Self-transition in Type 2 Diabetes Mellitus Client: A **Concept Analysis**

Mohd Khairul Zul Hasymi Firdaus^{1,2}

ABSTRACT

Objective: Behavioural modification required transition process to occur. There is limited data discussed on self-transition process to occur. Thus, this paper is aimed to examine self-transition concept for better understanding in managing Type 2 Diabetes Mellitus client. **Methods:** A Walker & Avant guideline was employed during concept analysis carried out. 20 articles have been extracted from CINAHL, ProQuest and Science Direct with duration of published paper within 2000 to 2016. Keywords of transition, transitions, self-transition and self-transition were used in extracting relevant articles. **Results:** Trust and empowerment are required antecedents prior to self-transition occurrence. There are four different attributes namely as challenges, availability of support system, vulnerability and self-regulatory/self-efficacy. Consequence of self-transition will lead to behavioural modification which may occurs through self-evaluation or epiphanies. Sustainability is another aspect that should be considered in maintaining behavioural modification. **Conclusion:** Self-transition will occur with the assistance of self-regulatory/self-efficacy based on the availability of support system. Furthermore, challenges and vulnerability will assist in shaping a person self-transition. Indeed, trust and empowerment are the antecedents prior to the Objective: Behavioural modification required transition process to occur. There is limited data discussed on shaping a person self-transition. Indeed, trust and empowerment are the antecedents prior to the development of individual self-transition. Successfulness of self-transition occurrence depends on sustainability of resources and perceptive behavioural modification changes either through self- evaluation or epiphanies.

KEYWORDS: Self-transition, Concept analysis, Self-transition concept

INTRODUCTION

Prevalence of Type 2 Diabetes Mellitus (T2DM) globally and specifically in Malaysia is inclining in pattern with the estimation of 3.6 million Malaysian pattern with the estimation of 3.0 illillion malaysian adult will be affected. According to a survey by the National Health and Morbidity Survey (NHMS) 2011, in 5 years' time, the trend of prevalence has increased one-third from previous data, from 11.6% (in 2006) to 15.2% (in 2011) (1). Diabetic foot ulcer is one of the commonest problem arises as complication of T2DM. Incident of diabetic foot ulcer itself hugely contributes toward patient hospitalization (2, 3). Hence, client empowerment is very crucial for prevention action (4). In addition, to ensure behavioural changes can occurs, another core element that needs to be paid attention in assisting client behavioural changes is transition. With the compliment of both elements client empowerment and readiness for transition will ensure prevention action of foot care is in place. Transition is a crucial process that always an individual easily to be achieved but hardly to be maintained. Empowerment can be delivered yet it will not guarantee the transition will take place following of empowerment.

influence in their daily life. Therefore, this paper aims in examining the concept of self-transition as compared to general or broad transition concept itself. Furthermore, self-transition concept will be explored in details so that an appropriate framework for preventive action of diabetic foot care management can be developed.

*Corresponding Author

Mohd Khairul Zul Hasymi Firdaus Kulliyyah of Nursing, International Islamic University Malaysia, Kuantan, Malaysia. Email: zulhasyimi@iium.edu.my Tel: +6095707210

What is transition? Why transition is an important concept? How does transition will influence empowerment among T2DM client? How transition occurs in T2DM client and affects their daily life? In order to answer these questions, it is important to have deep understanding by analyzing concept of transition. Moreover, this paper will focus mainly on T2DM client perceived transition process and its

MATERIALS

A guideline introduced by Walker and Avant (2005) has been adopted as the main reference in performing this concept analysis (5). The guidelines introduced by Walker and Avant (2005) basically a modifiable from Wilson's (1963) to be simpler from 11 steps to 8 steps namely as a) concept selection, b) determining the aims/purposes of the analysis, c) identifying all the uses of the concept chosen that can be discovered, d) determine the defining e) identify a model case, f) identify attributes, contrary, invented, and identify antecedents and borderline, related, illegitimate cases, g) identify antecedents and consequences and h) define empirical referents (5). Though, not all steps will be carried out in this paper such as steps e, f and most probably step h. The following steps will be further explained in this paper are: a) concept selection, b) determining of aims for the analysis, c) identifying of the concept uses and d) determining the defining attributes, antecedents and consequences for the concept chosen. In this paper, self-transition concept in T2DM client is chosen to be explored in details as an initial step (step a). Follow with step b, which identifying the purpose of concept analysis in this paper is to examine self-transition rather than transition concepts so that an appropriate framework for preventive action of diabetic foot care management can be developed.

