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EVALUATION OF LEADERSHIP STYLES, POWER USAGE AND HEALTH WORKER PERFORMANCE

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ABSTRACT

Purpose: The aim of this study was to determine relationships between relation-task oriented leadership, change oriented leadership styles, power usage of these kind of leaders and their effects on worker performance.

Material and Method: This study was designed as descriptive and cross-sectional. Six private hospitals classified as A group by the Ministry of Health and operating in the province of Istanbul were selected by the stratified random sampling method. 122 health workers who were working in managerial positions at that time were included in the study. Three different questionnaire were used for data collection. Data was collected between 17.02.2014 and 10.04.2014. Leadership style scale is a 22-item scale taking place in Özşahin, Zehir and Acars' work called "Linking Leadership Style to Firm Performance: The Mediating Effect of The Learning Orientation" and received from Yukls' work called "An Evaluative Essay on Current Conceptions of Effective Leadership". The performance scale is the scale which was developed by Fuentes, Saez Montes (2004) and Rahman, Bullock (2004); adapted to Turkish by Göktaş (2004); used by Şehitler and Zehir (2010) and includes 6 questions. Power usage scale was taken from Bolelis' (2012) study and consists of 33 question. All analyses were conducted by SPSS 13.0.

Findings: It was found that power usage of change oriented leader leads to improved performance.

Conclusion: The strongest factor on the efficiency of the organizations is workers. So, leadership is the most crucial in the management of these human behaviors in order to produce services and goods. Besides the need of visionary and constantly evolving leaders and how they affect the worker performance have become some of the most important points that need to be questioned. It was determined that the change oriented leaders affect the worker performance more than relation and task oriented.

Introduction

Leadership is an important issue that has been discussed for centuries and still, there is not any common idea on leadership concept. Researchers have been trying to find answers to these questions: "What does leadership mean? Why is leadership important? and What makes leadership important?" There are so many studies about leadership, the sources of leadership, the power that leaders use, leadership styles etc. available in literature (Bakan and Büyükbeşe, 2010; Soylu et al. 2007; Alkın and Ünsar, 2007; İbicioğlu et al. 2009). Leadership can play a vital role in success or failure of an organization. The effectiveness and productiveness of organizations depends mostly on human factor. Therefore, motivating workers and inducing them to the organizational goals are very important. Effective leaders can motivate workers and enhance their performance (Kocolowski, 2010). In addition to motivating workers, leaders can improve the organizational climate and increase productivity in the workplace (Mills, 2005). They use different kind and level of powers to lead people in organizations. According to their leadership styles, they prefer different sources of power. It sometimes depends on the workers profile. If most of the workers are X type people, then leaders should compel them to do their job well as McGregor concerns (McGregor, 1960). So, which kind and level of power affects worker performance positively? This question should be answered to enhance the productivity of workers.

In this regard, it is necessary to clarify leadership approaches.

Trait Theory: This theory is accepted as the first theory that tries to explain leadership concept. It suggest that leaders have certain qualities which make them leaders and these leaders have inherent traits. It is also known as "Great Man Theory". Advocates of this theory claim that leaders have certain characteristics such as; good looking, being decisive, persuasive and charismatic. There are many different skills which were described by researchers. However, the underlying causes of the inability to reach consensus about qualities of leaders are overlooking the followers and over-focus on the leader. Other reasons of not being able to explain the leadership process by trait theorists are that cause-effect relations and variable situations were ignored by researchers. As a result, researchers have focused on how leaders behave, not particularly on the characteristics of the leaders since the 1960s, so behavioral theory emerged.

Behavioral Theory: In the behavioral approach, researchers express the leadership concept as leaders' behaviors which provide the success imagined by followers. According to this approach, everyone can be a leader with right knowledge and it should be examined what leaders do to inspire their followers rather than their individual features.

Situational Theory: Those who study leadership are getting aware that there are more complicated factors about the source of leadership rather than a few features and behaviors of leaders. So the situational approach emerged with the idea that the behavioral approach would not always be enough. This approach seeks to define what leaders can do in both internally and externally changing situations. According to this approach, leadership behaviors can vary according to circumstances, audience, time, and individual characteristics of the leaders.

The situational approach is one of the most contemporary approaches about leadership phenomenon. When somebody thinks about todays' changing environment, it will not be wrong to say situational leaders can be more successful than others. Those who have change oriented leadership styles can adapt different situations and force his/her workers as well.

Leadership: Leadership is an issue that has been discussed for a long time but there is not any consensus on a specific definition yet (Şişman, 2014**).** As far as Koçel (2010) concerned, leadership can be defined as the process of one's influence and guidance activities of followers to perform a specific or group goal under certain conditions. As it can be understood in this definition, Koçel claims that leadership is a process of influence. Some

researchers mention leadership as an art of motivation. Some leadership definitions are as follows:

- Leadership is an activity that creating changes, giving directions and taking actions (Baltaş, 2013).
- Leadership is to bring together a group of people in order to fulfill the specific objectives (Eren, 2008).
- Leadership is a process of social influence (Kotter, 2015)

There are more and more definitions about leadership and the number of these definitions will increase as leadership studies continue. Like in the definitions, there are so many leadership styles as well. In this study relationships between 3 different leadership styles, power usage of these leaders and health workers performance were examined.

Task-Oriented Leadership

Task-Oriented Leadership expresses the level to which a leader describes the roles of their followers, concentrates on objective achievement, and establishes well-defined patterns of communication (Bass, 1990).

Relationship-Oriented Leadership

Relationship-Oriented Leadership expresses the degree to which a leader shows concern and respect for their followers, looks out for their welfare, and expresses appreciation and support (Bass, 1990).

Change-Oriented Leadership

Change oriented leadership includes individualized consideration, intellectual stimulation, idealized influence (charisma), and inspirational motivation (Yukl, 1999).

Power of the Leaders:

There are five kinds of power described in the literature (Koçel, 2010). These are coercive, legitimate, reward, referent and expert type of powers. Coercive power is mainly based on fear. This type of power includes punishments such as dismissing from job, deduction of rank etc. (Serinkan, 2008). Legitimate power is related to having a position in an organization and followers accept legal power of the leader. If leader reward his/her followers then he/she can use it as a power tool. It can be considered as an opposite of punishment, and it includes awards like providing wage increase. There is no need a formal organizational structure, the award can be praise as well. Referent power stems from being trustworthy and respected. It is related to the personality of the leader. Expertise power is based on knowledge and experience. If subordinates perceive leaders as well informed and experienced then followers will be willing to do whatever leaders say (Bakan and Büyükkbeşe, 2010).

Performance: Performance has entered the literature in recent years, but it has a wide range of usage. Besides, various indicators are used to measure performance as well. In general, performance can be defined as completing tasks efficiently (Başat, 2014).

Sharing the leadership will be imperative not an option in the future. Top managers are no longer sole decision makers. The most important role of leaders will be creation of internal interaction networks that would affect the foundations of the organizations. Sharing the leadership as a management model will be increasingly inevitable. Because nobody will be able to the one having all the critical skills that will be needed in the future. (Barutçugil, 2014).

