Health Locus of Control and Diabetes Adherence

Paraskevi Theofilou1,2,*, and Aymara Reyes Saborit3

1Panteion University, Department of Psychology, Athens, Greece
2General Hospital “Sotiria”, Athens, Greece
3University of Oriente, Department of Psychology, Santiago, Cuba

Adherence has been defined as the degree to which a patient’s voluntary behaviour corresponds with the clinical recommendations of health care providers [1] and suggests that patients are self-sufficient individuals who assume an active and voluntary role in defining and achieving goals for their medical treatment [1-5].

Adherence is a multi-dimensional element of well-being affected by health-related quality of life (HRQoL) and specifically by the physical, mental, emotional and social status of patients [6-8]. Adherence as well as HRQoL issues is emerging as an important outcome in chronic disease studies, like chronic heart failure [9], end-stage renal disease and maintenance dialysis [10-22], kidney transplantation [23], Alzheimer [24], multiple sclerosis [25], Parkinson’s disease [26], rheumatoid arthritis [27], systemic lupus erythematosus [28], chronic obstructive pulmonary disease [29], breast cancer [30], pancreatic cancer [31], obesity [32] or hypertension [33]. This growing interest on the part of the scholars towards adherence issues has also characterized the scientific community dealing with the assessment of adherence in patients with diabetes.

The diabetes regimen is extremely complex [34] and it is generally accepted that a patient with a more complex regimen is less likely to be adherent than a patient with a less demanding regimen [35]. It is crucial that individuals with diabetes follow a strict treatment regimen in order to maintain control over their blood sugar. This regimen includes maintaining a proper diet, engaging in regular physical activity or exercise, blood glucose monitoring, and taking any prescribed medications [36]. The high incidence of complications in individuals with diabetes indicates that adherence to the diabetes regimen is an eminent problem. According to Glasgow and Anderson [37], many studies have documented that diabetes adherence is not a unitary construct and in fact varies across different components of the regimen. Therefore, relationships between adherence and other variables may not be observed when using a unitary measure of self-management behaviours [38].

Health Psychology offers a number of models that seek to help us understand the factors that influence an individual’s adherence to a medical regime. One such model is Leventhal and colleagues’ self-regulatory model (SRM), which suggests that health locus of control factors influence a range of illness coping behaviors and outcomes among people experiencing illness or disease. This related concept of patient self-management involves patients in the assessment, care planning collaborative problem solving and decision making to manage kidney disease and treatment, including medications [16]. An individual with internal locus of control may be more willing to follow treatment recommendations as he or she believes the path of disease progression may be controlled via personal ability and action; action in this sense referring to adherence [16]. The positive reinforcement maintaining behaviour is derived from the belief that hard work and ability leads to desired positive outcomes [16]. In contrast, individuals who believe that their fate is determined largely by chance or by other persons and not by their own actions may less likely to adhere to therapy, because they feel that their actions may not appreciably affect outcomes [16]. These individuals would attribute advances or declines in health to natural remission or progression of disease.

The health locus of control theory is used to assess adherence to diabetes regimen in some studies. According to Rodin [39], an individual with high perceived control may have better health because he or she is more likely to take health-enhancing actions. This would suggest that enhancement of an individual perceived control over his or her health may lead to improved personal health. In particular, individuals with diabetes may adhere more closely to their regimen if they experience an increase in perceived or internal locus of control. Indeed, research that has examined the relationship between perceptions of control and adherence to the diabetes regimen has found supporting evidence for the relationship between these two variables. In a study, Macrodimitris et al. [40] examined the relationship between perceived control and HbA1c levels in 115 individuals with type 2 diabetes. Results indicated that perceived control was negatively related to HbA1c levels. Therefore, high-perceived control has a beneficial effect on individuals with type 2 diabetes, as demonstrated by lower HbA1c levels. It was concluded that one’s perception of control over his or her condition is a good indicator of whether or not that individual will actually exhibit control over his or her condition. A study conducted by Surgenor et al. [41] investigated the relationship between sense of control and metabolic control in 96 females with diabetes. Results were similar to those from Macrodimitris et al. [40]. Those participants that had optimal HbA1c levels had significantly higher levels of sense of control in all three domains than those with poor HbA1c levels.

Theofilou [16] has indicated that in a sample of patients undergoing haemodialysis or peritoneal dialysis treatment, internal health beliefs may help the patients to face their problems related to end-stage renal disease and evaluate in a positive way their HRQoL as well as the status of general health, showing better psychological health and less somatic symptoms [16]. On the other hand, focusing on important others’ control and responsibility over one’s condition seems to indicate depressive mood [16].

The above studies demonstrate the importance of understanding health locus of control in patients with chronic diseases as well as the contribution to adherence and HRQoL. This suggests potential for investigating whether individually based or group based interventions

*Corresponding author: Paraskevi Theofilou, Panteion University, Department of Psychology, Athens, Greece, E-mail: theofi@otenet.gr

Received January 16, 2012; Accepted January 20, 2012; Published January 23, 2012


Copyright: © 2012 Theofilou P, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
that are aimed at specific, inaccurate, individual illness perceptions can improve perceived HRQoL in chronic disease patients.

References
18. Theofilou P (in press) The relation of social support to mental health and locus of control. JRN.

Submit your next manuscript and get advantages of OMICS Group submissions

Unique features:
• User friendly/feasible website-translation of your paper to 50 world’s leading languages
• Audio Version of published paper
• Digital articles to share and explore

Special features:
• 200 Open Access Journals
• 15,000 editorial team
• 21 days rapid review process
• Quality and quick editorial, review and publication processing
• Indexing in PubMed (portail), Scopus, DOAJ, EBSCO, Index Copernicus and Google Scholar etc.
• Sharing Option: Social Networking Enabled
• Authors, Reviewers and Editors rewarded with online Scientific Credits
• Better discount for your subsequent articles

Submit your manuscript at: http://www.omicsonline.org/submission