

EFFECTIVE FACTORS ON WILLINGNESS OF BLOOD DONORS TO DONATE BLOOD AGAIN IN RASHT CITY (With an Emphasis on Social Marketing Approach)

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Abstract

Purpose of this study is explanation of effective factors on willingness of blood donors to donate blood again in Rasht city (Iran) emphasis on social marketing approach. Research method in term of purpose is applied and in term of implementation is descriptive-analytical. Research nature is causal. Method of data collection is field. The society population is blood donors of Blood Transfusion Center in Rasht (Iran).total of statistical population is obtained 420 blood donors and 395 questionnaires is analyzed. Also research tool is questionnaire. Validity of questionnaire is confirmed by advisors and supervisors. To determine the reliability of questionnaire was used Cronbach's alpha method. Considering that, all alpha coefficients obtained are more than 70 percent; therefore, questionnaire has the necessary reliability. Research hypotheses were tested through regression test and Chi-square. The results of testing hypotheses show that effective factors on willingness of blood donors to donate blood again include gender, educational level, physical condition of the donation room, practical skills of employees, waiting time and communication skills of employees.

Keywords: Willingness of Blood Donors, Blood Transfusion Organization, Social Marketing

1. Introduction

Today one of the most important challenges and problems is attention to various aspects of attract, relationships and customer retention. Increase production capacity and surplus products due to technological advancement and improvement of systems and procedures, variety of products and increased competition, increased customer awareness and many other factors also exacerbated this problem and attract customers and more importantly, their maintaining are top concerns of today's executives (Mirakzadeh, Barrami, 2011). Healthcare arena over the past two decades has undergone many changes. New areas of health, as well as changing customer needs and health care provider organizations to satisfy these requirements should apply effective management practices. "Social marketing" is one of these methods. To achieve a customer-centric marketing approach in the health sector, this type of marketing process should be based on research and evaluation and it is also highly respected ethical aspects (Torabi, 2006).

Social marketing emerged as a full and independent scientific field in 1970. Philip Kotler and Gerald Altman, two prominent scholars and experts in marketing, had introduced this new scientific field. They believed that assumptions and concepts of commercial marketing can be used for sale beliefs, attitudes and human behavior. Kotler and Altman insist on this point that the

main difference of social marketing with other areas of marketing is manifest in goals and objectives of social marketing and its administration. The main mission of social marketing is influencing social behavior and human. In social marketing, earn profits and personal benefits is not the main priority. In other words, social marketing focuses is not only satisfy the needs and demands of society people through the process of exchange and bargain; but it has a higher purpose and target and it is Influencing actions and behavior of individuals in society. Over the past 20 years, many blood transfusion organizations have used marketing strategies for design and develop from blood donor's management programs. Although social marketing like commercial marketing will follow a logical process of planning that associated with research of consumer-centered, analysis, market categories, set goals and identify strategies and tactics based on voluntary exchange of costs and benefits for two or more parties. This new marketing compared to commercial marketing due to behavioral changes of unavoidable has complex from aspect of economic, social and political resulting from its limited resources. Additionally, the ultimate goal of marketing business is achieving the goals of shareholders while the primary concern of social marketers is wants of population to improve the quality life of its citizens. In this regard, blood donor's management in providing resources of volunteer donor blood safe and adequate is important (Mahmoudi, 2011).

2. Problem Statement & Theoretical Framework

Continuous improvement processes based on the principles of total quality management that including customer orientation, quality orientation and affairs implementation as shape of team is always from interest principle of dynamic and successful organizations (Mirsepasi, 2002). In the meantime to obtain feedback of logical and scientific from the needs and expectations of customers control not only can be used as a means to monitor and control in organizations but in a more comprehensive look can be one of the main prerequisites for institutional planning process (Asefzadeh, 1999).

Therefore, a continuous awareness from the ultimate satisfaction of each customer or intermediary in continuous improvements promotes of providing and securing blood products is very important. It is obvious that planning and operating organization without the knowledge of their customers' expectations were unable to accountability to the changing and growing needs of its customers and eventually will stagnate and break (Hersey, 2000).

It must be said that essential to a democratic society is to accountable clear and appropriate of organizations for the people. Every administrative organization formed to respond to a range of social needs and during its life is continuous so long to respond to the social needs of its period and whenever social conditions change its nature, they eliminate or structure may be modified adapted to new social conditions. The other side of it can be concluded from client satisfaction is consider as a criterion to determine the effectiveness and efficiency of the organization (Taleghani, 2011).

Therefore, having sufficient information from blood sampling environment, how to communicate with blood donors, how give informing about donate condition and viral infectious diseases transmitted through blood and have helped to attract continuous and increasing the number of donors and eventually lead to a safe and adequate blood supply to the core mission of the organization.