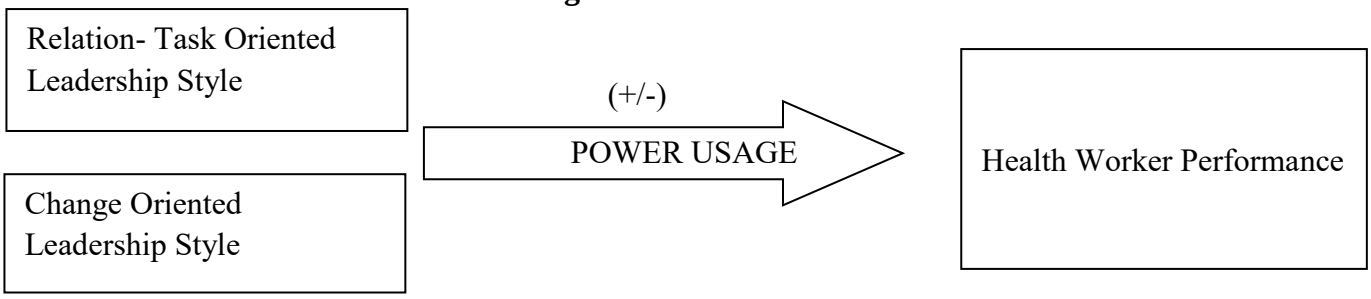
Material and Method: This study was designed as descriptive and cross-sectional. Six private hospitals classified as A group by the Ministry of Health and operating in the province of Istanbul were selected by the stratified random sampling method. Those who accepted to participate in the study were included and those who reject to participate in the study were excluded. After giving face to face information, questionnaires were distributed to health staff. Questionnaires were collected in a box to make participants sure about protection their private information. Totally 122 health workers who were working in managerial positions at that time were included in the study. Three different questionnaire were used for data collection. Data was collected between 17.02.2014 and 10.04.2014. Leadership style scale is a 22-item scale taking place in

Özşahin, Zehir and Acars' work called "Linking Leadership Style to Firm Performance: The Mediating Effect of The Learning Orientation" and received from Yukls' work called "An Evaluative Essay on Current Conceptions of Effective Leadership". The performance scale is the scale which was developed by Fuentes, Saez Montes (2004) and Rahman, Bullock (2004); adapted to Turkish by Göktaş (2004); used by Şehitler and Zehir (2010) and includes 6 questions. Power usage scale was taken from Bolelis' (2012) study and consists of 33 question. All analyses were conducted by SPSS 13.0.

Each questionnaire is forced type of Likert scale that consist of 6 options to choose. All analyses were done by SPSS 13.0 Software program.

Research model is shown on the table below. As it can be seen on the model, this study aims to determine the relationship between leadership styles and health worker performance according to power usage.

Figure 1. Research Model



Research Results:

Table 1. Demographical characteristics of the study participants

	Categories	F	%
Gender	**Male**	**53**	**43,4**
	Female	**69**	**56,6**
Age	**18-30**	**43**	**35,2**
	31-45	**74**	**60,7**
	45+	**5**	**4,1**
Managerial Position	**Junior**	**42**	**34,4**
	Mid-level	**72**	**59**
	Top executive	**8**	**6,6**
Managerial Time (year)	**0-2**	**25**	**20,5**
	3-6	**59**	**48,4**
	7-10	**23**	**18,9**
	11+	**15**	**12,3**
TOTAL		**122**	**100**

As shown on the table, 56.6% of those surveyed was women while 43,4% was men, 60.7% was 31-45, 35,2% was 18-30, 4,1% was 45+ years of age, 59% of them were middle managers and 48.4% 's range of managerial time is 3-6 years.

Table 2. Performance, change-oriented leadership, relationship- task oriented leadership and power usage averages.

	Performance	Change Oriented Leadership	Relation- task Oriented Leadership	Power Usage
Mean	4,1844	4,9481	5,1078	4,1928
Median	4,1667	5,1111	5,2308	4,1400
Std. deviation	1,07540	,81577	,85221	,70493
Minimum	1,33	2,00	1,00	2,00
Maximum	6,00	6,00	6,00	5,88

It was found that performance mean was 4,18±(1,07), change oriented leadership mean was 4,94±(0,81), relation- task oriented leadership mean was 5,10±(0,85) and power usage mean was 4,19±(0,70) of the study participants.

Table 3. Relationship of performance, leadership style and power usage

		CHANGE ORIENTED LEADER	RELATIONSHIP-TASK ORIENTED LEADER	POWER USAGE	PERFORMANCE
CHANGE ORIENTED LEADER	R	1	,837(**)	,577(**)	,450(**)
	P	.	,000	,000	,000
	N	122	122	122	122
RELATIONSHIP-TASK ORIENTED LEADER	R		1	,428(**)	,344(**)
	P		.	,000	,000
	N		122	122	122
POWER USAGE	R			1	,313(**)
	P			.	,000
	N			122	122
PERFORMANCE	R				1
	P				.
	N				122

Kolmogorov-Smirnov Test was used to determine distribution of variables. Accordingly, it was found that distribution of leadership variable, power usage variable and performance variable is normal (p= 0.073, 0.200, 0.059). Therefore, Pearson Correlation Analyze were performed. and it was found that there are moderate and positive correlation between change oriented leadership level and both power usage and performance (r= 0,45; p<0,05). And there are poor and positive correlation between relationship-task oriented leadership level and performance (r= 0,344; p<0,05).

Discussion and Conclusion: There are so many studies available in the literature related to how leaders can affect worker performance, which leadership style has most effect on worker performance, relationship between leadership style and productivity, the impact of leadership style on worker motivation, relationship between leadership types and organizational culture and etc.

In a study which was conducted in 2002, it was found that transformational leadership has a significant direct influence on frustration and optimism, with the negative influence of frustration having a stronger effect on performance than the positive influence of optimism. Frustration and optimism were found to have a direct influence on performance, and the emotions,

frustration and optimism, fully mediate the relationship between transformational leadership and performance. Additionally, the effect of transformational leadership style on performance is significant, but indirect (McColl-Kennedy and Anderson, 2002). In another study which was conducted to determine the relationship between leadership styles and organizational perception of teachers, there is a positive relationship between leadership style and performance but it is not a direct relationship (Korkmaz, 2005). However, in another study whose sample consisted of hotel managers, researchers tried to determine the relationship between leadership styles and business performance. It was examined the relationship of task and relationship oriented leadership styles with business performance. According to the study, there is not any statistically significant relationship between leadership styles and performance (Akbaba and Erenler, 2008). In a respectively new study, moderately significant relationship was found between leadership types and occupational performance (Akman et al. 2015). Koçak and Özüdoğru (2012), in their study which was conducted in hospitals, determined that the leadership qualities of the managers influence the motivation and performance of the employees. As the leadership qualities of managers increase, the motivation of employees increases and there is positive and strong relationship between leadership and worker performance (Koçak and Özüdoğru, 2012).

