with DM about illness self management behaviors.

Knowing diabetes mellitus

The commencement of self-management for living with DM, for all participants, was at the time they realize they had got the disease. Some participants sought help because of the occurrence of abnormal symptoms. The physical symptoms of DM cause the emotional factors which made participants feel uncertain and need help. The concepts include recognizing symptoms, ruksa-bor-souw (incurable disease), bou-wan-paeng/bou-wan-haeng (wet/dry diabetes) and consuming imbalance.

Recognizing symptoms

All participants were alerted by symptoms and sought support from healthcare professionals. They observed symptoms and sought disease diagnosis; also to get support from healthcare providers to deal with their health problems.

"I had frequent voiding and weakness of both legs. Ants came and gather around a spot of my urine. I went to see a doctor. The doctor said I had DM".

The participants gave a range of meanings to DM which focused on bio-medical, clinical characteristics, health behavior, and consuming too many sweet things.

Ruksa- bor -souw (incurable disease)

The concept 'ruksa-bor-souw' (incurable disease) encompassed the time of diagnosis. Some participants recalled the events surrounding the time knowing that they had diabetes and reported experiences of preparing to manage to deal with the illness.

"I knew that DM is Raksa- bor -souw (incurable). My friends said that people with diabetes must take medication and visit the doctor regularly. I made-up my mind to accept this".

DM is viewed as an incurable disease which leads the participants to develop self-management to live with it. The participants were also concerned about managing the disease so that they would avoid complications. As they perceived that they could live longer with appropriate self-management.

Bou-wan-paeng/bou-wan-haeng (wet/dry diabetes)

The difference in DM symptoms is used by the participants to identify the meaning of DM. From the participants' observations, they related symptoms and patient characteristics and used this description to define DM.

"I think that there are two types of Bou-wan (diabetes). Bou- wan- haeng (dry DM) means DM which occurs in thin people and they do not have DM wounds. It contrast that with, bou-wan-paeng (wet DM) which occurs in fat people and usually results in DM wounds".

Signs of the disease are significant for people to knowing about the illness. In this study, the participants based the meaning of DM mainly on physical characteristics of persons with DM.

Consuming imbalance

The participants tried to figure out what could be the cause of DM and indicated that food consumption behavior related to DM. Some participants indicated:

"I wonder why currently people in rural areas get DM the same as people who live in urban areas. I think maybe eating oily food. In the past the villagers ate a lot of vegetables but now are changing to eat a lot of oily food. When I was young, I went to work in Bangkok. At that time I ate a lot of oily foods. I think that this eating behavior lead me to get DM".

Participants learned from their experience that food consumption behaviors closely related to their eating behavior, especially over intake of high energy foods. This was influenced by existing information about major causes of DM.

Modifying way of life

The participants set their goal to get healthy living. They used many strategies to foster their life to achieve a better quality of life. The concepts around this intention include balancing food consumption, focusing on exercise, observing the body, controlling taking medication, preventing complications and making merit.

Balancing food consumption

Participants revealed that they managed and adjusted food intake to normalize blood sugar. As the participants recognized their life would be harmed by low or high blood sugar levels. A participant expressed: "I try to eat enough to prevent low blood sugar as well as not too much to prevent high blood sugar. Both high and low blood sugar can lead to Koob (unconscious caused by low or high blood sugar). Koob is very dangerous and can lead to death".

Participants recognized the harm of low and high blood sugar, which can lead them to face the lift threatening event called koob. This facilitates the willingness of the participants to avoid risk in their life, which is a significance driving force for them to adjust their eating behavior to maintain normal blood sugar.

Focusing on exercise

Participants integrated exercise to be a part of daily living. They viewed physical exercise as a tool to control blood sugar. Some participants do exercise alongside with their work.

"Exercise, I do it a lot. I did regular exercise every day. I walk to rice field to pull out grass from the rice field...sometimes, I go digging to get small insect all day".

The participants based their view of the meaning of exercise on physical activities and believe that continuous movement of the body means exercise. They incorporated exercise into their daily living.

