

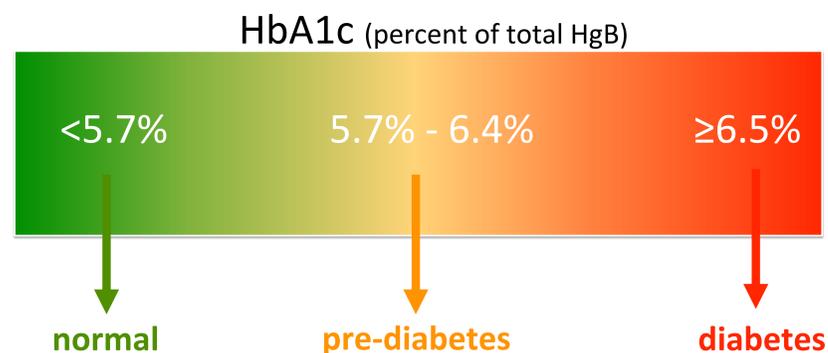
The Effect of Illness Perception on Diabetes Control

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Background

- Illness perception is a patient’s cognitive appraisal and personal understanding of both a medical condition and its potential consequences.
- Illness perception includes both positive and negative beliefs that can influence one’s ability to manage disease.
- Type 2 diabetes mellitus (T2DM) is characterized by a functional deficit of insulin created by the imbalance between insulin levels and insulin sensitivity. Any patient with T2DM is at risk for developing hyperglycemia, which may lead to non-enzymatic glycation of proteins and lipids.
- A buildup of glycated hemoglobin within the red blood cell reflects the average level of glucose exposure during that cell’s life-cycle. This aggregation is measured via the glycation of hemoglobin (HbA1c) test.



Source: American Diabetes Association

Purpose

Current literature suggests favorable illness perceptions have been associated with better health outcomes, while unfavorable illness perceptions have been associated with worse outcomes. This study seeks to identify the association between illness perception and type 2 diabetes control, as measured by HbA1c.

Methods

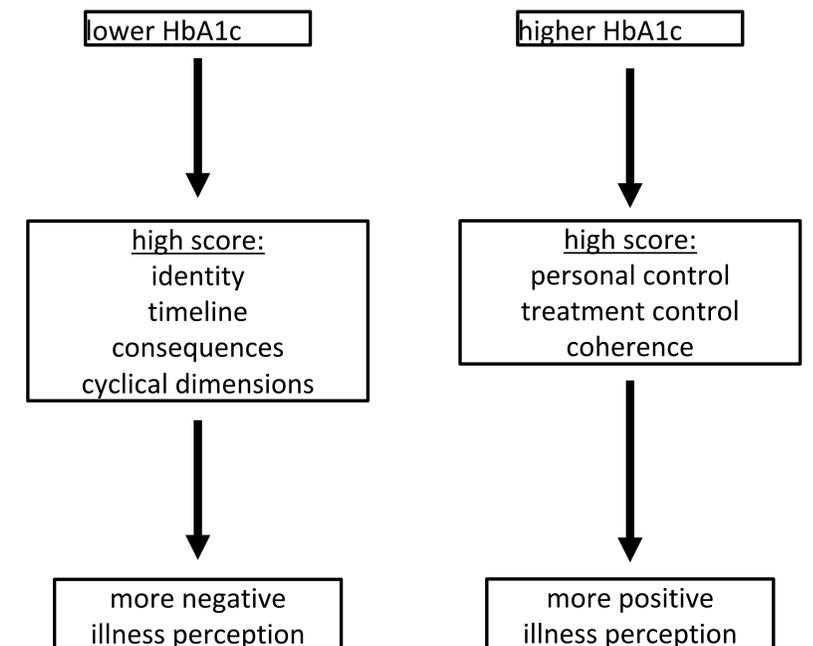
20-30 patients with diagnosed type 2 diabetes and HbA1c > 7.0% (excluded if diagnosed with dementia) will be given the Revised Illness Perception Questionnaire (IPQ-R). The IPQ-R assesses a patient’s positive and negative beliefs about their illness by scoring eight dimensions—identity, timeline (acute/chronic), consequences, personal control, treatment control, coherence, cyclical, and emotional representations. High scores on the identity, timeline, consequences, and cyclical dimensions represent strongly held beliefs about the number of symptoms attributed to the illness, the chronicity of the condition, and the negative consequences of the illness. High scores on the personal control, treatment control and coherence dimensions, represent positive beliefs about the controllability of the illness.

	VIEWS ABOUT YOUR DIABETES	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
IP4*	This diabetes will pass quickly					
IP5*	I expect to have this diabetes for the rest of my life					
IP6	My diabetes is a serious condition					
IP7	My diabetes has major consequences on my life					
IP8*	My diabetes does not have much effect on my life					
IP9	My diabetes strongly affects the way others see me					
IP10	My diabetes has serious financial consequences					
IP11	My diabetes causes difficulties for those who are close to me					
IP12	There is a lot which I can do to control my symptoms					
IP13	What I do can determine whether my diabetes gets better or worse					
IP14	The course of my diabetes depends on me					
IP15*	Nothing I do will affect my diabetes					
IP16	I have the power to influence my diabetes					
IP17*	My actions will have no affect on the outcome of my diabetes					
IP18*	My diabetes will improve in time					
IP19*	There is very little that can be done to improve my diabetes					
IP20	My treatment will be effective in curing my diabetes					
IP21	The negative effects of my diabetes can be prevented (avoided) by my treatment					
IP22	My treatment can control my diabetes					
IP23*	There is nothing which can help my condition					
IP24	The symptoms of my condition are puzzling to me					
IP25	My diabetes is a mystery to me					

Sample Revised Illness Perception Questionnaire

Expected Results

It is hypothesized that a higher HbA1c (poor diabetes control) will correlate with higher scores on the dimensions that associate with a negative illness perception. Similarly, it is hypothesized that a lower HbA1c (better diabetes control) will correlate with higher scores on the dimensions that associate with a positive illness perception.



Future Directions

It is hypothesized that illness perceptions are amenable. Thus, targeted interventions may have the potential to improve glycemic control. Based off the IPQ-R dimension scores, a multifaceted, patient-centered approach that might include behavioral, educational, and psychosocial components may be used to better control a patient’s diabetes.

Acknowledgments

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