The impact of leadership style on group performance is one of the main topic that attracts attention of researchers (Özdevecioğlu and Kanıgür, 2009). However, the discrepancies among the results of the studies that performed at different time with different groups are available as well. Therefore, the ideal leadership style in every situation could not be determined exactly. (Özdevecioğlu and Kanıgür, 2009). Contingency approach which is relatively new approach clarifies this issue: There is no single best leadership style; the effectiveness of the leader varies according to the circumstances (Özdevecioğlu and Kanıgür, 2009). For example, Iqbal, Anwar and Haider (2015) have concluded that effect of leadership styles on worker performance varies according to period. If the time is restricted, then autocratic leadership is most effective on workers performance while participative leadership is effective in long term. A study has concluded that the transformational leadership style has most positive effect on worker performance whereas laissez-faire leadership style shows negative relationship with employee performance outcomes in terms of effectiveness, and employee satisfaction (Asrar-ul-Haq and Kuchinke, 2016). Khuong and Hoang (2015) in their study have revealed that relationship oriented leadership style, charismatic leadership style and ethic-based contingent reward leadership style have a positive effect on employee motivation. The success of leadership styles differs from one sector to another, from public to private, in different time frames and from universe of a study to another. In some circumstances task oriented leader may be the effective one on the performance, while in the other circumstances is relationship-oriented leader. However, there is a clear evidence about using power. Change oriented leaders have to use power more than other leaders because of the resistance to changes.

Because of accelerated communication and globalization, businesses should adapt their production processes according to changing environment. Workers should develop their skills according to needs of businesses. Besides, competition is getting harder day by day. Therefore, leaders should follow various developments in the market and they have to motivate their workers to adapt these kind of developments. However, every process of changing cause resistance caused by shareholders. Therefore, leaders have to use power to surpass the resistance to changes. The power apparently will be higher when the manager has change-oriented leadership skills.

According to this study conducted among health sector managers, health workers works more effectively when their managers have change-oriented leadership skills. As a conclusion, this study can help decision-makers in health sector to decide

characteristics that are required for an individual who will run in managerial positions.

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EVALUATION OF THE HEALTHCARE TRANSFORMATION PROGRAMME IN TURKEY AS A STRATEGY FOR BETTER HEALTH

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ABSTRACT

In November 2002 elections, when Justice and Development Party (AKP) came into power as a single party government, after several coalition governments in the country, it was the beginning of a new term for Turkey. In 2002, health indicators of Turkey was far behind of the OECD countries, patient satisfaction was 39.5%, often news about holding patients hostage by hospital administrations because of unpaid healthcare service bills was taking place on the media. Thus, there were several problems in terms of accessibility and efficiency of health services in Turkey (TURSTAT, 2003; OECD, 2003; WHO, 2012). Under this circumstance, AKP declared its agenda and urgent action plan for healthcare in 2002, and the reform programme in 2003, naming Healthcare Transformation Programme (HTP). And the programme has been implementing by the Ministry of Health since 2003. The programme aims revolutionary changes in Turkish healthcare system and most of these changes have been successfully implemented.

In this study, it is aimed to evaluate the HTP regarding components of the programme based on the reports of Turkish Ministry of Health and international institutions, mainly OECD. Firstly, objectives of the HTP will be explained with the comparison of healthcare system before 2003 and today, and then selected health indicators of the country in 2003 and 2013 will be handled for assessing the success of the programme.

1. WHAT WAS THE AIM OF THE HTP AND WHAT IS THE SITUATION NOW?

based on the World Health Organisation's mission of *"health for all in 20th century"* (MoH, 2003, p.24, 26). Key principles of the HTP were designated as sustainability, continious quality improvement, participation, reconcilement, volunteerism, division of power, decentralisation, and competition in service (MoH, 2003). The HTP is formed with 8 main components which clearly explain the objectives of the programme in detail. Hence, the first part of the evaluation will be based on these eight components.

1.1. The Ministry of Health as the Planner and Controller

Before 2003, healthcare services were multi-headed, fragmented, and lacking of integration in Turkey. Hence, inefficiency was a big problem caused by the vertical organisation of Turkish Ministry of Health (MoH, 2003; OECD, 2008; World Bank, 2003). There were different healthcare institutions which were working with separate bodies (purchasers). Therefore, redesign and decentralisation of all institutions of the Ministry was aimed and the mission of the Ministry was designated as planner and controller of health services at the beginning of the programme (MoH, 2003).

In 2005, all public healthcare providers, except for university hospitals, gathered under the umbrella of the Ministry in order to have a harmonised provision system (MoH, 2011). Nowadays, there are three different healthcare providers in the country, which are

Objectives of the programme were defined as "*to organise, provide financing, and deliver the health services in an effective, productive, and equal way*",

ministry hospitals, university hospitals, and private institutions. This component was stated as the one that "the slowest" progress have been made in a stakeholder analysis by Akinci, Mollahaliloglu, Gursoz, and Ogucu (2012) especially because of the delay in the legislations about Public Administration Main Law and Public Personnel Reform Law. Public Personnel Reform law is still yet to be established. However, all changes in the organisation of the Ministry can be stated as appropriate steps towards New Public Management Approach, increasing efficiency and competition (Lamba, Altan, Aktel, & Kerman, 2014).

1.2. General Health Insurance: Gathering Everybody under a Single Umbrella

In 2002, there were three different insurance schemes in addition to Green Card scheme for low income people, which were gathered under one body which is named Social Security Institution in 2006 (MoH, 2009). Thus, a single purchaser system was built in Turkey. Previous fragmented structure was causing several problems, including applying different prices for the same services. In 2007 with Health Burden Law, a change in payment system and a standard payment system for all type of healthcare providers (ministry, university, and private) based on ICD 10 coding system was established. With this law, Diagnosis-related Groups were

defined, and an integrated e-billing system called MEDULA was created (MoH, 2009). All public and also private providers that are in contract with the security institution are required to use this system.

Currently, there is a single compulsory national health insurance system in Turkey as well as supplementary private insurance schemes. Public health insurance coverage was 64% in 2002 and this figure increased to 98.5 % in 2013 (WHO, 2012; OECD, 2005 and 2015). As a result, accessibility of healthcare services improved dramatically in the country in ten years (Chakraborty, 2009; OECD, 2014).

1.3. Widespread, Easily Accessible, and Friendly Health Service System

This component was explained with three headings, which are strengthened primary care, effective referral chain, and health enterprises having financial and administrative autonomy (MoH, 2003).

Prior to the programme, primary care service in Turkey was lack of a well-designed and performance-based system (World Bank, 2003, WHO, 2012). Family medicine implementation was stated as an important part of a strong primary care at the beginning of the programme and establishment of a more effective system in Turkey was planned (MoH, 2003). Currently, all citizens are registered with a family physician who works for the public sector (MoH, 2011). Improvement in primary care and accessibility of primary health services concluded with high level patient satisfaction according to approximately 80% of family physicians (MoH, 2010). In 2008, number of patients for each general practitioner was 3.400, and in 2013 this figure was 3.621 (OECD, 2008; MoH, 2013). Therefore, in spite of significant improvements in primary care, the ratio of family doctors is still low in Turkey due to the shortage in number of physicians.

As well as having a strong primary care, effective referral chain is showed as a requirement for efficiency by allowing people to jump the first step with a small amount of contribution fee (MoH, 2003). Currently, there is no compulsory referral chain in the country. This was criticised because of causing inefficiency (Yildirim, 2013) and having a weak gatekeeping system (OECD, 2014). And as the contribution fee is small, it questionable as to whether this disincentive prevents people who can be treated at the first step from going to the second or third step. On the other hand, compulsory referral change was not stated as an aim of the programme. Thus, the aim of improved primary care have been achieved, especially services for maternal and child care.

