

Studying the Efficacy of Fordyce Happiness Model on Life Quality of Patients Suffering from Diabetes and Cancer

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ABSTRACT: Happiness, one of the parameters of quality of life, is from the features of personality. Having a feeling of consent and happiness in daily life is one of the main factors, which affects the healthiness of physical and psyche. Therefore, training happiness can be effective in: increasing joy, improving life quality, increasing the resistibility of physically ill people such as those who suffer from diabetes and cancer against the disease, and improving life expectancy in these patients. The main purpose of present research is to study the efficacy of Fordyce Happiness Model (FHM) on life quality of patients suffering from diabetes and cancer in Ardabil city. The statistical population of this research includes all patients suffering from diabetes and cancer hospitalized in Ardabil hospitals in 2009-2010. The sample includes 60 patients suffering from diabetes and cancer hospitalized in Ardabil hospitals, who are selected with random sampling method. In this research, which is of trial kind, independent and dependent variables are happiness and life quality, respectively. We use Fordyce collection of happiness instruction and questionnaire of life quality (SF-36) for data collection. For analyzing hypotheses we have used multi-variable variance analysis and LSD follow-up test. The results indicate that instructing FHM is effective in increasing the life quality of patients suffering from diabetes and cancer ($P < 0.01$). The factor of happiness not only safeguards people against physical and psychical diseases, and increases their capacity in different physical, social and psychical areas, but also has a direct impact on their life quality and improves its level. Instructing happiness can be of important role in: increasing joy, improving life quality, increasing the resistibility of physically ill people such as those who suffer from diabetes and cancer against the disease, and improving life expectancy in these patients.

Keywords: Happiness, Life quality, Diabetes, Cancer.

INTRODUCTION

How one can live in a better way? With which mechanisms one can enjoy the world? What is the secret of happiness? It is a long time that man we try to answer these questions. Specialists in social and behavioral sciences are endeavoring to find desired answers to these questions and reach to these objectives. From among the said objectives we can name happiness, thinking positively, job satisfaction, production and productivity, and finally a successful society, which are attainable through positivistic psychology (Seligman, 2000). Some parameters such as life quality, the manner with which one functions in the society and family, and happiness are among the fundamental concepts of positivistic psychology.

Changing the idea that only developments in science, medicine, and technology improve the quality of life to the idea that individual, family, and social welfare is created through a combination of the developments in the said areas with one's valuation and perception of the welfare and environment conditions, is from among the primary resources of orientation toward quality of life (Brown, 2002). The term "quality of life" beside simple evaluation of signs or member pathology refers to different areas of one's life. These areas include some contexts of individual happiness, role performance, and health condition. It includes, for example, supportive satisfactory relationships, social network efficacy, and releasing one from disappointment (Zaki, 2007). The quality of life is of strong relationship with emotional function and psychical health of an individual, and states different moods of

people's treatment, their capabilities and changes in life, and their satisfaction from multiple functions of life impacts (Rafiei, 2003).

On the other hand, happiness is one of the variables, which drive many attentions in recent years in the areas of personality and health psychology; it is one of the psychical requirements of human being and is of significant impact in personality formation and psychical health. A lot of social and behavioral researches have conducted about positive feelings, one aspect of which is quality of life, which includes some aspects of human healthiness such as life satisfaction, and feeling of being happy and successful (Zaki, 2007).Furnham&Cheng(1997) believe that happiness is a personality feature and one of the parameters of life quality; they consider happiness, in most of their research, as an equivalent to stable extrinsicness in the theory of Eizenk(Furnham& Cheng,1997).

Not only people's happiness is considered as a safeguard against physical and psychical diseases and increases their capabilities in different physical, psychical and social arenas, but also it affects directly their quality of life and promotes it in them (Poostal,2002). Some researchers like Bruhen et al have performed some studies on a group of active and well to do people. These researchers found that some diseases like cardio-arterial, cancer and diabetes, which shorten the life, are mainly prevalent in people who have not a happy and satisfactory life; on the other hand they are less prevalent in people who enjoy a happy life and are of higher life quality (Mansoori, 2006).In a research with the title of "Studying the efficacy of cognitive-behavioral education of happiness in decreasing pre-period symptoms of women in Baharestan, Isfahan" Moradei et al claimed that cognitive-behavioral education of happiness had been effective in decreasing symptoms of depression in the said period (Moradi, Jafari, &Abedi, 2007). In his research "Studying the efficacy of Fordyce happiness education on the degree of depression in deaf girl students" of Tehran's high schools showed that this education had decreased the level of depression (Sedaghat, 2008). In another research with the title of "The efficacy of collective counseling on job fatigue and tiredness of social assistants with Fordyce cognitive-behavioral happiness model" Hosseineiyani&Khodabakhshai showed that training happiness with Fordyce method had been effective in decreasing job fatigue and tiredness of social assistants (Hosseineiyani&Khodabakhshai, 2007).

