

Hope and Psychological Well Being among Diabetes Patients: A Correlational Study

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ABSTRACT

Hope is an optimism that is experienced even though the individual may have little personal control over the situation. This nature of hope changes the behaviour of patients and these changes influence various aspect of personality psychological well-being of patients and make their behaviour somewhat positive towards their disease to cope with it. One's capacity to hope for things places an absolute limit on one's power. Thus, Adult hope of patients helps them to deal with their disease in a positive manner. Diabetes is a type of disease in which patients have to face crucial time during their treatment period. The present study has been done to examine the influence of hope on psychological well-being, for this purpose the sample of 100 diabetes patients (50 male and 50 female diabetes patients) were selected randomly from Rajiv Gandhi Centre for diabetes JNMC, A.M.U, Aligarh. The adult hope questionnaire and psychological well-being scale was administered on diabetes patients to collect data. T-test and Pearson product moment co-efficient of correlation were used for data analysis. The obtained result revealed significance difference between male and female diabetes patients on hope and psychological well-being and relationship between hope and psychological well-being was found significantly positive.

Keywords: *Diabetes, Hope, Psychological Well-Being, Patients.*

Dibetes is actually a complex condition in which not only the pancreas involved but many other organs as well including the adrenals, pituitary, thyroid and the liver. If it continues for a long time, the patient becomes weak and may eventually die from malnutrition because of the body's inability to break down and use of the food that one's eats.

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There are three types of diabetes:

1) Type 1 Diabetes: The body does not produce insulin. Some people may refer to this type as insulin-dependent diabetes, juvenile diabetes, or early-onset diabetes. People usually develop type 1 diabetes before their 40th year, often in early adulthood or teenage years.

Type 1 diabetes is nowhere near as common as type 2 diabetes. Approximately 10% of all diabetes cases are type 1.

Patients with type 1 diabetes will need to take insulin injections for the rest of their life. They must also ensure proper blood-glucose levels by carrying out regular blood tests and following a special diet.

2) Type 2 Diabetes: The body does not produce enough insulin for proper function, or the cells in the body do not react to insulin (insulin resistance). Some people may be able to control their type 2 diabetes symptoms by losing weight, following a healthy diet, doing plenty of exercise, and monitoring their blood glucose levels. However, type 2 diabetes is typically a progressive disease - it gradually gets worse - and the patient will probably end up have to take insulin, usually in tablet form.

Overweight and obese people have a much higher risk of developing type 2 diabetes compared to those with a healthy body weight. People with a lot of visceral fat, also known as central obesity, belly fat, or abdominal obesity, are especially at risk. Being overweight/obese causes the body to release chemicals that can destabilize the body's cardiovascular and metabolic systems.

Being overweight, physically inactive and eating the wrong foods all contribute to our risk of developing type 2 diabetes. Researchers from Imperial College London reported in the journal *Diabetologia*. The scientists believe that the impact of sugary soft drinks on diabetes risk may be a direct one, rather than simply an influence on body weight.

The risk of developing type 2 diabetes is also greater as we get older. Experts are not completely sure why, but say that as we age we tend to put on weight and become less physically active. Those with a close relative who had/had type 2 diabetes, people of Middle Eastern, African, or South Asian descent also have a higher risk of developing the disease.

Men whose testosterone levels are low have been found to have a higher risk of developing type 2 diabetes. Researchers from the University of Edinburgh, Scotland, say that low testosterone levels are linked to insulin resistance.

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3) **Gestational Diabetes:** This type affects females during pregnancy. Some women have very high levels of glucose in their blood, and their bodies are unable to produce enough insulin to transport all of the glucose into their cells, resulting in progressively rising levels of glucose. Diagnosis of gestational diabetes is made during pregnancy. The majority of gestational diabetes patients can control their diabetes with exercise and diet. Between 10% to 20% of them will need to take some kind of blood-glucose-controlling medications. Undiagnosed or uncontrolled gestational diabetes can raise the risk of complications during childbirth. The baby may be bigger than he/she should be.

Scientists from the National Institutes of Health and Harvard University found that women whose diets before becoming pregnant were high in animal fat and cholesterol had a higher risk for gestational diabetes, compared to their counterparts whose diets were low in cholesterol and animal fats.