As there is one unified social security institution at present, patients have the right to choose the public hospital where they want to be treated. Additionally, patients are able to go to private hospitals that the security institution has a contract with; and several proportions of the expenses, depending on the terms of the contract, are paid by the institution as well as some services that all expenses are paid by the institution like cancer treatment (Adaptation of Social Security and Universal Health Insurance Law, 2006). Hence, patient satisfaction with healthcare system increased to 71.2% in 2014 from 39.5% in 2002 (TURKSTAT, 2014).

Decentralised public hospitals with financial and administrative autonomy were another aim of the programme. Union of Public Hospitals was established firstly in 2011 to be piloted with a new structure towards encouraging performance management (Official Gazette of Turkey, 2011). Currently, every city has at least one union, being more than one for big cities like Istanbul, and all ministry hospitals are formed to provide service under this union. Each union has one council and a president to organise these establishments, and these unions are under Institution of Public Hospitals of Turkey which is subject to Ministry of Health. Additionally, state hospitals (or integrated health campuses) are to be built under the programme with public-private partnership, and the process is continuing (MoH, 2009). Private sector also developed rapidly in ten years, representing 36% of hospitals and 18% of hospital beds. Thus, important investments have been made in terms of hospital capacity in the country.

1.4. Health Manpower Equipped with Knowledge and Competence and Working with High Motivation

Number of physicians for per 1000 population was 1.4 and for nurses the figure was 1.7 in 2003. These numbers has changed to 1.8 for both in 2013 (OECD, 2005 and 2015). While assessing this, change in Turkish population should be considered and number of people who live in Turkey increased approximately 6 million in 10 years, increasing to around 76 million from 70 million (TURKSTAT, 2013). Therefore, there is a relatively good progress in terms of health manpower in the country despite still staying behind of the OECD countries.

In terms of motivation of the personnel and increasing productivity, in 2004, performance based supplementary payment system was established for ministry hospitals and piloted firstly in 10 hospitals, before extending to all ministry hospitals (MoH, 2011). This was criticised by some authors because of giving more attention on quantitative indicators of the performance (Yildirim, 2013). However, there are some studies show that with the implementation of pay for performance system productivity of public hospitals enhanced (Sahin, Ozcan, & Ozgen, 2009; Sulku, 2011).

1.5. Education and Science Institutions Supporting the System

Need for a national public health institution which would supply necessary education to healthcare professionals, in terms of healthcare management and healthcare economics and planning, during the implementation of the HTP was defined as another component of the programme (MoH, 2003). In this context, Public Health Institution of Turkey, and Council of Health Occupations established in 2011 (Official Gazette, 2011).

Cooperation with universities was also aimed at the beginning of the programme. In 2002 registered student number in faculties of medicine was 31.719 and this figure went up to 55.879 in 2015 as a result of increasing number of universities in the country (Council of Higher Education, 2015). Therefore, it is clear that in terms of education and science institutions there is a good progress.

1.6. Quality and Accreditation for Qualified and Effective Health Services

Prior to the HTP, quality of care was varying across insurance scheme and healthcare provider and this was one of the biggest motivators for the programme (MoH, 2003; WHO, 2012). Establishment of National Health Quality and Accreditation Institution was planned at the beginning of the programme (MoH, 2003). According to Ministry of Health (2009), implementation of supplementary payment for performance improved efficiency in health institutions. In addition, technical quality, patient centeredness, and working conditions improved in the country (WHO, 2012). Since 2010 physicians are required to work just for public or just for private institutions with full-time legislation (Offical Gazette, 2010) in order to enhance quality of service delivery in public hospitals. In 2007 National Health Quality and Accreditation Institution was founded (MoH, 2009). And Service Quality Standards which are applied to all public hospitals were announced by Ministry of Health. Therefore, considerable steps are taken in terms of quality an accreditation.

1.7. Institutional Structure in the Management of Rational Medicine and Equipment

As expenses for medicine was one of the most important proportion of healthcare spending, a national body was needed for standardisation (MoH, 2003). National Institution of Medicine and Medical Devices were established in 2011 with a special budget.

Before the HTP, there were several important problems in access to medicine in the country (WHO, 2012). There is a remarkable reduction in drug prices, more than 200 times, in Turkey due to reference payment system since 2004; and VAT rate also decreased to 8% from 18% for drugs (MoH, 2011). With the Decree on Pricing of Medicinal Products for Human Use (Official Gazette, 2009), another important decision was made: “When a generic of an original product has been marketed, the price of the product may not exceed 66% of the current market price (both for the original and the generic product)” (MoH, 2011, p. 97). Although accessibility and efficiency enhanced, still there is a need for putting more effort on rational medicine use.

1.8. Access to Effective Information at Decision Making Process: Health Information System

This component was explained mainly with the aim of building a national health information system and a national social security information system in order to provide necessary data for planning and provision of healthcare services (MoH, 2003). Currently, National Health Data Information System has been using by all citizens to see their own health records which are retrieved from all health institutions. A national social security information system (MEDULA) has been using by the Social Security Institution and healthcare providers. Additionally, an online portal (HEALTH-NET) which is for communication with health professionals and also citizens is another important step of this programme.

Increased use of health technology tools at every stage of healthcare services was aimed with the HTP (MoH, 2003),

currently an online appointment system is in use for ministry hospitals, e-prescribing, clinic decision support systems are used by physicians, and other e-health applications are in service. So that, with the implementation of the HTP, Turkey made a significant progress regarding health information systems and technologies despite of some technical problems and concerns about sustainability of these expensive services (Akinci et al., 2011).

2. COMPARISON OF TURKISH POPULATION'S HEALTH STATUS IN 2003 AND 2013

Looking at selected heath indicators that are presented in OECD Health at a Glance Reports (2005 and 2015) is chosen as a reliable way in order to understand the impact of the programme on Turkish people's health.

Life expectancy at birth was 68.7 in 2003 and increased to 76.6 in 2013 (OECD, 2005 & 2015). Though this figure is still behind of the OECD average (80.5), in one decade longevity went up approximately 8 years among Turkish people (OECD, 2015). In terms of infant mortality, the figure was 29 per 1000 birth in 2003 and ten years later declined dramatically to approximately 10 (OECD, 2005 & 2015). As the average is 3.8, the number is comparatively higher. Nevertheless, 19 year reduction is not a number that can be underestimated. Similarly, there is a good progress in childhood immunisation from 2003 to 2013, rising to 98% from 68% (OECD, 2005 & 2015). In 2013, Turkey was ahead of several OECD countries and the average, while it was far behind of all OECD countries in 2003 (OECD, 2005 & 2015). These figures can be explained with the great emphasis of the reform programme on strengthening primary care services and improving accessibility.

With regarding economic figures, health expenditure as a share of GDP was 7.4% in 2003 and decreased to 5.1% in 2013 (OECD, 2005 & 2015). This change can be explained with the high investments at the beginning of the programme and the effects of global economic conjuncture. Additionally, change in GDP of the country should be considered, increasing significantly from approximately 300 billion USD to 822 billion USD in ten years according to World Bank. Thus, the amount which was spent for healthcare services did not reduce and, indeed, increased. Despite the decline in the percentage of GDP which was spent on healthcare, public health expenditure per capita soared from 364 USD to 941 USD. However, this figure still far behind of the OECD average, which was 3.453 USD in 2013 (OECD, 2005 & 2015).