Lazarus et al have referred to several directions in which people's optimistic view and happiness evoke positive emotions and promote the level of resistance against stress resources and improve the quality of life (Lazarus, Kaner, &Folkman, 2002). Mayer & Dierner showed that there is a correlation between life satisfaction and high psychical health; the higher satisfaction from life the more capability for experiencing positive emotion and feelings would be (Mayer, &Dierner, 2003). In their research "Studying the effect of training Fordyce happiness model on social function of patients suffering from renal and cancer diseases", Zganec&Lipovcan(2006) showed that training this model had decreased the degree of depression in these patients and had increased their social relationships. In his research "The efficacy of happiness on decreasing patients' blood pressure", Wart showed that training happiness can decrease systolic and diastolic blood pressures up to 23 percent and 34 percent, respectively; moreover, it increases these patients' happiness up to 56 percent (Wart, 2009). In another research titled "Testing and evaluation of the quality of life, life satisfaction and welfare of professional nurses for discovering gender and age differences", Thomas showed that all in all there is a strong relationship among the quality of life, life satisfaction and welfare; life satisfaction is mainly predictable through public properties, and physical and social satisfaction but welfare is mainly predictable through the quality of life and psychological dimension (Toomas, 2010). Therefore, with regard to the impacts of training happiness on increasing happiness, promoting quality of life, increasing the resistibility of physically ill people such as those who suffer from diabetes and cancer against the diseases, and on improving life expectancy in these patients, this research is tried to answer to this question that whether Fordyce happiness model is of effect in the life quality of patients suffering from diabetes and cancer or not.

RESEARCH METHOD

Research method is of trial kind, in which we have used pretest-posttest pattern with control group. Happiness is considered as independent variable and quality of life as dependent variable.

Table 1.Method of research

Groups	Pretest	Dependent variable	Posttest
Control group	T ₁	X	T ₂
Main group	T ₁	-	T ₂

Research population includes all patients suffering from diabetes and cancer hospitalized in Ardabil hospitals between 2009 and 2010. Research sample includes 60 patients from among the abovementioned patients. Since research method is of trial kind every group must be of at least 15 members (Delavar, 2001). But

due to the increase in the external validity, the samples were 60 patients from among the said patients who were selected by random sampling method.

For data collection we have used two tools: The collection of Fordyce happiness education: Fordyce (1997) believes that happiness is teachable. Fordyce, a scholar in happiness psychology, with studying different research has presented a collection titled "Teaching Happiness". This program is of 14 principles, among which 8 principles are cognitive and the other 6 principles are behavioral. The underlying principle of Fordyce happiness model is that one can, if he/she wants, be happy like happy people. This model is a combination of cognitive and behavioral theories. We have explained the process of researches conducted for each of these principles; moreover we have presented the required logics for proving why these principles can increase learners' happiness.

Life quality questionnaire: This is a (short-form, 36-questions (SF-36) reliable questionnaire which are commonly used for evaluation of life quality. This form is translated and retranslated into Persian by Montazeri et al (Montazeri, Goshtasbi, & Vahdaninia, 2006). The reported reliability coefficient for micro-scales, except the micro-scale of liveliness which is 0.65, is from 0.77 to 0.90. The questionnaire (SF-36) includes 36 questions in which its 35 questions are summarized in 8 multi-provision micro-scales: eight scales (SF-36) are summarized in 2 dimensions of Physical health and psychological health. The first four micro-scales i.e. physical function, physical role, physical pain, and general health from "physical health dimension" combine with the last four micro-scales i.e. liveliness, social function, emotional role and psychical health from "psychical health dimension". We use questionnaire for collecting the required data. After preparing the list of patients suffering from diabetes and cancer, and their selection randomly, first we defined them research objective, and then as a pretest we distributed the questionnaire of life quality among both groups and asked them to give their opinions. Then the subjects of control group participated in six sessions of training workshops in which they were trained 12 principles of Fordyce happiness model.

