

Application of empowerment and self-efficacy models for diabetes education



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Introduction

Throughout this paper, I will examine ecosocial, empowerment, and self-efficacy models and how they are utilized in the Diabetes Education and Wellness clinic in the Highland Park community. This examination will both assess its applications and suggest a collectively oriented self-efficacy model be adapted to broaden impact.

Description

A community can refer to association, gender, race, geography, or common location such as cities or neighborhoods (Ohmer & DeMasi, 2009). Located in southeast Michigan, Highland Park is a small community of about 11, 000 people (U. S. Census Bureau, 2016). Demographically, Highland Park is 92.4% African American (U. S. Census Bureau, 2016). The median value of homes is valued at \$32, 600, while the median household income is \$17, 455; 46.8% of the residents live in poverty (U. S. Census Bureau, 2016). This reveals that much of the community consists of a low-income minority group.

The vulnerable community of Highland Park faced issues of energy poverty in 2011, when DTE Energy forcibly removed 1400 street lights as a result of \$4 million in unpaid energy bills (“ DTE Repossesses Highland Park’s Street Lights,” 2011). DTE justified its actions saying it would save the city \$50, 000 every month (“ DTE Repossesses Highland Park’s Street Lights,” 2011). However, this prevents the formation of community bonds and does not address the issue of energy poverty.

When looking at health issues affecting this community, Highland Park's leading cause of death are heart disease and cancer, similar to the rest of the US (" Division for Vital Records & Health Statistics," 2016). However, when examining Age Adjusted Mortality Rates, it is revealed that the number who die from these two causes is much higher than the rest of the country (" Division for Vital Records & Health Statistics," 2016). Additionally, 85. 4% of mothers who gave birth in 2016 were unmarried and 10. 4% of mothers are under the age of twenty (" Division for Vital Records & Health Statistics," 2016). 15. 3% of newborns were reported as low birthweight or 4. 9% very low birthweight (" Division for Vital Records & Health Statistics," 2016). Given all of this information, it is clear that the Highland Park community faces similar health issues to the rest of the nation, but as a result of lacking resources, they face much higher rates than the country.

While heart disease and cancer are the leading causes of death, another chronic health condition is affecting Highland Park and southeast Michigan: diabetes. According to the Centers for Disease Control and Prevention, over 100 million adults in the US now live with diabetes and pre-diabetes (" National Diabetes Statistics Report," 2017). Nationally, over 30. 3 million Americans have diabetes and 84. 1 million are living with pre-diabetes, which often leads to type 2 diabetes if not addressed through diet and exercise (" National Diabetes Statistics Report," 2017). If left untreated, complications can arise, which could result in costly medical treatments. High glucose levels cause damage to eyes, kidneys, nerves and blood vessels and diabetes also increases the risk for heart attacks and strokes (" National Diabetes Statistics Report," 2017).

Diabetes is 80% more likely to be diagnosed in African Americans than other races (“ Office of Minority Health,” n. d.). Biological, neighborhood, psychosocial, socioeconomic, and behavioral risk factors all contribute to rates of diabetes (Gary-Webb, Suglia, & Tehranifar, 2013). Given the census makeup of Highland Park, residents are more at risk for developing diabetes, and do not have the means or information to make healthy lifestyle choices to prevent or manage diabetes.

Explanation of Change

One theoretical framework that explains Highland Park’s poor social, economic, and health conditions is Krieger’s Ecosocial Model. Nancy Krieger’s Ecosocial Model of Discrimination and Health is a broad and complex theory used to explain causal relationships between disease distribution (Berkman, Kawachi, & Glymour, 2014). It is used to illustrate how societal and ecological factors affect us biologically, and hence influence population health (Berkman, Kawachi, & Glymour, 2014). Simply put, the model looks at who and what are affected in health outcomes. Furthermore, Krieger’s Ecosocial Model of Discrimination and Health utilize the four main concepts of: embodiment; pathways to embodiment; cumulative interplay of exposure, susceptibility, and resistance; and accountability and agency (Berkman, Kawachi, & Glymour, 2014).