In spite of these encouraging numbers, obesity rate among Turkish people almost doubled from 12% in 2003 to 22% in 2013 (OECD, 2005 & 2015). Fight with obesity was one of the initiatives of the programme, and despite of all public campaigns and increased number of sport facilities all around the country, there is an increase in this determinant of health. Although alcohol consumption is far behind of OECD countries because of religious and cultural factors, this figure increased to about 1.8 litres in 2013 from 1.4 litres in 2003 (OECD, 2005 & 2015). Negative change in these two determinants is needed to be investigated further. Daily smoking, on the

other hand, declined considerably from 32% in 2003 to 24% in 2013 (OECD, 2005 & 2015). This change can be explained with increasing effort of the Ministry and the President Erdogan, who was the head of AKP until 2014, for fighting against smoking, and Tobacco Control Law established banning smoking in closed and open public places in 2008.

Though still there are considerable differences between rural and urban areas with respect to health status (Tatar et al., 2011), the comparison of Turkish people's health status in 2003 and 2013 shows that the programme has a remarkable affect on the country's health indicators.

3. CONCLUSION

As it can be seen, outcomes of the HTP are beyond being encouraging. Admittedly, most of these positive changes in health and healthcare can be attributes to the HTP. However, it is difficult to distinguish results of healthcare policies and other socioeconomic improvements in a country. There is a broad consensus among the citizens of the country and healthcare professionals about the positive impacts of the programme on health system and health status of the country (Akinci et al., 2012, Eracar, 2013, Jadoo, Aljunid, Sulku & Nur, 2014).

In the study, it was aimed to evaluate the success of the Healthcare Transformation Programme based on its main aims and comparison of OECD health indicators in 2003 and 2013. Regarding the aims of the programme, components that were defined at the beginning of the HTP journey have been mostly achieved, providing better health outcomes and better services to the citizens of Turkey.

Compared with the OECD countries, there is no doubt that, Turkey still has a long way to go, but the progress have been made is a remarkable example for middle income countries. And while making comparisons with the OECD countries and Turkey, population and GDP of the country should also be considered. For example, comparing the United Kingdom with Turkey might be appropriate in terms of population, but not in terms of GDP.

Reasons behind the successful implementation of the HTP can be summarised under six main points as following: clear vision and strong leadership, political and economic stability, the European Union dynamic (efforts have been made in the context of being a member of the union), reforms dynamic itself, impact of international institutions, political demand, support and persistence (OECD, 2014; Yildirim & Yildirim, 2010). As in 2015 November elections Justice and Development Party (AKP) elected as single party for third times, political feasibility was ensured for the future of the programme, with economic growth and consistency in the country.

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RISK MANAGEMENT IN HEALT INSTITUTION: RISK ANALYSIS OF A PUBLIC HOSPITAL[i]

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ABSTRACT

Aim of Study: Hospitals are health institutions encompassing many risk factors within its body. This study has been carried out to identify hazards and risks that may arise during service presentation in health institutions bearing high-risk elements and determine points to improve.

Method of Study: Interview technique has been used as data collection method in the study. In this regard, face-to-face interviews have been performed with 15 managers authorized in Risk Management in a public hospital. Acquired data have been transferred into Risk matrices, thereby obtaining results.

Obtained Results: It has been concluded that sharp object accidents and infection hazard in Operating room**,** Sterilization and Morgue units are most important (unacceptable risk) risk components. Second important risk groups have been detected to be medical waste risk of operating room workers, violence risk in Emergency service and intensive care unit, infection in clinics and security workers, violence and transmission risk.

1.INTRODUCTION

"Risk" subject has always been a notion existing all dimensions of life as well as operations of organizations. Risk and Risk Management are subjects that require attention and worth studying in an organization that is complex and that performs protection and treatment functions for human life, i.e. an hospital. Health services aim treating and not harming in its base. Equipment and materials bear various inherent risks endangering health workers and patients. Aim of risk management studies is predetermining risk to arise, reducing uncertainties-risks, protecting health institutions from risks and ensuring patient and worker safety.

On the other hand, improvements in health technologies and diversity of disease-causing factors have rendered the subject of patient and worker safety a notion of which importance level is constantly rising. In this context, this study has been performed to determine risks that may occur in a public hospital.

Viewed from this point, answers will be sought for the following question: What are the risks that may affect patients, health workers and visitors during a health service presentation?

1.1. Risk:

A probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through preemptive action(www.businessdictionary.com). According to another definition Risk; Realization possibility of a given hazard and related results (wikipedia.org).

1.2.Risk Management

Risk management is the whole proses starting with identification of risks and encompassing assessing the risks, determining moves to take against those risks and applying those determined activities, monitoring these activities and re-evaluating the results (Güleç and Gökmen, 2009: 172). Also, risk management means management which enables data-based decision making in a direction to reduce effect of hazards that may occur by assessing the risks systematically (Regulations Regarding Internal Auditor Working Method and Principles, 2006; Article 4). When studies on risk management matter are examined (Konuralp, 1997; Candan, 2008; Bolgün

and Akçay, 2009; Tansöker, 2008), it is seen that there are more risk management implementations and studies in particularly banking sector compared to other sectors. When this situation is handled in terms of health sector, it is seen that regulations pertaining to risk management applications have not improved sufficiently as in banking sector.

2. MATERIAL AND METHODS

3.1.Population and Sample (Scope of Study)

Population of study consists of manager, occupational health expert and unit supervisors (operating room, emergency service, sterilization, administrative unit, pharmacy, intensive care, patient admissions unit, kitchen and cafeteria, laboratory, morgue, laboratory, cleaning, technical unit, security unit, service unit supervisors unit supervisors) serving in Konya Ataşehir Public Hospital. In this context, interviews have been carried out with 15 responsible managers.

3.2. Data Collection Tools and Method

Within the scope of the study, unit-based risk assessment analysis form was filled by using interview method with related supervisors about 12 most commonly encountered risk factors (**radiation, noise, hazardous substances, infection, sharp object accidents, allergen substances, ergonomics, violence, transmission, reparation accidents, mobbing and medical waste risks)** by screening related sources. Participants were asked to grade possibility and violence points to encountered risks. As a result of acquired points, (Risk Score = Possibility X Effect (Violence) **Risk Point** was calculated. Points given to risk possibility and risk violence are shown in detail in the following tables.

Table 1. Risk Possibility Score Determination Table

Quantitative Value	Qualitative Value	Possibility of Incidence
1	VERY RARE	Not seen in the last 2-10 years
2	RARE	Seen at least once in the last 1 year
3	SOMETIMES	Seen in the last 1 year
4	OFTEN	Seen in the last 3 months
5	VERY OFTEN	Seen in the last 1 month

Table 2. Risk Violence Score Determination Table

Quantitative Value	Qualitative Value	Effect/ Violence Level
1	Very mild	No working hour loss, not requiring first aid
2	Mild	No working day loss, not having permanent effect, requiring ambulatory, first aid treatment
3	Moderate	Mild injury, requiring inpatient treatment
4	Serious	Serious injury, long lasting treatment, occupational disease
5	Very serious	Death, permanent disability

Table 3. Risk Points Assessment Table

POSSIBILITY (PROBABILITY)	**VIOLENCE GRADING**				
	VERY SERIOUS 5	**SERIOUS 4**	**MODERATE 3**	**MILD 2**	**VERY MILD 1**
VERY HIGH 5	25	20	15	10	5
HIGH 4	20	16	12	8	4
MEDIUM 3	15	12	9	6	3
LITTLE 2	10	8	6	4	2
VERY LITTLE 1	5	4	3	2	1

FINDINGS

Risk point and risk types of 12 risk factors most commonly encountered in health institutions prepared by interviewing with 15 responsible managers are handled in detail in the following table.

