

## Coping Skills in Patients with Diabetes

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### Letter to Editor

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Any changes in a human's life, either pleasant or unpleasant, require re-adaptation. Coping strategies for life changes and tensions caused by these changes differ in different people in various situations. Diabetes mellitus (DM) is one of the highly prevalent stressful diseases. At present, the prevalence of diabetes has been estimated to be 4% throughout the world, and it is expected that this rate will increase to 4.5% by 2025 (Iturralde, Weissberg-Benchell, & Hood, 2017). DM is a syndrome in which carbohydrate, fat, and protein are disrupted due to the lack of insulin secretion and tissue sensitivity to insulin (Huang et al., 2016).

Children have difficulty dealing with the condition, sometimes experiencing thoughts of distress, depression, and fear during the initial phase of DM diagnosis; 30% have psychiatric attachment disorder in the third month following diagnosis (Northam, Matthews, Anderson, Cameron, & Werther, 2005). These difficulties are often resolved in the first year, but poor adaptation in this initial stage puts children at risk of later psychological difficulties (Dantzer, Swendsen, Maurice-Tison, & Salamon, 2003). Multiple studies have shown depression in 10-26% of adolescents with DM (McDonnell, Northam, Donath, Werther, & Cameron, 2007), and anxiety and disorderly activity in 12-20% of adolescents (Leonard, Jang, Savik, Plumbo, & Christensen, 2002).

Similar to the term stress, there is still no agreement on the definition of coping. However, as a general term, it is defined as various areas of behavioral, cognitive, emotional, and physiological functions. It is defined within the context of certain cognitions or behaviors, or in total, as any response to stress (Reid, Dubow, Carey, & Dura, 1994). Coping has been investigated for more than 3 decades by social science researchers. Lazarus and Folkman (Lazarus, 1991) stated that coping is the intellectual, emotional, and behavioral attempts of a person when facing mental pressures in order to overcome, tolerate, or minimize the consequences of stress. In other words, coping requires mobilizing and training forces and energy of a person, which are obtained through training and trying; therefore, it is different from tasks that are automatically done (Aldridge & Roesch, 2008). Sometimes, coping appears in the form of reforming or eliminating problems, or the mindset of a person about the problem, or learning how to tolerate and accept it (Folkman & Lazarus, 1980). In addition, coping with communication conflict can take the form of quitting the relationship or creating strategies to improve the relationship. Moreover, coping is defined by the attempts conducted to explain various strategies of responding to stress and entails various areas of psychology like animal experiments, ego psychology, and cognitive psychology (Chouhan & Shalini, 2006).

Coping styles are strategies that reduce stress, but maladaptive coping technique are those that increase stress. Some comparative researches focus on styles, some of them focus on processes, and some other on strategies. The concept of style suggests that people have a certain view and are constantly regarding their coping methods. The concept of process or strategy suggests that people have various coping strategies based on their period of life and position requirements (Bagherian Sararoudi, Ahmadzadeh, & Mahmoudi, 2009). It should be mentioned that the first coping models introduced by researchers based on ego psychology highlight defensive mechanisms and conscious and unconscious processes to cope with stress. Furthermore, researchers have attempted to create a classification system to classify coping styles based on the degree of psychological maturity or level of adjustment of these styles. However, researches in this theoretical framework have been criticized because of their very small sample size, low reliability of evaluators, and lack of attention to stressful situation characteristics (de Groot et al., 2010).

Many studies have examined the relationship between coping strategies and diseases. There is a great deal of evidence illustrating that patients have less flexibility in their ability to solve problems or coping strategies. Furthermore, the application of active coping strategies has been linked to medication adherence in the management of stressors related to disease, and emotional approaches are related to tolerance when stressors linked to the disease are considered to be uncontrollable (Yoshida et al., 2018). Moreover, coping strategies have both negative and positive effects on health behaviors. In alcohol dependent individuals, active and cognitive coping strategies can lead to a reduction in pain and alcohol abuse in the long run.