Findings

Table 2. Mean and standard deviation for variables of life quality and its sub-scales in tow diabetic and cancer groups

Variable	Groups	Number	Mean	SD
Pretest	Diabetic	30	60/06	3/21
Life quality	Cancer	30	51/53	2/99
Posttest	Diabetic	30	82/50	6/21
Life quality	Cancer	30	74/96	5/75
Pretest	Diabetic	30	8/33	1/26
Physical function	Cancer	30	6/53	1/33
Posttest	Diabetic	30	10/20	1/84
Physical function	Cancer	30	9/33	1/71
Pretest	Diabetic	30	7/16	1/48
Physical role	Cancer	30	6/06	1/14
Posttest	Diabetic	30	10/60	1/84
Physical role	Cancer	30	9/80	1/58
Pretest	Diabetic	30	8/33	1/60
Physical pain	Cancer	30	8/33	1/34
Posttest	Diabetic	30	5/86	1/81
Physical pain	Cancer	30	5/50	1/58
Pretest	Diabetic	30	7/16	1/46
General health	Cancer	30	6/60	1/24
Posttest	Diabetic	30	10/93	2/16
General health	Cancer	30	9/13	1/90
Pretest	Diabetic	30	6/63	1/21
liveliness	Cancer	30	5/93	1/38
Posttest	Diabetic	30	11/23	2/71
liveliness	Cancer	30	11/00	2/30
Pretest	Diabetic	30	6/63	1/54
Social function	Cancer	30	6/26	0/98
Posttest	Diabetic	30	10/83	1/80
Social function	Cancer	30	9/40	1/95
Pretest	Diabetic	30	6/73	1/17
Emotional function	Cancer	30	5/66	1/21
Posttest	Diabetic	30	11/23	2/34
Emotional function	Cancer	30	10/80	2/05
Pretest	Diabetic	30	9/06	1/72
Psychical health	Cancer	30	5/63	1/09
Posttest	Diabetic	30	11/60	1/88
Psychical health	Cancer	30	10/00	2/30

Titles of these sessions include

1st session: definition of happiness – necessity and its important, a brief review of its history and methodology of happiness-related researches, the results of research, research performed about happiness, and also correct and incorrect imagination about happiness;

2nd session: training the subjects to spend more time in communities and collective activities, being productive and performing useful and meaningful works;

3rd training the principles of planning and better organization, removing anxieties, and lowering wishes and expectations;

4th session: training the principles of positive and optimistic thinking, living in the present time, upbringing a healthy character;

5th session: training the principles related to social and extrinsic personality, being one’s real self, putting negative thoughts and feelings aside;

6th session: training the principles of hearty relationships as the main source of happiness, and valuating happiness.

After the end of training course we redistributed the questionnaire of life quality as a posttest to the subjects of both groups. It is noteworthy that the required data are collected individually and in the place where the patients were hospitalized. Then we analyzed the collected data through SPSS tools and the test of multivariable variance analysis and LSD.

related to credit indicators of multivariable variance analysis

Table 3. The results of Wilks' Lambda test

Effect	Value	F	DF	DF Error	Meanfulness level
Group	0/66	12/14	9	0/66	00/0
Pillar effect	0/31	12/14	9	0/31	00/0
Wilkes lambda	2/18	12/14	9	2/18	00/0
Hoteling effect	2/18	12/14	9	2/18	00/0
Rooting					

As indicated in the above table, Wilkes' lambda value is 0/31, which is meaningful at (01/0 ≥ P) level. The lesser Wilkes' lambda value indicates that there is a significant deference between two groups.

Table 4. Multivariable variance analysis for variables of life quality, physical function, physical role, physical pain, general health, liveliness, social function, and emotional role in two diabetic and cancer groups

Source	Scales	Sum of Square roots	DF	Mean values of Square roots	F	Meanfulness level
Model	Life quality		1			0/00
	Physical function	1363/26	1	1363/26	25/75	0/03
	Physical role	987/01	1	987/01	11/04	0/00
	Physical pain	86/40	1	86/40	19/97	0/00
	General health	22/81	1	22/81	4/20	0/04
	Liveliness	38/40	1	38/40	7/13	0/01
	Social function	48/60	1	48/60	12/59	0/00
	Emotional role	62/01	1	62/01	12/80	0/00
	Psychical health	50/41	1	50/41	8/20	0/00
	Groups	Life quality		1		
Physical function		1363/26	1	1363/26	25/75	0/03
Physical role		987/01	1	987/01	11/04	0/00
Physical pain		86/40	1	86/40	19/97	0/00
General health		22/81	1	22/81	4/20	0/04
Liveliness		38/40	1	38/40	7/13	0/01
Social function		48/60	1	48/60	12/59	0/00
Emotional role		62/01	1	62/01	12/80	0/00
Psychical health		50/41	1	50/41	8/20	0/00

As you can see from table 3 training Fordyce happiness model has been effective in life quality of patients suffering from diabetes and cancer (01/0 ≥ P), which means that this model improve the said patients' quality of life.