¹Faculty of Nursing, Prince of Songkla University, HatYai, Thailand

²Department of Medical Surgical Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, Kuantan, Pahang

After the concept selection, by using key words of transition OR transitions, self-transition OR self-transition, 20 articles has been extracted as for final number to be analysed from databases of CINAHL (n = 121), ProQuest (n = 2148) and Science Direct (n = 3126) with the range of publication starting year 2000 to 2016 by screening the abstract for data sources of this concept analysis. The other articles were removed due to a) only abstract available, b) available in other language than English, and 3) misleading of the title which does not represent of the concept that intent to be explored. Moreover, online dictionary also has been referred as part in defining this concept (6, 7). For further deliberation of transition concept, the details will be discussed as follow: common usage and from other field perspectives.

RESULTS

Common Usage

From literature review, the usage of transition varies in each discipline for instance health, life span and career pathway. According to Merriam-Webster Online has defined in three different meaning for the word of transition (6). Firstly it is defined as "passage from a state, stage, subject or place to another. In other words it is defined as a movement, development, or evolution from one form, stage or style to another."(6) Secondly it defined as "a musical modulation which reflects as a musical passage leading from one section of a piece to another."(6) Lastly, based pure science field, the definition is as "an abrupt change in energy state or level (as of an atomic nucleus or molecule usually accompanied by loss or gain of a single quantum of energy." (6) MacMillan Dictionary Online has defined transition as "changing of one situation, form or state to another, or to cause someone or something to do this." (7) Many literature explaining transition from in the aspect of changes in health care, transition of from one stage to another stage i.e teen to adult, but there is no clear evidence on explaining how self-transition may occurs. The process of transition itself, depends on individual which known as self. Therefore, foundation of self-transition concept analysis has been formed to be explored and discussed in further details.

Defining Attributes

In defining attributes that may represent the concept we have to be alert with the repetitions of characteristics that appear over the time in many different literatures that we read (5). From the literature review carried out, four defining attributes has been identified such as a) challenges (8,9), b) availability of support system (10), c) vulnerability (12, 13) and d) self-regulatory/self-efficacy (9, 11, 14). Challenges as a first defining attributes identified in self-transition concept. This is described as a hurdle

Challenges as a first defining attributes identified in self-transition concept. This is described as a hurdle facing by oneself in performing necessary changes (8). The main challenges that might arise come from the environment factor (9). For example, a T2DM client may abide with the restriction of taking sweet foods or drinks for certain period of time. However if he/she is regularly provided with sweet food or drinks prepared in their home persistently, the T2DM client may end up abstained from the restriction or recommendation provided by health care providers (HCPs).

Second defining attribute is the availability of support system which facilitates the transition process in a T2DM client (10). Furthermore, the

availability and accessibility of support system may engage the T2DM client towards self-transition particularly those with chronic disease. Indirectly it will help the T2DM client tends to have a better readiness towards the self-transition (11).

Third defining attributes is vulnerability which is the susceptibility of the ailing that may affect self-transition process (12, 13). For instance, T2DM client may prefers alternative treatment on top of taking prescribed medication compliance such as taking supplements (i.e. drink supplements or herbal drink etc.) that may contain high sugar content and worsening the blood glucose level of his/her condition.

Lastly defining attribution is self-regulatory/self-efficacy. Both of these elements are being state side by side since it is inter-related and closely link to each other (9,11,14). In these elements, internal factor in individual play an important roles to realize the self-transition process.

Antecedents

Antecedent is an event that occurs prior to the development of the concept (5). From analysis carried out, two different antecedents have been identified; a) trust and b) empowerment. The presence of these two concepts may influence either inhibit or stimulate self-transition occurrence in T2DM client.

Trust between HCPs and T2DM clients are a critical element that will facilitate the self-transition concept (15). A trusted relationship may build up through clear and consistent health instruction, health education, health promotion and other nursing management during face to face contact with T2DM clients. Little resistance may be faced by the HCPs during delivery of care but with a trusted relationship that built up earlier, there is a higher potential that the T2DM clients will comply with recommendations provided.

Next, empowerment is the second element in antecedent of self-transition concept. Empowerment plays an important role which may incline the process of self-transition. One of the methods to empower client is through knowledge delivery that is up-to-date and appropriate for client including information on a) disease process, b) accessibility to the healthcare service which may impact towards self-management (16). Imparting this information will improve the T2DM clients which may gear self-transition process (17).