Psychological Well-Being

Psychological well-being is important with respect to how we function and adapt and with respect to whether our lives are satisfying and productive. Psychological well-being refers to how people evaluate their lives. According to **Diener and Suh (1997)**, these evaluations may be in the form of cognitions or in the form of affect. The cognitive part is an information based appraisal of one's life that is when a person gives conscious evaluative judgments about one's satisfaction with life as a whole. The affective part is a hedonic evaluation guided by emotions and feelings such as frequency with which people experience pleasant/unpleasant moods in reaction to their lives. According to **Kitchener and Jorm (2002a)**, Psychological well-being can be described as a state of mind with an absence of a mental disorder, from the perspective of positive psychology, it may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience

Boghle & Prakash (1995) observed that person high on psychological well-being not only carries high level of life satisfaction, self esteem, positive feelings and attitudes but also manages tension, negative thoughts, ideas and feelings more efficiently. They developed a tool to measure the psychological well-being which comprises of twelve factors such as meaninglessness, self esteem, positive affect, life satisfaction, suicidal ideas, personal control, tension, wellness, somatic symptoms, daily life events/activities, social support and general efficacy.

Researchers in the field of positive psychology have been trying to focus and explore positive Psychological states like hope, well-being, resilience, hardiness, sense of coherence and similar related constructs which act as mediating and moderating factors for stress and thereby enhance satisfaction. Psychologists often conduct empirical work on adolescents primarily because of the fact that this age group is vulnerable to many psychological issues and rather than focusing on negative psychological states, exploring the strengths of adolescents and giving them feedback

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and training those to use those strengths can significantly reduce possible emerging psychological issues.

Hope

In the late 20th century, theoretical and scientific interest in the concept of hope has developed among investigators and clinicians in psychology, medicine and nursing. Although there are a variety of conceptualizations of hope, there has been agreement on the essential characteristics of the concept. Hope is one of the factors in coping, is future oriented and considered to be multidimensional by most researchers. Snyder is most closely associated with the research and conceptualization of hope construct. **Snyder (2002)** gave hope theory. Hope theory also begins with viewing goals as the central organizing component of human behaviour (Snyder, 2002). Hope in this model is primarily a cognitive construct that consists of two parts. If goals direct people's behaviour, to reach them successfully people must have the capacity to generate *pathways*. Generating pathways is not sufficient to attaining goals, however. People also need to have confidence in "the perceived capacity to use one's pathways to reach desired goals" (Snyder, 2002). This "agency thought" is the motivational component of hope theory. Simply put, hopeful thought reflects the belief that one can find pathways to desired goals and become motivated to use those pathways. Human actions are goal directed. Accordingly, goals are the targets of mental action sequences, and they provide the cognitive component that anchors hope theory. Goals may be short- or long-term, but they need to be of sufficient value to occupy conscious thought. Likewise, goals must be attainable, but they also typically contain some degree of uncertainty (**Snyder, 1994a, Stotland, 1969**). In order to reach their goals, people must view themselves as being capable of generating workable routes to those goals. This process known as pathways thinking signifies one's perceived capabilities at generating workable routes to desired goals. These pathways thinking is typified by affirming internal messages that are similar to the appellation —I'll find a way to get this done! (**Snyder, Lapointe, Crowson & Early, 1998**). The motivational component in hope theory is agency—the perceived capacity to use one's pathways so as to reach desired goals. Agentic thinking reflects the self-referential thoughts about both starting to move along a pathway and continuing to progress along that pathway. It has been found that high hope people embrace such self-talk agented phrases as —I can do this and —I am not going to be stopped. Hope enables an individual to cope with a stressful situation by expecting a positive outcome. Because a positive outcome is expected, the individual is motivated to act in the face uncertainty. Individuals high in hope often appraise stressors as more challenging (as opposed to more threatening), and thus have the ability and motivation to find solutions to ameliorate the stressful feelings and resolve the stressor as a function of this orientation.

LITERATURE REVIEW

The Diabetes Attitudes, Wishes and Needs (DAWN) programme, the largest global psychosocial study related to diabetes care, reported that the majority of patients with Type 1 or Type 2

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diabetes experience psychological problems (67.9% and 65.6%, respectively). Despite the widespread prevalence of diabetes-related distress and its important negative consequences, only a small minority of people with diabetes (3.3%) had received psychological treatment for diabetes-related problems within the 5 years prior to the survey (**Skovlund & Peyrot, 2005**).