Table 4. Obtained Findings

RİSK PUANI	RİSK SEVİYESİ	RİSK TÜRÜ
1	Unimportant Risks	- violence risk in sterilization - violence risk in operating room - mobbing risk in emergency service - radiation risk in sterilization - hazardous substance, infection, allergen substance, ergonomics, violence, reparation accidents, medical waste and mobbing risk in administrative unit - pharmacy workers - radiation, infection, sharp object accidents, ergonomics, reparation, medical waste risk in intensive care unit - patient admissions unit radiation, ergonomics, reparation accidents, mobbing risk - radiation, reparation accidents in laboratory - radiation, ergonomics, transmission, reparation accidents, medical waste risk in morgue - radiation, allergen substance, ergonomics, transmission risk of cleaning workers - noise sharp object accidents, ergonomics, violence, transmission risk of technical unit - sharp object accidents, allergen substances, transmission, medical waste, mobbing risk of security units - radiation, allergen substance, ergonomics risk of

		service workers
2	Acceptable Risks	Reparation accident of operation room workers Radiation risk of administrative unit workers Hazardous substance risk in intensive care unit Sharp object accidents in patient admissions unit Ergonomics, transmission risk in laboratory Noise risk in morgue - noise, hazardous substance risk of cleaning workers - reparation accidents, medical waste risk of technical unit workers
3	Acceptable Risks	- noise, transmission risk of administrative unit workers - sharp object accidents, violence, mobbing risk of laboratory workers - reparation accidents in service workers
4	Acceptable Risks	- allergen substance risk of operating room workers - radiation, hazardous substance, allergen substance, reparation accidents and medical waste risk in emergency service. Mobbing risk in sterilization
5	Acceptable Risks	- noise, hazardous substance, allergen substance, medical waste risk of laboratory workers - transmission, medical waste risk in laboratory
6	Acceptable Risks	- ergonomics risk of operating room workers - violence risk of patient admissions unit workers - violence risk of morgue workers - noise risk of security workers - sharp object accidents in administrative unit
8	Moderate Risks	- infection risk of technical unit workers - ergonomics risk of security unit
9	Moderate Risks	- noise, infection risk of operating room workers - infection, ergonomics, transmission risk in emergency service.

		- noise, mobbing risk in intensive care unit - hazardous substance, allergen substance risk of patient admissions unit workers - allergen substance risk of morgue workers
10	Moderate Risks	- infection substance risk of technical unit workers - radiation, hazardous substance, mobbing risk of laboratory workers - infection risk of laboratory workers
12	Moderate Risks	- transmission risk of operating room workers - noise risk in emergency service - ergonomics risk in sterilization - radiation risk of security unit workers
15	İmportant Risks	- radiation risk of operating room workers - noise, allergen substance and violence risk of laboratory workers
16	İmportant Risks	- hazardous substance risk of operating room workers - reparation accidents in sterilization - sharp object accidents in emergency service - violence risk of security unit workers
20	İmportant Risks	- medical waste risk of operating room workers - violence risk in emergency service - noise risk in sterilization - violence risk in intensive care unit - infection, violence, transmission risk in service - infection risk of security unit workers
25	Unacceptable risks	- sharp object accidents and mobbing risk of operating room workers - hazardous substances, infection, sharp object accidents, medical waste risk in sterilization - infection in morgue workers

In addition to findings above, 11 participants answered the question “Is there a risk committee in your hospital?” as **yes** while 4 participants stated **no**. 5 participants said yes while 10 participants said no to the question whether risk committees of their hospital give education. There were 4 people who stated that there is not anyone to know what to do and a person to direct in case of a risky situation.

CONCLUSION

The following results were obtained from this study performed with 15 responsible people for determining 12 different risk elements in a public hospital:

- It has been concluded that sharp object accidents and infection hazard are most important (unacceptable risk) risk elements in operating room, sterilization and morgue units.
- It has been detected that second important risk elements are medical waste, hazardous substance and radiation risk of operating room workers, violence risk, sharp object risk of emergency service and intensive care unit, infection, violence and transmission risk in clinics and security workers.
- **Unimportant risks are ranked as follows**: violence risk in sterilization and operating room, radiation risk in sterilization, hazardous substance, infection, allergen substance, ergonomics, violence, reparation accidents, medical waste and mobbing risk in administrative unit, radiation, infection, sharp object accidents, ergonomics, reparation, medical waste risk of pharmacy workers and in intensive care unit, Patient admissions unit radiation, ergonomics, reparation accidents, mobbing risk.

Generally, it has been concluded that particularly operating room, emergency service and intensive care units are risky areas, there are practices about Risk Management in the institution, however, these practices are not sufficient and systematic.

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WOMEN PERCEPTIONS OF MILK BANKING IN GUMUSHANE CITY CENTER LOCATED IN EASTERN BLACKSEA REGION

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ABSTRACT

It is stated that breast milk provides not only immunologic, neurologic and socio-economical advantages to an individual but also lower levels of morbidity–mortality rate and cardiovascular risks in later life. Milk bank is a profound source for the infants who could not receive breast milk for various reasons

The aim of this study was to determine women perceptions of milk banking in Gumushane city center.

Material and Method: Study data; between the dates of 1.03.2014-30.06.2014 Gumushane State Hospital was gathered with women who applied to the outpatient clinics. A total of 362 women (response rate: 98%) who agreed to volunteer to participate in the study formed the sample.

Findings: 45.0% of the participants of the study were aged between 15 and 25, 50% of them were undergraduates, and 58% of them had professions. 91.8% of the mother participants stated that they breastfed their babies for almost 14 months. 28.7% of the participants support the idea of milk banking concerning infant health and 20.9% of them also support this idea in relation to some emergency cases. 51.8% of the participants, who were not in favor of milk banking, claimed that milk sharing is not acceptable because of Islamic religious aspects. Those who think that milk banking is not suitable for Muslims especially feel uneasy about the possibility that the infants

can accidentally get married in the future with the other infants who share the same milk.

Conclusion: In this research it was shown that women in Gumushane have a positive attitude towards milk banking but they have some concerns related to religious aspects. Thus, this subject needs further investigation.

Introduction: It is stated that breast milk provides immunologic, neurologic and socio-economical advantages to an individual and it also ensures lower levels of morbidity–mortality rate and cardiovascular risks in later life (Lam, 2012). World Health Organization (WHO) puts forward that exclusive breastfeeding for 6 months is the most appropriate way of feeding the infants. Thereafter infants should receive complementary foods with continued breastfeeding up to 2 years of age or beyond. (WHO/UNICEF, 2009). Over 1 million infants and children die from diarrhea, respiratory tract infection and similar diseases every year because of inadequate breast feeding (Turkish Ministry of Health, 2014).

