

**DETERMINING THE RELATION BETWEEN HEALTH LITERACY AND THE  
SATISFACTION OF THE FAMILIES' CHILDREN SUFFERING FROM CANCER  
ABOUT THE QUALITY OF SERVICES PROVIDED IN SHAHREKORD'S HOSPITALS****Masoumeh Alidosti<sup>1</sup>, Dr. Elahe Tavassoli\*<sup>2</sup>, Dr. Zabihollah Gharlipour<sup>3</sup> and Mahtab Mahbubi<sup>4</sup>**<sup>1</sup>Department of Public Health, Behbahan Faculty of Medical Sciences, Behbahan, Iran.<sup>2</sup>Assistant Professor, Social Determinants of Health Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran.<sup>3</sup>Assistant Professor, Department of Health Education and Promotion, Faculty of Health, Qom University of Medical Sciences, Qom, Iran.<sup>4</sup>M.S. Nursing student in Neonates Intensive Cares, Nursing and Midwifery School, Iran University of Medical Sciences, Tehran, Iran.**\*Corresponding Author: Dr. Elahe Tavassoli**

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Article Received on 29/12/2017

Article Revised on 19/01/2018

Article Accepted on 09/02/2018

**ABSTRACT**

**Introduction:** Health literacy is the individuals' capacity for achieving, processing and understanding of health information and health. The patients' and their families' satisfaction is an indicator of hospital services quality and considered an important factor in hospitals evaluation. This study was conducted to determine the relation between health literacy and the families' satisfaction of the children suffering from cancer about provided services in Shahrekord's hospitals. **Materials and methods:** This descriptive-analytical research was done in 2016 in Kashani's and Hajar's hospitals' children wards in Sharekord city. 240 ones of patients' families were studied in the mentioned wards through convenience sampling method and Health Literacy standard questionnaire and satisfaction of the provided services were used. The collected data were analyzed by descriptive and analytical tests including One- Way Variance Analysis and Peareason and spearman correlations and also through spss (version 18). **Finding:** 45 (108 cases), 31.7 (76 cases) and 23.3 (56 cases) percent of the studied patients had insufficient, borderline and enough level of health literacy, respectively. The mean scores of satisfaction of medical, welfare and nursing services were, in turn,  $82/27 \pm 86$ ,  $71/33 \pm 25/25$  and  $85/23 \pm 29/44$ . There was significantly direct relation between patients' fathers' age and their satisfaction of welfare and medical services. Also, significantly direct correlation was found between patients' mothers' age and three sorts of provided services ( $p < 0/05$ ). A converse correlation was seen between patients' parents' education level and satisfaction of provided medical services. At the same time, a converse correlation was found between their mothers' education level and satisfaction of welfare services. On the other hand, there were significantly direct relation between welfare and medical services, nursing and medical services and also welfare and nursing services ( $p < 0/05$ ). **Conclusion:** The present study showed that most of the people lack enough health literacy. On the other hand, three sorts of satisfactions including welfare, medical and nursing are appropriate. Therefore, providing necessary education to the patients' families seems to be necessary in order to increase health literacy.

**KEYWORDS:** Health Literacy, Satisfaction, Child, Hospital, Parents.**INTRODUCTION**

Some diseases such as cancers threaten physical, psychological and social aspects of the patients' health. As shown in studies, around 50 to 80 percent of these patient suffer from a kind of psychiatric disorders. Depression is a one of them which affects their treatment adversely.<sup>[1,2]</sup> If the patient regards it as a serious threat for their life, he/she becomes anxious so that it changes into an important clinical problem.