The Guilan province is located in the North West of Iran that has a population of over 2.4 million and always associated with blood diseases such as thalassemia and favism and hemophilia has long been facing during recent years, open-heart surgery - cancer - road accidents as well as the need for blood and blood products has greatly increased. Due to the population growth in the Guilan province so that elderly population is more and individuals 16-60 years old can only donate blood and pregnant women - breast and also some diseases removed from this population. Organizations to provide adequate and safe blood for the needy have always been faced with the challenge. Considering that the end customer of this organization are need for blood and blood products, initial suppliers (blood donors) should always be ongoing and healthy available in the organization in order to not face the problem of necessary and sufficient blood supply (Attar,2005). Therefore, according to content expressed is the following main question of research:

What effective factors on willingness of blood donors to donate blood again in Rasht city?

Research on blood donation behaviour to date has tended to take one of three directions. One aspect of donor behaviour that has been investigated is the use of motivational incentives, such as monetary inducements, to encourage donation (Holdershaw, Gendall & Wright, 2003). In a survey done by Roshanfekr and Amenien (2012) found that social marketing with modeling of commercial marketing tools try to advertise and marketing products and ideas and values of effective in people's health. Voluntary blood donation is a valuable product of promotional and marketing. In this way, rather than giving mere information and dry directions to all the people trying to by studying the behavior and attitudes of different groups of people in connection with the lack of voluntary blood donation must be set a program because by using appropriate method to change attitudes induce value in the name of voluntary blood donation in treasures of the audience values. In other words, by identify behavioral and normative beliefs and the perceived and influencing of these beliefs on the willingness to voluntary blood donation can provide possible strategies for attracting more people to a voluntary donation. Goal in this type of marketing is not only a process of exchange and trade but it is the intent and purpose of higher that influence on actions and behavior of individuals in society and this behavior change provides supply of blood and blood products healthy for patients or those in need a variety of blood products. In this regard, factors such as level of education, gender, positive beliefs toward blood donation play a greater role in the willingness to donate blood voluntarily and regularly. It also seems that active and effective communication with donors and having trained personnel and appropriate equipment and adequate space is important in attracting donors. Thus, according to the study conducted, variables, model of this research are presented as follows:

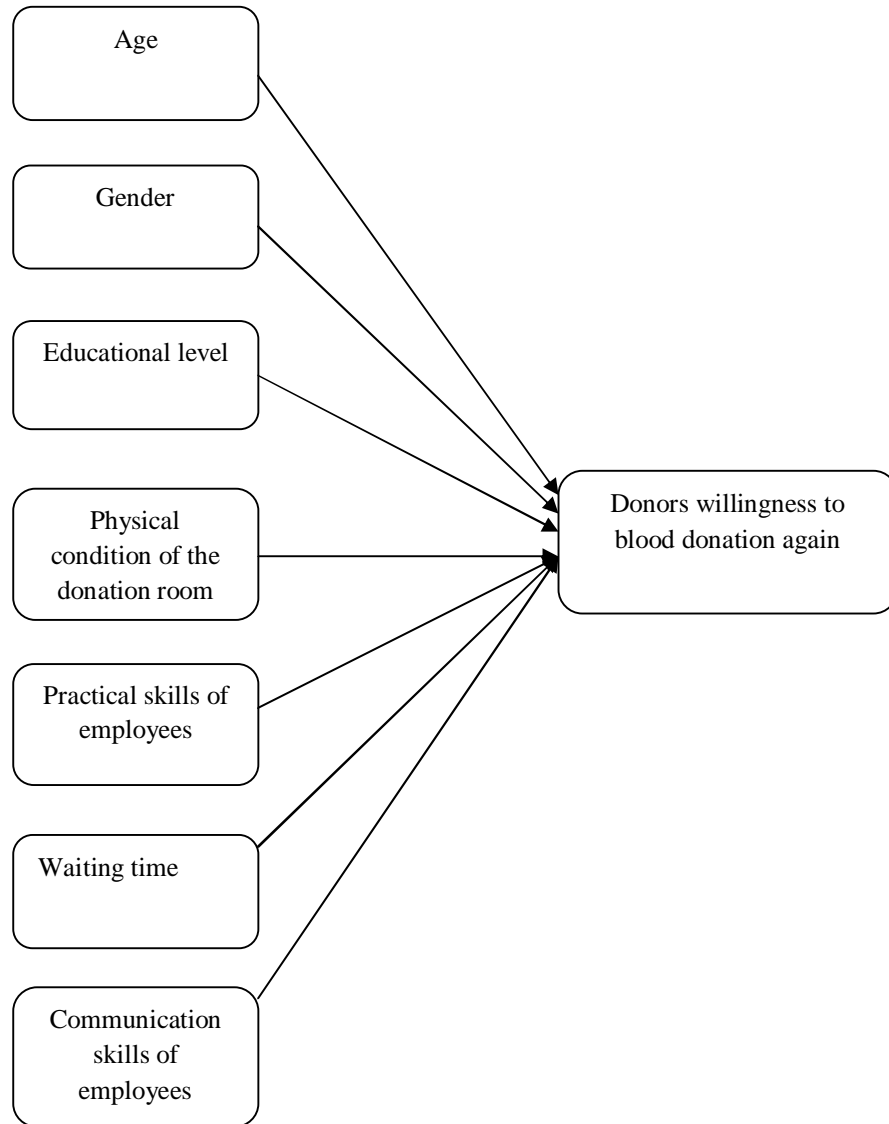


Figure 1) conceptual model of research (Roshanfekar, Amenien, 2012)

3. Research Hypotheses

- 1 – Age of blood donors has an impact on their willingness to donate blood again.
- 2- Gender of blood donors has an impact on their willingness to donate blood again.
- 3- Educational level of blood donors has an impact on their willingness to donate blood again.
- 4- Physical condition of the donation room in terms of (light - space - music) has an impact on blood donors willingness to donate blood again.
- 5- Practical skills of employees have an impact on blood donors willingness to donate blood again.
- 6- Communication skills of employees have an impact on blood donors willingness to donate blood again.

7- Shortening waiting time blood donation has an impact on blood donors willingness to donate blood again.

3. Research Methodology

Research method in term of purpose is applied and in term of implementation is descriptive-analytical. Research nature is causal. Method of data collection is field. The society population is blood donors of Blood Transfusion Center in Guilan (Rasht). Total of statistical population is obtained 420 blood donors and 395 questionnaires is analyzed. Sample method is judgment sampling. Based on judgment sampling, statistical sample is equal to statistical population. Considering that the population size is limited timeframe so all of population is considered as statistical sample that 395 questionnaires were correct and were analysed. Also research tool is questionnaire. Validity of questionnaire is confirmed by advisors and supervisors. To determine the reliability of questionnaire was used Cronbach's alpha method. Considering that, all alpha coefficients obtained are more than 70 percent; therefore, questionnaire has the necessary reliability. Research hypotheses were tested through Regression test and Chi-square.

4. Data Analysis

Table 1) Regression test result of first hypothesis

Hypotheses	R	Beta	Sig	Result
H1 – Age of blood donors has an impact on their willingness to donate blood again.	0/080	-0.59	0.112	Rejected

1. In the first hypothesis test according to $R = 0/080$ observed that there is relationship between age of blood donors and donor's willingness to donate blood again and according to $\text{sig} = 0.112$ that is greater 0.05, this effect is not significant. Research hypotheses based on individuals age affects their willingness to donate again is rejected. Also, in order to determine this effect, according to coefficient B is negative, that its value is -0.59. It can be concluded that this effect is indirect. On the other hand $R^2 = 0.006$, it means that depend variable could predict approximately 1% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for age (independent variable) as X_1 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 3.329 - .059 X_1$$

Table 2) Chi-Square test of second hypothesis

		Gender	t
2- Gender of blood donors has an impact on their willingness to donate blood again.	Chi-Square	2.841E2 ^a	2.701E2 ^b
	df	1	8
	Asymp. Sig.	.000	.000

2. According to in second hypothesis test $\text{sig} = 0.000$ obtained less than 0.05, so can be said with 95% confidence that hypothesis is confirmed and gender of blood donors has an impact on donor willingness to donate blood again.

Table1) summary of Regression test

Hypotheses	R	Beta	Sig	Result
H3- Educational level of blood donors has an impact on their willingness to donate blood again.	0/714	0/463	0/000	Confirmed
H4- Physical condition of the donation room in terms of (light - space - music) has an impact on blood donors willingness to donate blood again.	0/639	0/455	0/000	Confirmed
H5- Practical skills of employees have an impact on blood donors willingness to donate blood again.	0/308	0/260	0/000	Confirmed
H6- Communication skills of employees have an impact on blood donors willingness to donate blood again.	0/379	0/303	0/000	Confirmed
H7- Shortening waiting time blood donation has an impact on blood donors willingness to donate blood again.	0/227	0/162	0/000	Confirmed

3. In the third hypothesis test according to $R = 0/714$ observed that educational level has an impact on their willingness to donate blood and according to $\text{sig} = 0.000$ that is less than 0.05, this effect is significant and research hypotheses based on educational level of people affects donor's willingness to donate blood again is accepted. Also, in order to determine this effect, according to coefficient B is positive, that its value is 0.463. It can be concluded that this effect is direct. On the other hand $R^2 = 0.510$, it means that depend variable could predict approximately 51% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for educational level (independent variable) as X_3 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 2.041 + .463 X_3$$