Consequences

Consequences are the outcomes derived resulting from occurrence of the concept identified (5). There are two major consequences that derived from the self-transition concept; a) sustainability and b) behavioural changes. These two elements will determine the successfulness or failure of self-transition occurrence in T2DM client. Sustainability is defined as the ability to maintain a thing (i.e behavioural changes) in same state. Sustainability is helpful for transition process to take place by putting extra preparation to ensure a greater outcome is achieved at the end (18).

An individual decision to consistently adopt behavioural changes is the consequence of self-transition that might be influenced by self-evaluation. If a T2DM client believes in that a desired outcome is produced when certain healthy behaviour is adopted, he/she will decide to change his/her behaviour accordingly once self-evaluation is carried out (19). For example, a T2DM client who is often experiencing hypoglycaemic attacks where he/she started to sweat profusely, having tremor on

Apart from that, epiphanies, one of the consequences may also develop in T2DM client which is an action that an individual develop by perceiving something that is commonly not normal as a normal condition that may occur to him/her in certain situation (20). For instance, a T2DM client has develop a small wound on the foot might think that is not a big deal. During his/her earlier days diagnosed with T2DM, the wound might heal with self-remedies. Therefore, based on this experienced, he or she did not seek for the treatment. However, neglecting the importance of further foot treatment may worsen the wound condition. So epiphanies may take place when the T2DM client assumed seeking further treatment is not important since the wound will heal like before. Figure 1 explains the concept of self-transition based on the details mentioned earlier.

CONCLUSION

This concept analysis has made a clear understanding in defining self-transition concept which might be similar to transition. However, it has put a distinguish attributes as for the refining this concept in a closer way. In addition, it may promote mutual understanding for this concept so that people will not have misunderstanding on the terminology that will be used. Moreover, with the assistance of concept analysis, a precise operational definition can be made based on the nature of the concept exist itself and reflects its theoretical base. Additionally, it also facilitate in tool development for the further research to explore the concept of self-transition (5).

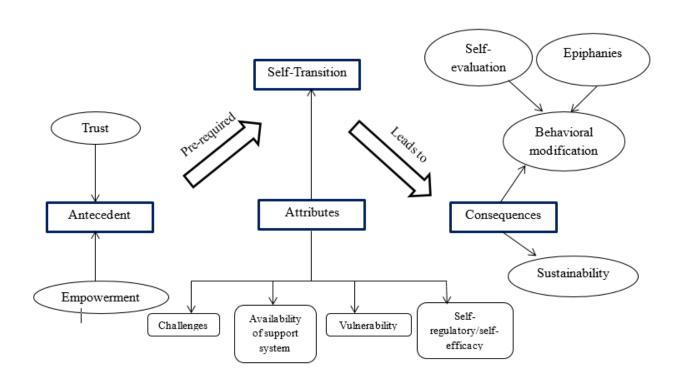


Figure 1: Self-transition Concept

Self-transition Concept Definition

Based on the concept analysis carried out, definition of self-transition can be described as follow:

Self-transition will occurs with the assistance of self-regulatory/self-efficacy based on the availability of support system. Furthermore, challenges and vulnerability will assist in shaping a self-transition. Indeed, trust empowerment are the antecedents prior to the development of individual self-transition. of self-transition Successfulness occurrence depends on the sustainability of resources and perceptive behavioural modification changes either through self- evaluation or epiphanies.

CONFLICT OF INTEREST

The author declares there is no conflict of interest.

ACKNOWLEDGEMENT

The author would like to acknowledge Asst Prof. Dr. Waraporn Kongsuwan and Asst. Prof. Dr Sang-arun Isaramalai for their guidance in producing this manuscript.

REFERENCES

Ministry of Health Malaysia. Non Communicable Disease Section, Disease Control Division, Diabetes Registry Report 2009 - 2012. Available from: http://www.moh.gov.my/moh/resources/Penerbitan /Rujukan/NCD/Diabetes/National_Diabetes_Registry_ Report_Vol_1_2009_2012.pdf [Accessed 3rd October,

Green-morris, G., An evaluation of the effectiveness of providing foot care educational in a rural clinic setting (Doctorate's thesis). The University of Southern Mississippi, New Orleans: Losuiana: United

States; 2014.

Boulton, A. J. M. The diabetic foot: a global view, Diabetes Metabolism Research and Review, 2000; 16(1), 2-5.