For those infants who could not receive breast milk for varied reasons, milk banking is a profound source (Demirtaş, 2011). Mothers can alternatively use donated pasteurized milk from the banks in case of having insufficient or unusable breast milk (Lam, 2012). When human breast milk gained a growing importance, milk banking became crucial especially for premature and low birth weight babies. Milk banking functions both as a secondary healthcare in terms of being palliative care and treatment strategy and as a primary healthcare because it reduces morbidity-mortality rate by preventing long term complications (Arnold, 2006).

Because various problems can occur in donor human milk practice, multidisciplinary teamwork and supportive institutions are very crucial (Szucs et al., 2009). Mother's consent, protocols of milk banks, continuous controls, multidisciplinary teamwork, feeding premature infants are the factors that formalize this utilization culture (Carroll, 2012). Feeding the infant in intensive care unit should be based on medical procedures rather than personal perceptions (Meier et al., 2010). Beliefs and knowledge about breast milk are very important for donor human milk practice (Bartle, 2010).

Other advantages of milk banking are that it reduces the complications (bacteremia, sepsis, infiltration, hypoglycemia) related to Total Parental Nutrition (TPN) and length of hospital stay and accordingly health expenses (Torres et al., 2010). It is also seen that milk banking decreases premature infant morbidity and mortality rate considerably (Lucas, 1997).

Milk banking was first practiced in the 1940s in Australia where this procedure is very common nowadays. However, during those years the people were planning to use the excessive milk that they had collected in maternities after the war. Recently, milk banking also aims to feed the premature babies and encourage mothers to breast feed during night (Thorley 2011). American Academy of Pediatrics proposes

to establish donor milk banks in order to provide healthcare standards for each premature baby (American Academy of Pediatrics, 2012; Arslanoğlu et al., 2010).

In a survey study carried out with the participation of the members of American Academy of Pediatrics, it is seen that 55% of the neonatologists support donor human milk and they also believe that milk banking plays a crucial role in especially intensive care units (Harris, 2005).

Research on milk banking is limited in Turkey. In a study by Demirtaş, it is stated that milk banking is essential especially for premature babies with breastfeeding problems and low birth weight. Demirtaş also proposes that milk banking policies should be explicitly integrated into existing policies and put into practice by programme development procedures (Demirtaş, 2011).

All in all the aim of this study was to determine women perceptions of milk banking in Gumushane city center.

Material and Method: The sampling group of this descriptive study consists women living in Gumushane. According to the Turkish Statistics Institution (TSI), there are 9.708 female citizens in Turkey aged between 20 and 45. The number of women in sampling group was calculated and determined as 370 with a 95% confidence interval. It was at first aimed to reach 400 women seeing the expected loss. Study data; between the dates of 1.03.2014-30.06.2014 Gumushane State Hospital was gathered with women who applied to the outpatient clinics. A total of 362 women (response rate: 98%) who agreed to volunteer to participate in the study formed the sample. Written permission was received from Gumushane State Hospital Union General Secretaries. All of the participants were informed about the aim and method of the study and they signed the consent forms. After the literature review, data gathering process was carried out by conducting a 32- question-survey form about the participants' socio-demographic features and their perceptions of breast milk and milk banking. Data was collected by face-to-face interview method. Statistical Package for Social Sciences (SPSS) was used for data analysis. Chi-square test, standard deviation, arithmetic mean and percentage values were used in the data analysis process. $p<0.05$ was accepted as meaningful.

Results:

The participants' socio-demographic features are shown in Table 1.

Table 1. The participants' socio-demographic features (N=362)

Descriptive Characteristics	**n**	**%**
Age Group (n= 362)		
15-25 Age	163	45.0
26-35 Age	120	33.2
36-45 Age	79	21.8
Total	362	100.0
Education (n = 350)		
Primary Education	83	23.7
High School	92	26.3
University	175	50.0
Total	350	100.0
Long-Time Location (n = 353)		
City	259	73.4
Rural	43	12.2
Village	51	14.4
Total	353	100.0
Working Condition (n: 338)		
Employed	235	69.5
Housewife	103	30.5
Total	338	100.0
Family Condition (n:358)		
Small Family	304	84.9
Extended Family	54	15.1
Total	358	100.0

45.0% of the participants are aged between 15 and 25, 50.0% of them are university graduates, 73.4% live in Gumushane city center, 31.9% are medical personnel and 84.9% have small families (Table 1).

40.3% of the participants have been married for ten years and above, 23.6% of them have been married for 6-10 years, and 24.0% have been married for 2-5 years. 69.4% of the participants have children, 37.4% of them have one child, 35.5% have two, 27.6% have three, and 11.3% have four children or above. It is seen that 62.9% of the participants had normal delivery and 22.8% of them had caesarean section and 14.4% had them both.

It is seen that 91.8% of the mother participants breastfed their baby approximately 14.72 months ± 10.5 months (min: 1 month, max: 76 months). 98.3% of the participants believe that breast milk is protective and 97.4% of them know about the advantages of breast milk, 53.3% of them know that it is advised to breast feed the infants at least for 6 months.

Participants stated that breastfeeding is important because 89.5% of them believe that it supports the immune system of the infants, 43.1% of them think that it is easy to use, 66.3% believe breastfeeding bonds the baby and the mother, and 43.6% think it is necessary for baby to gain weight.

Table 2. Evaluation of the participants' perceptions of breast milk and milk banking (N: 362)

Have you heard about the term "milk siblings"?		
	n	**%**
Yes	39	11.4
No	304	88.6
Total	343	100.0
Have you ever given milk to other people's babies?		
	n	**%**
Yes	23	8.1
No	260	91.9
Total	283	100.0
Would you give your milk to one of your relatives' baby in case of an emergency?		
	n	**%**
Yes	110	62.5
No	66	37.5
Total	176	100.0
Do you think that it is appropriate to share milk among the relatives?		
	n	**%**
Yes	164	48.4
No	175	51.6
Total	339	100.0
Would you make use of milk banks if they were available?		
	n	**%**
Yes	124	36.9
No	212	63.1
Total	336	100.0
Have you heard about milk banking?		
	n	**%**
Yes	187	53.4
No	163	46.6
Total	350	100.0
Would you donate your milk to the milk banks?		
	n	**%**
Yes	158	46.5
No	182	53.5
Total	340	100.0
Do you think that milk banking is necessary in Turkey?		
	n	**%**
Yes	203	58.0
No	149	42.0
Total	352	100.0

11.4% of the participants stated that they had heard about milk siblings, 8.1% of them had given their milk to other infants, 62.5% of them indicated that they can give their milk to another infant in case of emergency, 48.4% of them approve milk sharing with the relatives, and 57.7% have positive perceptions about milk banking (Table 2).