These disorders can be demonstrated more sever among children rather than adult people. Their parents' nervousness and having commiserated feeling due to their children's disease can affect them clearly. Most of the patients including children suffer from sever pain because of being operated and their somatic nerve injury so that pain is a the commonest complaint of them especially in surgery wards of cancer. However, pharmaceutical and non- pharmaceutical remedies are used to relieve the pain after operation. One of the most

important types of the latter sort of remedy is to get in touch with patient and the health team members are supposed to develop it. Because it can improve positive results and accelerate the recovery.<sup>[3]</sup> It should be noted that satisfaction of treatment services is one of the most effective indices which influence appropriate outcomes in the patients with cancer. However, the effect of interaction between nurses and patients on satisfaction has not been known well yet.<sup>[4]</sup> In fact, patients' satisfaction is referred to their attitude towards the range of fulfillment about their expectations and preferences provided for them in medical centers. Providing their needs and making them satisfied is one of the most valuable ethical virtues.<sup>[5]</sup> So, one of the seven – permitted designs of government for editing state departments is to respect clients.<sup>[5]</sup> As a matter fact, hospital admission makes stress for children and their parents. Ambiguous results of disease treatment process, recurrent admission, especial treatments, observing their child pain and burden cause to increase families stress and affect their performance in future.<sup>[6]</sup> The assessment of patients' satisfaction of health cares is necessary to improve hospital service quality especially those ones provided for children.<sup>[7,8]</sup>

Basically, their parents are also regarded as the receivers of therapeutical services. They support children in health care centers, and therefore they are representative of patients' beliefs and needs. In other words, the quality of cares are closely related to patients' satisfaction. The more they are satisfied, the more they cooperate and adjust with disease. It may lead them to use these services more. The study of their satisfaction can improve the quality of cares, because it provides important information which can be used to promote management programs and also staffs performance.<sup>[9,10]</sup> This can make it possible to achieve appropriate communication and consulting patterns.<sup>[5]</sup>

However, although the physicians have been the most important sources of health and medical information, having access to other sources of data are easy for the public by developing the media and information distribution through Internet. So, the skills of the patients and their families, in order to achieve, precise understanding and using information, affects the behavior and health condition remarkably and, consequently Improves their satisfaction.<sup>[11]</sup> Health literacy is defined as the individual's capacity to achieve, interpret and understand of primary information and health- related services which are necessary to make sound decisions.<sup>[11]</sup>

Since insufficient health literacy is a serious barrier against understanding health information and its application and, on the other hand, The staffs behaviors and hospital services provision affect considerably the treatment process of the patients suffering from cancer especially children cases. Moreover, hospital environment can be a suitable place to improve children

mood through playing and entertainment. Therefore, this study was searching the relation between health literacy and families' satisfaction of the services in Kashani and Hajar hospitals in Shahrekord city about providing medical, nursing and welfare services. This investigation is supposed to be a context to conduct other studies and interventions in future to promote health, health literacy and increase satisfaction of services for the children suffering from cancer.

## METHODS AND MATERIALS

### Study design and population

This analytical-descriptive study was conducted in 2016 in Kashani and Hajar hospitals' children wards. 240 parents of the mentioned patients were selected through convenience method. The satisfaction and health literacy level of parents (including those ones who received treatment as OPD cases or admitted in the hospital) were measured. It should be noted that those ones who were, at most, six hours in the hospital and received OPD cares, completed the questionnaire in the interval between finishing patient's treatment and discharge time. For the admitted cases, it was done after their physician's order to be discharged and leaving the hospital.

**The inclusion criteria** consist of signing written informed consent, being one of the close relatives of the patient or someone who was responsible to make the patients' related decisions, being 18-65 years old, living with the patient, being with the patient at least eight hours and being competent enough to take care of the patient.

**The exclusion criteria** were not to have any tendency to cooperate and participate in the study in any stages of investigation and having no suitable physical, cognitive and cultural conditions or suffering from any problems while replying the questions.