According to Krieger’s “ Methods for the Scientific Study of Discrimination and Health: An Ecosocial Approach,” the ecosocial model uses these main beliefs to explain health inequities (2012). Embodiment refers to the physical manifestations of the social and biological world into a person’s body

(Krieger, 2012). Pathways to embodiment studies various pathways that expose the individual to social and economic disadvantages, biological hazards, and environmental factors (Krieger, 2012). Cumulative interplay of exposure, susceptibility, and resistance examines the accumulation of and responses to diseases over the lifespan (Krieger, 2012). Accountability and agency state we must accept responsibility for social and health disparities and calls for explanations to these inequities (Krieger, 2012). The model states that inequitable race relations manifest through: groups that claim racial superiority over groups they deem inferior, racialized biology, and created inequitable living and working environments that result in these biological expressions of racism (Krieger, 2012). The Ecosocial Model could help examine how these social forces and pathways become embodied and incorporated into the physiological outcome of health.

After facing poor infrastructure and economic situations, incredibly high energy bills, the loss of basic services, as well as having their streetlights torn out in 2011, Highland Park residents face a lot of disadvantages.

Accumulated exposure to social disadvantage explains why the Age Adjusted Mortality Rates for heart disease and cancer are so high in the city, as well as why so many newborns are born with low birthweight. Furthermore, social and psychological stress and adversity can lead to cardiovascular risk, which can be complicated with obesity and diabetes (Berkman, Kawachi, & Glymour, 2014). Thinking about the consequences of high energy bills, or even lacking electricity entirely, elevates stress and contribute to these poor health conditions. High energy bills discourage individual's use of self-care and life-saving devices in two ways. First, high energy bills limit expendable

income that can go towards diabetes care. Secondly, community members may be discouraged to use medical devices that help other conditions that a patient with diabetes might have such as Continuous Positive Airway Pressure (CPAP) Machines for Sleep Apnea. Even worse are long-periods of blackouts where the patient cannot use their medical devices even if they can afford unlimited use of them.

Ecosocial theory offers the explanation that DTE, claimed superiority over a disadvantaged minority group, by removing their street lights, instead of empowering the community and giving them the tools to work off their debts (“ DTE Repossesses Highland Park’s Street Lights,” 2011). The removal of street lights has far-ranging implications. One of the most obvious is that without street lights, safety is significantly decreased. Thus, exercising outside in the evening after work is nearly impossible. The ability to exercise, an important self-care task, is impacted. In the winter, this problem is exacerbated when daylight begins late and ends early, limiting community members’ ability to exercise then, too.

Description of Community Intervention

In order to address this issue of high diabetes prevalence, the SAY Detroit Clinic in Highland Park partnered with Wayne State University to hold a free, student run diabetes clinic. The Wayne State University Diabetes Education and Wellness (DEW) Clinic provides free diabetes education and supportive services to residents of the Detroit area. In 2014, 10.4% of adults in Michigan were diagnosed with diabetes, compared to 9.4% nationally (“ Diabetes in Michigan Update,” 2015). Furthermore, Highland Park is 92.4%

African American, and African American adults are 80 percent more likely than non-Hispanic white adults to have been diagnosed with diabetes by a physician (“ Office of Minority Health,” n. d.). With this need in mind, the DEW Clinic was initiated in 2011 to address the high incidence of type 2 diabetes among a low income, urban population.

DEW is a once a month, walk-in clinic situated in a high poverty, urban neighborhood at the SAY Detroit Clinic. The clinic utilizes an interprofessional team with student and faculty volunteers from: Medicine, Pharmacy, Physical Therapy, Occupational Therapy, Nutrition and Dietetics, and Social Work. It allows patients to come and meet with Wayne State University students of each discipline that they want to address health concerns. Students use their skills and knowledge from their specific health profession to talk to the patient about their concerns and educate them on their diabetes care. The DEW clinic also aims to emphasize the importance of long-term self-care and available resources when educating the patients.

With the goal of providing free diabetes education and support in mind, DEW has succeeded. After seeing 24 patients in its first year, the clinic saw 88 in 2016 and 73 in 2017 (DEW Clinic Data, 2018). Students have allowed patients to form their own goals of: checking feet daily, using a pedometer to increase walking, speaking with their physician about issues, and increasing exercise and losing weight. Anecdotally, I have seen several patients return each month learning new things and making healthy behavioral changes. One patient had attended DEW for years, and his wife came in to clinic to share that he had passed away but thanked all the students and faculty for the impact they had on his life. While the reach of the clinic may not be as <https://assignbuster.com/application-of-empowerment-and-self-efficacy-models-for-diabetes-education/>

large as other interventions, it definitely makes an impact on the health of those it does reach.