Complications of diabetes have an important impact on patient's psychological health. Knowledge of long-term complications may be frightening for patients. Even a minor abnormality without serious implications can be upsetting. Developing a complication such as nephropathy or visual impairment may be devastating. **Naess, Midtjhell, Moum, Sorensen, and Tambs (1995)** showed that the psychological well being of diabetic patients was found to be significantly poorer than that of those without diabetes, but better than that of those with angina and stroke, two important complications of diabetes. Patients may react strongly and in unexpected ways. Extreme anger may be directed at the physician or institution. Such anger usually reflects deeper emotions, including fear of long anticipated problems and guilt about not being compliant. Listening to the expressions of anger, asking about other worries, and explaining what new clinical complications and their sequelae mean and what can be done can help calm the patient's underlying fears.

An important issue is the psychological effects of sexual dysfunction. Erectile dysfunction is negatively associated with an array of dimensions of psychological well being. In a study by **De Berardis et al. (2002)**, 45.6% of patients with frequent erectile dysfunction reported severe depressive symptoms. Corresponding figures for those with occasional erectile problems were 42.4% and 29.6% in the remainder ($w^2 \frac{1}{4} 29.8, p \frac{1}{4} .001$). Patients may not bring this problem up easily with their carers and this subject should be handled with great care by all those involved. To this respect, sexual function should be considered an integral part of overall health in diabetic patients.

When children and adolescents are diagnosed with diabetes, the patient and family become aware that they are entering a new world filled with challenges and constraints. They may feel they have been defeated and may enter a bereavement period. Children and adolescents with Type 1 diabetes may feel lonely, sad and irritable and may withdraw socially. Outbursts of temper, guilt, pessimism about the future, and refusal to take shots or attend school are more ominous and unusual (**Kovacs et al., 1985**).

In families where there are signs of tension, there is a higher rate of adjustment problems (**Jacobson, Hauser, & Lavori, 1994**). Among youths with adjustment disorder in response to the medical diagnosis, the 5-year cumulative probability of a new psychiatric disorder (anxiety or depression) was .48, compared to .16 among the other youths (**Kovacs, Ho, & Pollock, 1995**). Thus, when behavioural, psychological and family problems are identified at the onset of

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disease, the patient should be carefully monitored and immediate psychosocial intervention considered.

Aim & Objectives:

1. To examine the relationship between hope and psychological well being with its different dimensions of diabetes patients.
2. To examine the relationship between hope and psychological well being with its different dimensions of male and female diabetes patients.

Hypotheses:

1. There will be significant relationship between hope and psychological well being with its different dimensions of diabetes patients.
2. There will be significant relationship between hope and psychological well being with its different dimensions of male and female diabetes patients.

METHODOLOGY

Sample:

The sample will be comprised of 100 diabetes patients, of these 50 subjects will be male diabetes patients and 50 subjects will be female diabetes patients . The data will be collected from Rajeev Gandhi Centre for Diabetes & Hypertension (RGC), JNMCH, AMU, Aligarh.

Procedure:

The research data will be collected on different subjects individually. All the three scales will be administered on the subjects individually. Prior the data collection, the investigator will establish rapport and keeping in mind the subject's readiness to support the purpose, the data may be completed in one session or more than one session. Also, the researcher will assure all the subjects that their responses would be kept confidential and shall be utilized for only for research purpose.

MEASURES

Adult Trait Hope Scale:

(Snyder et al, 1991) It is a 12 item scale meant to measure hope. Four items measure pathways thinking, four items measure agency thinking and four items are fillers. Participants respond to each item using a 8-point scale ranging from definitely false to definitely true. Minimum score is 1 and maximum score is 64. Higher the score, the higher the hope in the respondents. Cronbach Alpha for the Hope Scale was found to be 0.86 and test retest reliability was found to be 0.81

Psychological Well Being Scale:

(Bhogle and Jai Prakash 1995) The scale comprised of 28 items with two alternative response categories 'Yes' and 'No'. The psychological well-being questionnaire consisted of 13 factors

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including: meaninglessness, somatic symptoms, selflessness, positive affects, daily activity, life satisfaction, suicidal ideas, personal control, social support, tension, wellness, general efficiency and satisfaction.

Statistical analyses:

In order to meet the research objectives data were analyzed; Pearson product moment correlation was administered to study the relationship between hope and psychological well being. The simple linear regression was applied to examine the influence of hope on psychological well-being. Further t-test was computed for the comparison of hope as well as psychological well-being of both groups.