### Ethical Considerations

- 1- Receiving formal recommendation from Shahrekord University Of Medical Sciences.
- 2- Handing in the mentioned recommendation form to Kashani and Hajar hospitals' officials in Shahrekord city.
- 3- Referring to the mentioned wards and presenting the study to their officials
- 4- Trying to regard the rules of the ward and hospital disciplines.
- 5- Describing enough about the research goals to the parents and getting informed consent in order to voluntary participation.
- 6- Making them assured that their data kept confidential.
- 7- Giving toys to children as gift.

### Measuring tools: validity and reliability

Studied demographic characteristics included the child's age, gender, his/her family member's age, his/her family

member's education level and job and also admission history.

Test of functional health literacy in adult's questionnaire was used to study health literacy of the studied cases.<sup>[12]</sup> This questionnaire has two parts including calculations and reading understanding. The first part measures the ability of individual to find out and act based on doctors' and educators' recommendations. The mentioned recommendations were supposed to need to be calculated. It has five health orders or descriptions about prescribed medicines, the time of referring to the doctor and one instance of a Para clinical test series. These descriptions were given to the cases in the form of the cards and the designed questions which were asked. The score of the individual was considered between zero to 50.

in the second part, the ability of participants about reading and finding out three texts including the introduction of preparation for photography from upper GI, the rights and responsibilities of the patient in insurance forms and standard form of hospital consent. The score of individual was also supposed between zero to 50. Adding the scores of these two parts, total score of health literacy was also supposed between zero to 70. Finally, the studied cases' health literacy score was divided into three levels including insufficient (0-59), borderline (60-74) and sufficient (75-100) levels.

The third section consisted of a questionnaire assessing families' children satisfaction. nine question of medical services satisfaction (such as; physicians informed us and described any procedures they wanted to do preceedingly), 10 questions for nursing services satisfaction (for example, the nurses did the cares related to medical on time and described simply to us our patients condition and the given cares), and 7 questions for welfare services satisfaction (for instance, cleanness of room, clothes and devices and the presence of staff talking to the patient whenever needed). The questions in three last parts were arranged based on five-option Likert scale (good, relatively good, average, relatively weak and weak). The mentioned items were given scores 4, 3, 2, 1 and zero respectively. The validity and reliability of the questionnaire were affirmed by Poormovahed et al and Hosseinian et al.<sup>[5,13]</sup> Its Kronbach Alpha was found 0.92.

### Data Analysis

The achieved data were analyzed by descriptive analytical tests including One-Way Variance Analysis and Pearson correlation test and through SPSS (version 18) in order to study the relation between health literacy and different dimensions of satisfaction.

## RESULTS

The mean age of the studied children's mothers and fathers were  $37/32 \pm 11/9$  and  $40/91 \pm 11/50$  years old respectively. 105 and 135 ones of the studied cases were

girls and boys respectively. 180 (75 percent) of these patients have been admitted previously. 24 and 40 percent of their mothers and fathers had diploma and academic levels of education respectively. 50/4 and 82/5 percent of the studied mothers' and fathers' job were, in turn, self-employment and housekeeping.

45 (108 cases), 31.7 (76 cases) and 23.3 (56 cases) percent of the studied patients had insufficient, borderline and enough level of health literacy, respectively. The mean scores of satisfaction of medical, welfare and nursing services were  $82/27 \pm 19/86$ ,  $71/33 \pm 25/25$  and  $85/23 \pm 29/44$  respectively (the achieved mean scores were rather appropriate). (Table one).

**Table 1: The mean and standard deviation (SD) of satisfaction of medical, welfare and nursing services in the families' children.**

Constructs	Mean $\pm$ SD
medical services (a total of 100 scores)	$82.27 \pm 19.86$
Welfare services (a total of 100 scores)	$71.33 \pm 25.25$
nursing services (a total of 100 scores)	$85.23 \pm 29.44$