In contrast, avoidance coping strategies are associated with mood disorder. DM symptoms and patients' need for self-care create numerous challenges in the daily lives of patients necessitating healthy coping behaviors for more adaption. Coping strategy can play an important role in the processing, management, treatment, and mental-social adaptation of patients with DM (Albai, Sima, Papava, Roman, Andor, & Gafencu, 2017). In addition, coping strategies used by these patients can have a key role in maintaining or increasing the duration and level of mental-social adaption. Coping styles in patients suffering from DM have been the subject of many

discussions. Some researchers claim that problem-focused methods can increase self-care in patients with DM, but can have harmful effects (Turan, Osar, Molzan, Damci, & Ilkova, 2002). However, a wide range of coping behaviors have already been identified as effective in reducing stress, including problem-scoring and emotional coping strategies.

Therefore, passive coping strategies may be an unknown obstacle to self-management of DM. For instance, Moody-Ayers, Stewart, Covinsky, and Inouye (2005) found an association between fair/poor self-rating health, low-income, and female coping with perceived social racism among 42 elderly African Americans with type 2 DM. Boulware, Cooper, Ratner, LaVeist, and Powe (2003) in their longitudinal assessment of bias management, reported a correlation between passive copying and poor health outcomes. They also noted that active coping strategies can have unintended side-effects, such as inducing or aggravating individual conflicts, and that further research is warranted in order to understand the effectiveness and the relationship between different coping responses.

Despite the limitations in literature related to coping, interest in coping processes and styles is increasing. Furthermore, more researches are required in order to determine the contexts in which coping strategies are more applicable. Coping skills training has been observed to have a considerable effect on improved performance and increased quality of life (QOL) of patients with DM. The results of studies indicate that the most common problem of these patients is paranoia, and the least common is a phobia. In addition, insulin-dependent patients are more obsessive and aggressive compared to noninsulin-dependent patients.

Moreover, diabetes and patients' need for self-care create numerous challenges in their daily lives necessitating healthy coping behaviors for more adaption. The amount of coping mechanisms used in DM adaptation and the self-care condition of DM patients are closely associated. Studies on the connection between coping and health effects should therefore be expanded to include other health effects in future studies. Future studies should therefore be based on a preliminary analysis.

Patients have different DM self-care strategies that are influenced by their health value. Moreover, their diets and exercise decisions can be affected, blood glucose monitoring frequencies are monitored, and drug regimens are complied with. Evaluations and interventions need to be comprehensive, and integrated theories must be available to study human behavior in order to understand the full range of DM self-care. It is necessary that greater attention be paid to patients' self-care strategies and self-care protocols be tailored to each individual patient. Self-care training can help people with poorly controlled DM or people who want to make their self-care regimens more flexible. In advising patients on self-care, the type of DM should be taken into consideration.

## Conflict of Interests

Authors have no conflict of interests.

## References

- Albai, A., Sima, A., Papava, I., Roman, D., Andor, B., & Gafencu, M. (2017). Association between coping mechanisms and adherence to diabetes-related self-care activities: a cross-sectional study. *Patient.Prefer.Adherence.*, 11, 1235-1241. doi:10.2147/PPA.S140146 [doi];ppa-11-1235 [pii]. Retrieved from PM:28761336