Observing the body

Participants learned by experience and by observing, some participants related symptoms to blood sugar level. One of the participants clearly expressed that:

"I noticed the symptoms and found that from eye vision, I can tell the blood sugar level. In the case of high blood sugar I couldn't see clearly all day. In contrast, if the blood sugar is low I won't see for just a moment and then it disappeared. I stop taking medication to prevent complications of low blood level.

Experiencing abnormal blood sugar is a source of learning to live with this disease without taking risk. They used the symptoms to monitor and adjust their blood sugar. This attempt to live with the disease is from a fear for the risk to their life.

Controlling taking medication

Taking medication, as prescribed, was view by the participants as a key to living with normal blood sugar levels. The reasons for maintaining the medication regimen was also to prevent fatal complications.

"I take DM drugs regularly as prescribed because I don't want to be treated with injection drug. Taking medicine is much easier than injection drug every day"...."I inject insulin 10 units in the morning and 6 units in the evening. I am always concern to get the same dose. I am worried that if I get more than the doctor ordered, I will be in shock and die".

Participants make an effort to avoid too much burden of living with DM by restricting taking medication. Participants viewed injections as making living with DM more difficult than taking medication orally. Fear of dying from dose errors also leads the participants to comply with the drug prescription.

Preventing complications

The participants managed to avoid disease complications. They followed the advice from health professionals and also developed means to protect themselves while doing daily activities and working.

"I wore a pair of boots when I went to the rice field regularly, and I don't go to the rice field when I could be poisoned by weed killers or pesticides. Contact with these poisons can lead to dirty wounds on the legs. I also clean my feet and legs after work to prevent infectious wounds".

Living with DM without complications is the important goal of elderly people with DM. Participants viewed complications as lowering the level of healthy living. Living without DM complications enables them to be normal and healthy.

Making merit

The participants view making merit as one of the significant mean to help them achieve healthy living. One participant stated that:

"I do meditation before going to bed. This makes me happy and I don't think too much and it helps me live without took (suffering). I am sa-bay-jai (mellow mind) after I do meditation".

Spiritual well being is viewed as an essential part of healthy living among elderly people with DM. They believe a strong mind can help them to live with the disease with less distress.

Networking for Illness management

Social support is necessary for elderly people living with DM in a rural context, which limits support from health professionals. All participants expressed that they needed support to live more comfortable with the disease. The concepts include learning from neighbors, support from lay healthcare providers, support from family, support from community and support from health professionals.

Learning from lay people

Lay people were viewed by the participants as one of the key people they could ask for information for developing illness management. Some participants also shared their illness management experiences with others.

"The neighbors came to visit me at home when I was sick. They told me that you do not need to be worried about the disease. They also shared their illness experiences, which helped me to develop means to deal with my health problems".

Direct experience is provided as significant information for the participants to decide and choose means to live with DM.

Support from family

Most, participants in this study were retired from work as a consequence of the disease. Some of them had to live on their own. Financial security is needed; support by family members is necessary for elderly people living with DM. The support includes emotional and financial support.

"My children gave me some money and I used it for going to the hospital. At the time that I was not well, they helped with everything. They cooked for me and cleaned my body".

In Thai culture, it is expected that children will support their parents when they get old, in particular among elderly people with chronic illness. Moreover, normally parents have already given their children their inheritance and have limit resources, so rely on their children.

Support from lay healthcare providers

Village health volunteers were one of the reliable supports for participants as they live in a rural community. They were visited by the healthcare providers when they were normal and when they were getting worse.

Village health volunteers visited and advised me to avoid taking too many sweet things, oily food, spicy food and to do regular exercise, avoid buying drugs without the doctors order, and to take medication only by the doctors order".

Living a long distance from the health care setting means healthcare support from local health volunteers is needed. In this study some participants relied on this support to manage to live with the illness, to attain and maintain healthy living.

Support from community

Community support was one of the significant networks to develop proper illness management and was an opinion for the participants. The support of the community ranged from emotional support to tangible support.