There were significantly direct relations between the patients' fathers' age and satisfaction of medical ( $r=0.338, p=0.000$ ) and welfare ( $r=0.403, p=0.000$ ) services respectively so that as their fathers got older, their satisfaction was higher. The same significantly direct correlation was seen between their mothers' age and satisfaction of mentioned sorts of services ( $r= -0.153, p=0.000$ ) in a way that the older mothers had higher levels of satisfaction. However, significantly converse correlation was seen between satisfaction of medical services and their mothers' ( $r= -.244, p=.000$ ) and fathers' ( $r= 0.153, p= 0.020$ ) levels of education so that higher education parents had lower level of satisfaction of medical services. The same correlation was found between mothers' ( $r=-0.286, p=0.000$ ) education level and their satisfaction of welfare services in a way that the mothers who were more educated, had less satisfaction of welfare services. However, there was significantly direct correlation between having admission history and satisfaction of medical ( $r=0.473, p=0.000$ ), welfare ( $r=0.495, p=0.000$ ) and nursing ( $r=0.701, p=0.000$ ) services.

There were significantly direct correlation health literacy and patients' fathers' and mothers' education levels ( $p=0.001, r= 0.435$  and  $p=0.001, r= 0.745$ ) respectively so that the understanding and perceiving of health\_related information and their application increased when their education levels developed, On the other hand ,there was significantly direct correlation between their mothers' age and health – related information ( $p = 0.006, r = 0.321$ ) so that their health literacy, in understanding and perceiving the information

related to their children, increased when their mothers' age went up (Table two). At the same time, there were significantly direct correlation between welfare and nursing services ( $r=0.299$ ,  $p=0.000$ ) welfare and medical

services ( $r=0.701$ ,  $p=0.000$ ) and also nursing and medical services ( $r=0.506$ ,  $p=0.000$ ). It means that when satisfaction in any of the services increased, the level of satisfaction in other levels went up reciprocally.

**Table 2: The association between satisfaction and Health Literacy with demographic variables.**

Variables	Health Literacy	Medical services	Welfare services	Nursing services
Father's age	$p = 0.143$ $r = 0.192$	$p = 0.000 *$ $r = 0.338$	$p = 0.000 *$ $r = 0.403$	$p = 0.073$ $r = 0.121$
Mother's age	$p = 0.006 *$ $r = 0.321$	$p = 0.000 *$ $r = 0.355$	$p = 0.000 *$ $r = 0.419$	$p = 0.006 *$ $r = 0.506$
Father's education level	$p = 0.001 *$ $r = 0.435$	$p = 0.020 *$ $r = -0.153$	$p = 0.739$ $r = -0.022$	$p = 0.110$ $r = -0.108$
Mother's education level	$p = 0.000 *$ $r = 0.745$	$p = 0.000 *$ $r = -0.244$	$p = 0.000 *$ $r = -0.286$	$p = 0.139$ $r = -0.098$
Father's job	$p = 0.078$ $r = 0.032$	$p = 0.118$ $r = 0.104$	$p = 0.716$ $r = -0.024$	$p = 0.383$ $r = -0.059$
Mother's job	$p = 0.354$ $r = 0.165$	$p = 0.484$ $r = -0.046$	$p = 0.510$ $r = -0.044$	$p = 0.172$ $r = -0.091$
admission history	$p = 0.121$ $r = -0.124$	$p = 0.000 *$ $r = 0.473$	$p = 0.000 *$ $r = 0.495$	$p = 0.000 *$ $r = 0.305$

\*The significance level  $P < 0.05$ .

## DISCUSSION

Hospitals are the transmission centers of knowledge and medical skills and establish remarkable sources for data and technology which try to protect and rehabilitate physical and psychological health of people in society by use of their facilities and specialized services.<sup>[14]</sup>

There were significantly direct relation between the patients' fathers' age and satisfaction of medical and welfare services respectively so that as their fathers got older, their satisfaction was higher. The same significantly direct correlation was seen between their mothers' age and satisfaction of mentioned sorts of services in a way that the older mothers had higher levels of satisfaction.

This may be due to this point that people become more patient and can control their feelings and expectations so that they are able to behave more logically.