- Aldridge, A. A., & Roesch, S. C. (2008). Developing coping typologies of minority adolescents: a latent profile analysis. *J Adolesc.*, *31*(4), 499-517. doi:S0140-1971(07)00080-2 [pii];10.1016/j.adolescence.2007.08.005 [doi]. Retrieved from PM:17904631
- Bagherian Sararoudi, R., Ahmadzadeh, G. H. H., & Mahmoudi, M. A. (2009). Coping styles among diabetic patients. *J Arak Univ Med Sci*, *12*(1), 9-17.
- Boulware, L. E., Cooper, L. A., Ratner, L. E., LaVeist, T. A., & Powe, N. R. (2003). Race and trust in the health care system. *Public Health Rep.*, *118*(4), 358-365. doi:10.1093/phr/118.4.358 [doi]. Retrieved from PM:12815085
- Chouhan VL, & Shalini V. (2006). Coping Strategies for Stress and Adjustment among Diabetics. *J. Indian Acad. Appl. Psychol.*, *32*(2), 106-111.
- Dantzer, C., Swendsen, J., Maurice-Tison, S., & Salamon, R. (2003). Anxiety and depression in juvenile diabetes: A critical review. *Clin.Psychol Rev.*, *23*(6), 787-800. doi:S0272735803000692 [pii];10.1016/s0272-7358(03)00069-2 [doi]. Retrieved from PM:14529698
- de, Groot M., Kushnick, M., Doyle, T., Merrill, J., McGlynn, M., Shubrook, J. et al. (2010). Depression among adults with diabetes: prevalence, impact, and treatment options. *Diabetes Spectr.*, *23*(1), 15-18. doi:10.2337/diaspect.23.1.15 [doi]. Retrieved from PM:22485068
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *J Health Soc.Behav.*, *21*(3), 219-239. Retrieved from PM:7410799
- Huang, C. Y., Lai, H. L., Lu, Y. C., Chen, W. K., Chi, S. C., Lu, C. Y. et al. (2016). Risk factors and coping style affect health outcomes in adults with type 2 diabetes. *Biol.Res Nurs.*, *18*(1), 82-89. doi:1099800415569845 [pii];10.1177/1099800415569845 [doi]. Retrieved from PM:25670841
- Iturralde, E., Weissberg-Benchell, J., & Hood, K. K. (2017). Avoidant coping and diabetes-related distress: Pathways to adolescents' Type 1 diabetes outcomes. *Health Psychol*, *36*(3), 236-244. doi:2016-53074-001 [pii];10.1037/hea0000445 [doi]. Retrieved from PM:27808528
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.
- Leonard, B. J., Jang, Y. P., Savik, K., Plumbo, P. M., & Christensen, R. (2002). Psychosocial factors associated with levels of metabolic control in youth with type 1 diabetes. *J Pediatr.Nurs.*, *17*(1), 28-37. doi:S0882596302712311 [pii];10.1053/jpdn.2002.30931 [doi]. Retrieved from PM:11891492
- Luyckx, K., Seiffge-Krenke, I., Schwartz, S. J., Goossens, L., Weets, I., Hendrieckx, C. et al. (2008). Identity development, coping, and adjustment in emerging adults with a chronic illness: the sample case of type 1 diabetes. *J Adolesc.Health*, *43*(5), 451-458. doi:S1054-139X(08)00219-X [pii];10.1016/j.jadohealth.2008.04.005 [doi]. Retrieved from PM:18848673
- McDonnell, C. M., Northam, E. A., Donath, S. M., Werther, G. A., & Cameron, F. J. (2007). Hyperglycemia and externalizing behavior in children with type 1 diabetes. *Diabetes Care*, *30*(9), 2211-2215. doi:dc07-0328 [pii];10.2337/dc07-0328 [doi]. Retrieved from PM:17563334
- Moody-Ayers, S. Y., Stewart, A. L., Covinsky, K. E., & Inouye, S. K. (2005). Prevalence and correlates of perceived societal racism in older African-American adults with type 2 diabetes mellitus. *J Am.Geriatr.Soc.*, *53*(12), 2202-2208. doi:JGS501 [pii];10.1111/j.1532-5415.2005.00501.x [doi]. Retrieved from PM:16398910
- Northam, E. A., Matthews, L. K., Anderson, P. J., Cameron, F. J., & Werther, G. A. (2005). Psychiatric morbidity and health outcome in Type 1 diabetes--perspectives from a prospective longitudinal study. *Diabet.Med*, *22*(2), 152-157. doi:DME1370 [pii];10.1111/j.1464-5491.2004.01370.x [doi]. Retrieved from PM:15660731
- Reid, G. J., Dubow, E. F., Carey, T. C., & Dura, J. R. (1994). Contribution of coping to medical adjustment and treatment responsibility among children and adolescents with

- diabetes. *J Dev Behav.Pediatr.*, 15(5), 327-335. Retrieved from PM:7868700
- Turan, B., Osar, Z., Molzan, T. J., Damci, T., & Ilkova, H. (2002). The role of coping with disease in adherence to treatment regimen and disease control in type 1 and insulin treated type 2 diabetes mellitus. *Diabetes Metab*, 28(3), 186-193. Retrieved from PM:12149598
- Yoshida, K., Otaka, H., Murakami, H., Nakayama, H., Murabayashi, M., Mizushiri, S. et al. (2018). Association between insomnia and coping style in Japanese patients with type 2 diabetes mellitus. *Neuropsychiatr.Dis.Treat.*, 14, 1803-1809. doi:10.2147/NDT.S168934 [doi];ndt-14-1803 [pii]. Retrieved from PM:30022829