RESULT AND ANALYSIS

The proposed study was conducted to measure the correlation between hope and psychological well being among diabetes male and female patients and also the comparison of male and female diabetes patients on hope and psychological well being. The obtained result revealed significance difference between male and female diabetes patients on hope and psychological well-being and relationship between hope and psychological well-being was found significantly positive.

Table 1: shows the correlation between hope (with its different dimensions) and psychological well-being among over all diabetes patients.

CORRELATION	
PSYCHOLOGICAL WELL BEING	
HOPE TOTAL Pearson Correlation	.441**
AGENCY Pearson Correlation	.502**
PATHWAYS Pearson Correlation	.281*
N	100

**Significant at the 0.01 level (2-tailed)

*Significant at the 0.05 level (2-tailed)

This table shows that hope is significantly correlated with psychological well-being ($r=.441$), and domains of hope i.e. agency and pathways were also found significantly correlated with psychological well-being ($r=.502$) and ($r=.281$) respectively among diabetes patients.

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Table 2: Show the correlation between hope (with its different dimensions) and psychological well-being among male and female diabetes patients.

CORRELATION		
PSYCHOLOGICAL WELL BEING		
	MALE	FEMALE
HOPE TOTAL Pearson Correlation	.535**	.455**
AGENCY Pearson Correlation	.548**	.484**
PATHWAYS Pearson Correlation	.288*	.357*
N	50	50

**Significant at the 0.01 level (2-tailed)

*Significant at the 0.05 level (2-tailed)

It shows that hope is significantly correlated with psychological well-being in male($r=.535$) and female($r=.455$), and domains of hope i.e. agency and pathways were also found significantly correlated with psychological well-being ($r=.548$) and ($r=.288$); ($r=.484$) and ($r=.357$) respectively among male and female diabetes patients.

Table 3: Show the Hope and Psychological well being difference between male and female diabetics.

VARIABLES		N	MEAN	SDs	t-value
HOPE	MALE	50	46.80	3.990	1.41
	FEMALE	50	46.12	7.558	
PSYCHOLOGICAL WELL BEING	MALE	50	19.68	2.045	2.52*
	FEMALE	50	18.06	1.856	

**Significant at the 0.01 level (2-tailed)

*Significant at the 0.05 level (2-tailed)

Here the result indicates that male and female has insignificant difference on the variable hope among the diabetes patients, whereas, on psychological well-being male and female both has significant difference.

DISCUSSION & CONCLUSION

The findings of the proposed study displays the statistically significant i.e. strong and positive relationship between hope and psychological well being among diabetes patients of both the group i.e. male and female, which means that hope has some contribution in making the psychological well being better among diabetes patients. Further, the study shows the insignificant difference on hope in both the groups of male and female among diabetes patients, the reason could be that diabetes is a chronic disease and the patients suffering from this disease may lose hope of getting cure; whereas, the psychological well being have significant difference in both the male and female groups of diabetes patients.

Findings indicate that hope and psychological well being significantly correlated with each other which are also verified by **(Park 2004)** they explore the association between hope and psychological well-being. Findings also show that hope and psychological well being among diabetes patients this regards several researchers has found that hope influence psychological well being.

Researchers found Hope to be associated with (a) higher competency in numerous life areas (e.g., academics; **Snyder et al., 1997**), (b) use of adaptive coping methods, (e.g., **Irving, Snyder & Crowson, 1998**) (c) more flexible and positive thoughts (**Snyder et al., 1996; Snyder & McCullough, 2000**), and (d) more positive appraisals of stressful events (**Affleck & Tennen, 1996**).

Gilman, Dooley, and Florell (2006) reporting high hope were found to be high on personal adjustment, global life satisfaction.

Consequently, it is concluded that hope has its significant and positive correlation as well as contribution on psychological well being of diabetics. The difference between hope and psychological well being is also found significant in men and women patients.

SUGGESTIONS

The findings of study show a glimpse of the correlation between hope and psychological well-being among diabetics. However, more researches are needed to study the impact of hope on psychological well-being among other chronic disease related to diabetes in order to better understanding of the hope related to psychological well-being. More research about the relationship between psychological well being's dimensions and domains of hope should be conducted. It is also necessary to understand the gender differences of these variables.

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Conflict of Interests

The author declared no conflict of interests.

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