Critique of Intervention

The first theory that justifies the DEW's community initiative is empowerment theory. Empowerment theory refers to the transformative ideology that helps individuals gain control of their lives and to gather the ability to act on their own psychological, sociocultural, political, economic, and health situations (Ohmer & DeMasi, 2009). Empowerment is a crucial tool for vulnerable, low income, and stigmatized communities like Highland Park where resources are often unavailable or withheld to its most vulnerable. Community organizers “ help residents develop knowledge and power by engaging them in the problem solving process” (Ohmer & DeMasi, 2009, p. 252). Due to several social, educational, and economic factors, many residents are not able to receive the proper healthcare they need to manage their diabetes. DEW bridges the gaps and gives patients the knowledge, resources, and tools such as glucose meters and testing supplies, to overcome these barriers to their health.

Empowerment theory fails in some explanations for DEW's intervention though. Alinsky describes power as contests between those who have money and those who have people (Ohmer & DeMasi, 2009). While a lack of income and resources for Highland Park may fit that definition, Alinsky further explains the use of community organizers to bring people into powerful groups to take power through a conflict model (Ohmer & DeMasi, 2009). An example of his methodology would be Mike Eichler, who organized the

citizens of Perry Hilltop to confront real estate brokers in their neighborhood and made them pay fines for immoral practices (Ohmer & DeMasi, 2009). Eichler realized the confrontation did not solve the issue and was only a small component of empowerment (Ohmer & DeMasi, 2009). The DEW clinic does build trust, help residents fully understand issues and challenges, and help the community display resilience, but they do not address the power struggle that presents these barriers to begin with.

Another theory that justifies DEW's efforts is the theory of self-efficacy. Self-efficacy is an individual's belief in his or her capacity to do something (Bandura, 1977). Albert Bandura's model was built off of social cognitive and social learning theories, and has been used to develop the Community's Self-Efficacy Scale (CSES) scale for community members preventing social isolation among older people in Japan (Tadaka, Kono, Ito, Kanaya, Dai, Imamatsu, & Itoi 2016). Self-efficacy asserts confidence in being able to control one's motivations, behaviors, and social environment (Bandura, 1977). Many of the patients do not believe that they are able to make the necessary dietary or exercise related changes to improve their diabetes; DEW allows them to raise their self-efficacy by having them form their own goals. The theory of self-efficacy operates under the assumption of "creating and strengthening expectations of personal efficacy" (Bandura, 1997, p. 193). By allowing patients to set their own goals, their motivations are intrinsically set, not because a doctor told them to do so. Specifically, because the goals are intrinsically set, the patient is able to outline the goal according to their reality, their current knowledge and levels of both self-efficacy and empowerment. In this way, the goals do not feel so out of reach,

impersonal, obscure, and out of line with their reality. These steps lead to more successful health outcomes.

Alternatives

While the partnership between the SAY Detroit Clinic and Wayne State University has allowed DEW to promote better health outcomes through diabetes education and management, the reach of their impact could be broader. It is estimated that 9.4% of Americans have diabetes (“National Diabetes Statistics Report,” 2017). The community intervention reached 161 patients through 2016-2017, which is a small number when Highland Park’s 11,000 person population is considered (U. S. Census Bureau, 2016).

Empowerment and self-efficacy theories work for the individuals within the population reached, but collective self-efficacy would be better at promoting community change. Collective efficacy refers to what residents believe they can do and are willing to do to improve their neighborhoods (Higgins & Hunt, 2016). It complements the concept of social cohesion: how residents think and feel about their neighborhood (Higgins & Hunt, 2016). DEW could help facilitate a communal intervention that promotes healthy behaviors together. It already forms goals with individuals about diet and exercise, so partnerships with farmers markets or group exercise activities could allow Highland Park community members to form goals together to combat the prevalence of diabetes.

Collective self-efficacy, however, also needs to come from a broader cooperation among institutions. While it is difficult to achieve those needs

from institutions, efforts like DEW’s might want to expand self-efficacy <https://assignbuster.com/application-of-empowerment-and-self-efficacy-models-for-diabetes-education/>

outside of the diabetes care into information on how to choose the best insurance, deal with insurance companies, select doctors, and find payment plans. If clinic such as DEW are able to teach self-efficacy to include both diabetic care and navigating health insurance and financial obstacles stemming from diabetes treatment, self-efficacy could be elevated on a substantially broader level.

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