Hampton, J. Components of empowerment and Hampton, J. Components of empowerment and diabetes metabolic control in type 2 (Order No. 1419778). 2004. Available from Nursing & Allied Health Database; ProQuest Dissertations & Theses Global. (305053071). [Accessed 3rd October 2016] Walker, L. O., & Avant, K. C. Strategies for theory construction in nursing. 4th Ed. Upper Saddle River: New Jersey: Pearson, Prentice Hall; 2005

Online Dictionary. Transition. from http://www.merriam-Meriam-Wébster Transition. from Available webster.com/dictionary/transition October 2016] [Accessed

MacMillan Online Dictionary. Transition. Available

- from http://www.macmillandictionary.com/dictionary/bri tish/transition_2 [Accessed 3rd October 2016] Schulman-Green, D., Bradley, E., H., Nicholson, N., R., J., George, E., Indeck, A., & McCorkle, R. One Step at a Time: Self-Management and Transitions Among Women With Ovarian Cancer, Oncology Nursing Forum, 2012; 39(4), 354-360 Li, K., Liu, D., Haynie, D., Gee, B., Chaurasia, A., Seo, D., et al. Individual, social, and environmental influences on the transitions in physical activity among emerging adults, BMC Public Health, 2016; 16:682, Available from doi: 10.1186/s12889-016-3368-3 3368-3
- 10. Duggleby, W., Thomas, J., Montford, K., S., Thomas, R., Nekolaichuk, C., Ghosh, S., et al. Transitions of Male Partners of Women with Breast Cancer: Hope, Guilt, and Quality of Life, Oncology Nursing Forum, 2015; 42(2), 134-141, Available from doi: 10.1188/15.ONF.134-141
- Cohen, S., E., Hooper, S., R., Javalkar, K., Haberman, C., Fenton, N., Lai, H., et al. Self-Management and Transition Readiness Assessment: Concurrent, Predictive and Discriminant Validation of the CTAPY Questionnairy Journal of Pediatric

the STARx Questionnaire, Journal of Pediatric Nursing, 2015; 30, 668-676, Available from doi: http://dx.doi.org/10.1016/j.pedn.2015.05.006

12. Cusson, R. M., & Strange, S. N. Neonatal nurse practitioner role transition: The process of reattaining expert status. Journal of Perinatal & Neonatal Nursing, 2008; 22, 329-337. Available from doi:10.1097/01.JPN.0000341365.60693.39

doi:10.1097/01.JPN.0000341365.60693.39
13. Downes, J., M., O'Neal, K., S., Miller, M., J., Johnson, J., L., Gildon, B., L., & Weisz, M., A. Identifying opportunities to improve medication management in transitions of care, American Society of Health-System Pharmacists, 2015; 72(2), 58-69, Available from doi: 10.2146/ajhp150059
14. Uzark, K., Smith, C., Donohue, J., Yu, S., Afton, K., Norris, M., et al. Assessment of Transition Readiness in Adolescents and Young Adults with Heart Disease, The Journal of Pediatrics, 2015; 167, 1233-1238

1238
15. Wright, D. Supporting Transitions to Parenthood: Bonding with a Baby that has Down's Syndrome, Midwifery Matters, 2015; 147, 9-12
16. Polfuss, M., Babler, E., Bush, L., L. & Sawin, K. Family Perspectives of Components of a Diabetes Transition Program, Journal of Pediatric Nursing, 2015; 30, 748-756
17.Rasmussen, B., Ward, G., Jenkins, A., King, S., J., Dunning, T., Patient Experiences, Young adults' management of Type 1 diabetes during life transitions, Journal of Clinical Nursing, 2010; 20, 1981-1992, Available from doi: 10.1111/j.1365-2702.2010.03657.x

- Ozawa, S., Singh, S., Singh, K., Chhabra, V., & Bennett, S. The Avahan transition: Effects of transition readiness on program institutionalization and sustained outcomes. PLoS One, 2016; 11(7) Available doi:http://dx.doi.org/10.1371/journal.pone.015865
- Murdoch-Eaton, D. Feedback: the complexity of selfperception and the transition from 'transmit' to 'received and understood', Medical Education, 2012; 46: 534-544 Available from doi: 10.1111/j.1365-2923.2012.04278.x
- 20.
- 2923.2012.04278.x Hall, J., M. Positive Self-Transitions In Women: Child Abuse Survivors, Issues in Mental Health Nursing, 2003; 24:647-666, Available from doi: 10.1080/01612840390219167
 J. W. Van Neck, B. Tuk, E. M. G. Fijneman, J. J. Redeker, E. M. Talahatu, and M. Tong, "Hyperbaric oxygen therapy for wound healing in diabetic rats: Varying efficacy after a clinically-based protocol," *PLoS One*, vol. 12, no. 5, pp. 1-16, 2017.