The mean values related to pre- and posttest life quality of patients suffering from diabetes and cancer is indicated in table 1, in which there is a difference between pre- and posttest scores. This shows the significant effect of the model on increasing life quality of the said patients. Training Fordyce happiness model has been effective in improving physical function, physical role, general health, liveliness, social function, emotional role, and psychical health of patients suffering from diabetes and cancer ($01/0 \geq P$).

DISCUSSION

The findings of present research indicate that training of Fordyce happiness model has been effective in the life quality of patients suffering from diabetes and cancer. The results of present research have been in line with the results of some other researches such as Mansoori(2006), Moradei&etal(2007), and Sedaghat(2008); moreover, it indicates that happiness is from the features of personality and a parameter of life quality. Feeling of welfare and satisfaction in the daily life is one of the main factors, which affects the healthiness of body and psyche. In his research, Zekei(2007) showed that the life quality of patients suffering from diabetes and cancer is respectively of high level in the dimensions related to function, interrelationship, metaphysic, symptoms of diseases, and feeling of happiness. Findings indicate that with increasing positive evaluation of diabetic and cancer patients from interrelationship, happiness and welfare, the level of their life quality will increase (Zekei,2007). Lazarus &etal(2002) have referred to several directions in which people's optimistic view and happiness evoke positive emotions and promote the level of resistance against stress resources and improve the quality of life. Mayer &. Dierner(2003) showed that there is a correlation between life satisfaction and high psychical health; the higher satisfaction from life the more capability for experiencing positive emotion and feelings would be.

This research showed that training of Fordyce happiness model is effective in promoting physical function, physical, role, and physical pain of diabetic and cancer patients. The obtained results indicate that people with high physical health have an inspiring and optimistic view about life and consequently are of high life quality, which are in line with the results obtained by Mark et al (Marc, Mary, &Ostogoy, 2003). With the awareness that physical malaises and disorders can lead to different psychical diseases; on the other hand by the perception that mental and psychical disorders such as anxiety, depression etc. can lead to behavioral disorders, decrease in social activities, and also physical disorders; consequently the problems caused by psychical health are meaningfully effective in cost wastage, physical unhealthiness, inability and early death, disinterest to work, decreasing of activity in work environment, absence from job, decreasing productivity, economical losses, and finally in decreasing of one's overall function and life quality; people's happiness and welfare not only can be a safeguard against physical and psychical diseases and increase their ability in different social, psychical, and physical areas but also can be of direct effect on their life quality and improve this quality in them. Moreover this research indicate that training of Fordyce happiness model have been effective in increasing of general health in diabetic and cancer patients, which are in line with the results of Gordon (Gordon, 1993) and Fordays(1983). The results indicate that the major resource of satisfaction in the current life has been general health and the major resource of dissatisfaction is unhealthiness, inability to do work, and family problems. Studies have showed that having a feeling of satisfaction and welfare from daily life is one of the main factors, which affects the healthiness of body and mind. Researchers like Bruhen et al have performed some studies on a group well to do and active people. These researchers found that the cardio-arterial disease, which shorten the life are mainly prevalent in people who have not a happy and satisfactory life; on the other hand they are less prevalent in people who enjoy a happy life and are of higher life quality.

In the present research training of Fordyce happiness model has been effective in increasing liveliness, and social function of diabetic and cancer patients, which is in line with Gordon (1993). The results indicate that with regard to sad people, those who have a happy and active life are of higher social function. In fact, the quality of life is like a pyramid with the concepts like satisfaction from life (at its top), happiness (in the middle) and satisfaction from other aspects of work like satisfaction from the amount of salary, and from cooperators and supervisors (at the bottom). There is a positive relationship between the quality of work life and other variables in an organization (performance, productivity, etc.) among which we can name happiness and satisfaction from life.

The results show that training of Fordyce happiness model is effective in increasing the emotional role of diabetic and cancer patients which are in line with the results of Leicher,Kaliterna, &Zganee(1980). This study shows that there is negative meaningful relationship between emotional in stability and happiness. The results of performed researches indicate that the more emotional learning provoke more happiness. Also this research indicate that training Fordyce happiness model is effective in increasing psychical healthiness of diabetic and cancer patients, which is in line with Lazarus &etal(2002). Also the results indicate that the quality of life and consequently happiness, job and life satisfaction is among the predictors of psychical health. The higher

satisfaction from life and job the more capability for experiencing positive emotion and feelings would be; and this leads to the promotion of psychical health.

CONCLUSION

Not only people's happiness is considered as a safeguard against physical and psychical diseases and increases their capabilities in different physical, psychical and social arenas, but also it affects directly their quality of life and promotes it in them. Therefore, training happiness can be effective in: increasing joy, improving life quality, increasing the resistibility of physically ill people such as those who suffer from diabetes and cancer against the disease, and improving life expectancy in these patients.

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