"People in the village went to visit me at the hospital when I was admitted. They ask about my health. They gave some money to someone who gets ill and does not have any money".

The community is an extended healthcare resource that can facilitate self-management for rural people with DM. People in the community share information and resources to manage chronic illness to fill the gap in health professionals in their community.

Support from health professionals

Health professionals were viewed as a necessary support for living with DM. The participants reflected their view that health professionals helped them to manage the illness.

"Nurses told me how to eat properly and how to do exercise. They also advised me to take exercise regularly...they told me everything to look after myself to prevent heart disease, high blood pressure and kidney disease. The doctor gave advice about taking medication ...sometime, they came to our village to visit DM patients".

Health professionals are key people who provide essential information which enables the participants to develop appropriate self-management. The participants viewed health professionals as a reliable source of valid health information and support.

Discussion

This exploration of elderly peoples' self-management has identified illness management. In order to live with DM, they modified illness management, which was provided by health professionals to fit with their lifestyle in a rural context. Participants viewed DM

as an incurable disease and this finding concurs with the study of cultural care for rural Thai people in the northeastern part of Thailand[10]. This meaning enables them to develop self-management. The participants developed self-management based on the meaning of diabetes, adjusted and modified their way of living by integrating illness management as one part of their lives to achieve healthy living with chronic conditions[12].

Self-management is a necessary strategy to attain a maximum level of well-being for people living with chronic illness. As the aim of participants in this study was healthy living and they viewed DM as an incurable disease lead the elderly people to seek means to manage to live with the chronic conditions. In order to gain healthy living, elderly people with DM focused self-management on physical, psychological and spiritual dimensions. Following the treatment regimen was essential to maintaining physical health as a controlled blood sugar level is the central part of DM management. Symptoms are a major concern of people and a focus of management of people living with chronic illness. In this study symptoms are at the core of self-management. The participants also modified eating behavior and increased physical activity to control blood sugar level and monitored their management by observing symptoms related to low and high blood sugar, which lead to effective DM management.

Spiritual strength is a significant aspect of self-management of people with chronic illness as they point out that the mind and spirit is at the core of the whole life. According to Chinouya and O'Keefe[13], inner strength from a religious belief helped Africans living with HIV to become better at coping, which is necessary to develop self-management. It is believed that people with strong spiritual beliefs are likely to have less stress which can predict better self-management. According to Soo and Lam[14], stress acted as an indirect disruption of self-management activities.

Social support was viewed by the participants as an important factor to maintain illness management to meet a better health outcome. According to McEwen, Pasvogel, Gallegos, and Barrera[15], social support powerfully facilitated people with DM to increase self-management activities and DM knowledge, and also improve the psychological health of people with DM. Lay people were one form of valuable support for people with DM to develop means to deal with the problems of living with the chronic condition. Sharing information among people with DM based on direct experiences was viewed by DM suffers as reliable information to guide self-management[5]. Participants in this study indicated that the community can support their self-management, which concurs with the community-based care that the improved quality of care and health status of those living with DM[16].

Recommendations

This study was employed to describe how elderly Thai people in a rural area with DM managed their live. The findings reveal that the basic tenet that underpins successful self-management is the basic social process named healthy living enabling elderly people with DM to develop and modify their way of life to live successfully with DM, and have a maximum quality of life.

According to the results from this study, health professionals need to be concerned with how people with DM view DM and how they manage to live with DM. It is evident that participants were concerned with hypoglycemic symptoms because some of the participants experience unconsciousness. Some of them indicated that hyperglycemia is rarely a risk to

their life. To mainly focus on hypoglycemia may lead people with diabetes to get a high risk of complications. Thus, health professionals should provide and raise awareness of focusing on hyperglycemic control. Information about DM complications and the effects of complications and means to control hyperglycemic should be made available and useable for elderly Thai people with DM living in rural areas.

Nursing curriculums also need to be developed to prepare nursing students to develop essential skills to help people with chronic illness, family and community to develop and maintain self- management. Nursing students also need to be prepared to ground their practice with cultural sensitivity, which is crucial to support people to gain and maintain their illness management skills.

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