Table 3. Evaluation of the participants' socio-demographic features and their perceptions of milk banking

	Do you think that milk banking is necessary in Turkey?					
	Yes		**No**			
Marital Status	**n**	**%**	**n**	**%**		
Married	110	54.5	98	66.7		
Single	92	45.5	49	33.3		
Total	202	100.0	147	100.0		
				X^2: 5.269,	**p: 0.022**	
	Do you think that milk banking is necessary in Turkey?					
	Yes		**No**			
Age Group	**n**	**%**	**n**	**%**		
15-25 Age	99	48.5	55	37.2		
26-35 Age	65	31.9	55	37.2		
36-45 Age	40	19.6	38	25.6		
Total	204	100.0	148	100.0		
				x^2:4.665,	**p:0.097**	
	Do you think that milk banking is necessary in Turkey?					
	Yes		**No**			
Education	**n**	**%**	**n**	**%**		
Primary Education	43	22.2	39	26.5		
High School	52	26.8	39	26.5		
University	99	51.0	69	47.0		
	194	100.0	147	100.0		
				x^2:0.949,	**p:0.622**	
	Do you think that milk banking is necessary in Turkey?					
	Yes		**No**			
Occupation	**n**	**%**	**n**	**%**		
Medical personnel	80	42.8	50	35.0		
Educationist	8	4.2	12	8.3		
Officer-Worker	48	25.7	30	21.0		
Housewife	51	27.3	51	35.7		
Total	187	100.0	143	100.0		
				x^2:6.119,	**p:0.106**	

In this study chi-square test was applied for participants' socio-demographic features and their perceptions of milk banking. As a result, a meaningful relation was found between milk banking and the marital status of the participants, but it was seen that profession, age or education do not affect perceptions of milk banking (Table 3).

Table 4. The reasons of participants' positive and negative perceptions about milk banking

Positive perceptions about milk banking	**n**	**%**
For the infants' health	48	28.7
For poor children to make use of breast milk	31	18.6
For mothers who do not have enough milk for their babies	22	13.2
For emergencies (in case of maternal mortality, premature delivery, low birth weight)	35	20.9
Because of the importance of breast milk	14	8.3
Because milk banking makes breast milk easily accessible	2	1.1
Because this can happen to anybody	4	2.2
Because it can provide the infants with the breast milk for the minimum duration	1	1.1
Because milk banking can help working mothers	3	1.8
Because some infants can have breastfeeding problems	7	4.1
Total	167	100.0
Negative perceptions of milk banking	**n**	**%**
Not acceptable because of religious beliefs	45	51.8
Not trustworthy in our country	7	8.0
Not reliable	12	13.8
Because of infectious diseases	7	8.0
Not necessary	6	6.8
Because people cannot trust the other people's milk	7	8.0
Because it can ruin the infant and mother binding	1	1.2
Because breast milk should be private to people	1	1.2
Because there are alternative feeding options	1	1.2
Total	87	100.0

In this study, regarding the positive perceptions of milk banking, it is seen that participants believe that breast milk is important in terms of infant health, and their protection from diseases. On the other hand, it is shown that negative perceptions focus on religious aspects, because according to Islamic belief system it is not acceptable for a person to get married with a milk sibling. Participants think that it would be difficult to investigate milk siblings and there can be some problematic issues in the future (Table 4).

Discussion: World Health Organization (WHO) and UNICEF claim that breastfeeding for 6 months is the most appropriate way of feeding the infants. Thereafter even if the infants receive complementary foods, they should be fed with continued breast milk up to 2 years of age or beyond (Yiğit et al., 2009; WHO, 2014; UNICEF, 2014). 91.8% of the participants of this study are the mothers

who breastfed their babies approximately 14.72 months. This can be accepted as a satisfying situation for the study, because the breastfeeding duration is long enough for the infants.

Breast milk is advised for especially the infants who are premature and have low birth weight. However; mothers can only use milk banks as an alternative when they have breast feeding problems or maternal diseases and when they do not want to breast feed their babies or do not have enough milk for their babies (Agostoni et al., 2009; Dempsey 2010; Panczuk et al., 2014). As a result of the study, it is seen that 58% of the participants have positive perceptions of milk banking. According to the remarks of the participants milk banking is necessary especially in case of emergency situations when the infants' health is in danger. They also state that milk banking is essential for providing the poor children with breast milk. The other advantages of milk banking are that it helps working mothers and provides enough feeding duration for the infants. The percentages of the women who think that milk banking is necessary is not shown to be enough, therefore common-public education and health plans related to this matter are crucial in order to raise awareness among mothers.

On the other hand, even if there is a lot of evidence about the advantages of milk banking, it is a known fact that HIV is transmitted by breast milk (Lording, 2006). Therefore, the reasons of the negative perceptions of the participants also consists the fear of infectious diseases that can be transmitted by breast milk because it is difficult to investigate the reliability of the milk.

There are different opinions regarding milk banking, but the authorities in medical field mainly support this idea. Midwives/Nurses have more positive attitudes against milk banking than the neonatologists (Lam et al., 2012). According to the results of the study, 58.0% of the participants said yes to the question of 'Should we open milk banks in Turkey?' and 61.5% of these positive perceptions come from the participants who are medical personnel.

As a result of this study it is seen that there is a meaningful relation between the marital status and milk banking perceptions. Single people have more positive attitudes against milk banking than the married people. The reason of this situation is considered to be caused by the fact that the majority of the married participants already breastfed their babies and did not have many problems.

51.8% of the participants who have negative attitudes against milk banking

believe that milk sharing can be a problem because of the possibility of future marriages between the milk siblings. However, in the literature it is heavily emphasized that the nutrition of the infants in the intensive care unit should be based on medical procedures rather than personal beliefs (Meier et al., 2010). In Turkey, which is an Islamic country, Turkish Religious Foundation released a report about milk siblings. In this report it is clearly stated that milk relativity is a term which explains the relationship between an infant and the milk provider and also some of her own relatives. According to this report milk sharing infants are accepted as milk siblings and also their mothers and their immediate family are claimed to be milk relatives. Therefore, milk relatives cannot get married. Also, according to the Islam Authorities the milk which is taken by an infant in the first two years of his life causes milk relativity no matter the amount of the milk is little or high (İSAM, 2009; Dönmez, 2006). In a study by Özdemir, 401 religious officers are interviewed and they are asked about their perceptions of milk banking. 71.3% of the participants in this study state that it is acceptable on the condition that the number of the milk receivers is limited (Özdemir et al., 2014).

As a result of the study it is clearly seen that the participants mainly have positive perceptions about milk banking but they have some doubts because of religious aspects. This is a generally known fact that the regulations related to this matter should be revised and organized considering the cultural and religious factors. Thereafter, people should be educated and informed about this subject in order to raise awareness. Besides, there should be a union regarding the human donor milk banks and they should be established all over the country. Milk banks should be available especially in case of emergencies related to the infants' health. National Coordination Centers and Secretaries should be founded and the authorities should budget these institutions. In a study carried out in India about milk banking, they established a national counseling center in coordination with the Ministry of Health, the Government and family health representatives. They compared literature reviews, other countries' experiences, instructions, cultural factors and needs (Bharadva, 2014).

In Turkey it is a need to make more investigations about milk banking. This study focuses only on a city but further and wider studies are necessary. Coordination between institutions should be established and they should raise awareness in the society. Milk banking is an elaborate and important procedure which requires milk donation, stocking, making regulations,

keeping medical records, selecting suitable donors, pasteurization. For that matter it is essential to establish a multidisciplinary approach, national policies and coordination among the related institutions.

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