4. In the fourth hypothesis test according to $R = 0/639$ observed that physical condition of the donation room in terms of (light - space - music) has an impact on blood donors willingness to donate blood again and according to $\text{sig} = 0.000$ that is less than 0.05, this effect is significant and research hypotheses based on Physical condition of the donation room in terms of (light - space - music) has an impact on blood donors willingness to donate blood again is accepted. Also, in order to determine this effect, according to coefficient B is positive, that its value is 0.455. It can be concluded that this effect is direct. On the other hand $R^2 = 0.408$, it means that depend variable could predict approximately 41% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for physical condition of the donation room (independent variable) as X_4 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 1.404 + .455 X_4$$

5. In the fifth hypothesis test according to $R = 0/308$ observed that practical skills of employees has an impact on their willingness to donate blood again and according to $\text{sig} = 0.000$ that is less than 0.05, this effect is significant and research hypotheses based on practical skills of employees has impact on donor's willingness to donate blood again is accepted. Also, in order to determine this effect, according to coefficient B is positive; that its value is 0.260 It can be concluded that this effect is direct. On the other hand $R^2 = 0.095$, it means that depend variable could predict approximately 10% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for practical skills of employees (independent variable) as X_5 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 2.069 + .260 X_5$$

6. In the sixth hypothesis test according to $R = 0/379$ observed that communication skills of employees has an impact on their willingness to donate blood and according to $\text{sig} = 0.000$ that is less than 0.05, this effect is significant and research hypotheses based on communication skills of employees has an impact on donor's willingness to donate blood again is accepted. Also, in order to determine this effect, according to coefficient B is positive, that its value is 0.303 It can be concluded that this effect is direct. On the other hand $R^2 = 0.144$, it means that depend variable could predict approximately 14% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for communication skills of employees (independent variable) as X_6 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 1.914 + .303 X_6$$

7. In the seventh hypothesis test according to $R = 0/227$ observed that shortening waiting time has an impact on their willingness to donate blood and according to $\text{sig} = 0.000$ that is less than 0.05, this effect is significant and research hypotheses based on shortening waiting time has impact on donor's willingness to donate blood again is accepted. Also, in order to determine this effect, according to coefficient B is positive, that its value is 0.162 It can be concluded that this effect is direct. On the other hand $R^2 = 0.052$, it means that depend variable could predict approximately 5% of the independent variables. Then regression model can be written as follows in the form of a 95% significance level. In the regression equation for shortening waiting time (independent variable) as X_6 and willingness to donate blood (the dependent variable) as Y is considered.

$$Y = 1.914 + .303 X_7$$

5. Conclusions and Recommendations

The results of testing hypotheses show that effective factors on willingness of blood donors to donate blood again include gender, educational level, physical condition of the donation room, practical skills of employees, waiting time and communication skills of employees. Thus result and recommendations of research is expressed as following:

The results of the second hypothesis showed that age of blood donors has an impact on their willingness to donate blood again, so given that most of the donors were male; it is recommended that with training classes, as well as advertising and support, women may be more motivated to donate blood. They also blood donation turn to charitable work in their minds to increase their motivation to further reference.

The results of the third hypothesis showed that educational level of blood donors has an impact on their willingness to donate blood again. Considering that most donors were less than bachelor, can be said reasons such as unavailability of centers and long waiting times were reasons for less referral of educated people, therefore, it is recommended that mobile centers be established and also reduce the waiting time for blood sample and increase blood samples hours can increase referred of educated people and the busy.

The results of the fourth hypothesis showed that a good Physical condition of the donation room in terms of (light - space - music) has an impact on blood donor's willingness to donate blood again. Therefore, it is recommended that be provided blood donation clean environment and required facilities for donors so that donors do not feel uncomfortable and encourages them to further reference.

The results of the fifth hypothesis showed that Practical skills of employees have an impact on blood donor's willingness to donate blood again. Therefore, it is recommended that is trained to personal to learn the necessary skills and provide the necessary services to blood donors and increase service quality.

The results of the sixth hypothesis showed that communication skills of employees have an impact on blood donor's willingness to donate blood again. Therefore, it is recommended that employees know their customers and must be treated well and must inspire to their target audience that blood donation is human action and good.

The results of the seventh hypothesis showed that shortening waiting time blood donation has an impact on blood donor's willingness to donate blood again. Therefore, it is recommended that so set up mobile teams and increasing blood donate hours for people who do not have time will help in return of blood donors.

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