Significantly converse correlation was seen between satisfaction of medical services and their mothers' and fathers' levels of education so that higher education parents had lower level of satisfaction of medical services. The same correlation was found between mothers' education level and their satisfaction of welfare services in a way that the mothers who were more educated, had less satisfaction of welfare services.

Naturally, apparently higher educated parents inform more about appropriate sorts of services and expect that the best welfare services would be provided for their children. They pay attention more to the services given by doctors and expect that the doctors do their best, be present whenever needed, inform them before doing any procedures (including any clinical and paraclinical tests)

and finally answer their questions well. There was significantly direct correlation between having admission history and satisfaction of medical, welfare and nursing services. Probably, the parents must have formed their own logical expectations about provided services due to recurrent admissions of their children and repeated referrals.

There were significantly direct correlation health literacy and patients' fathers' and mothers' education level ( $p=0.001$ ,  $r=0.435$  and  $p=0.001$ ,  $r=0.745$ ) respectively so that the understanding and perceiving of health related information and their application increased when their education levels developed. This is also due to augment their patience and experience during the time so that they achieve health – related information correctly and use them appropriately in order to make decisions and take the behaviors connected to their children's health condition.

45 (108 cases), 31.7 (76 cases) and 23.3 (56 cases) percent of the studied patients had insufficient, borderline and enough level of health literacy, respectively. Health literacy is defined as a series of reading, listening skills, making decision analysis, the ability of applying these skills in health circumstances which are not necessarily correlated to education years or general reading ability.<sup>[15]</sup> So, WHO introduces health literacy as the most important modifier of health. It recommends all countries to establish an institute consisted of all individuals affected by this issue in order to monitor and coordinate strategic activities for improving health literacy in different societies.<sup>[16,17]</sup>

Therefore, health literacy and its effects on different dimensions of people's life, especially, patients should be



considered remarkably. It is obvious that most of educations and information in health system is in the form of writing and beyond the levels which are understandable for people nowadays. As a result, learning and finding out new health information need high skills in reading, calculations and decision making skills.

Today, the need of ability in achieving self-care skills and the presence of special needs such as the necessity of doing specific tests and precise referrals of children lead to increase the importance of health literacy in this group. This is mainly due to massive prevalence of chronic diseases and their consequences. Hence, insufficient amount of health literacy is a warning for the officials, policy-makers and stakeholders in health field. On the other hand, low level of health literacy causes recurrent and unnecessary referrals of people to the doctors. It also leads to make hospitalization prolonged. Subsequently, this increases costs and wastes of budget in health sector.

The mean satisfaction score of medical services, in present study was  $82/27 \pm 19/86$  in the studied hospitals. It was 37 percent in Hosseini et al's study.<sup>[5]</sup> Akbarian found that the highest level of satisfaction was related to the doctors' behaviors and their manner.<sup>[18]</sup> Jebbraieli et al did the study in Urmieh University Of Medical Sciences about the satisfaction of patients related to provided services. They reported lower level of satisfaction than expected in the studied hospitals.<sup>[19]</sup> This is not compatible with the present study's results. The mean satisfaction scores of nursing and welfare services were, in turn,  $85/23 \pm 29/44$  and  $71/33 \pm 25/25$ .

Aslan Abadi and Shahbazi studied patients' mothers' satisfaction of nursing services. They came to this conclusion that their mean satisfaction was  $74/77$ .<sup>[20]</sup> Hosseini et al<sup>[5]</sup> reported moderate level of satisfaction. Moghadasian et al investigated satisfaction of nursing services and their interaction with patients. Considering patients' and their parents' needs of what they want to know, leads to increase their satisfaction of hospital services.<sup>[5]</sup> Although getting in touch with the patients are important generally, it is more crucial for the patients suffering from cancers. In fact, it is necessary to make sound decisions and make them involved in care process and prevention from side effects of current remedies which they receive. This necessity is more remarkable when they admit in hospital.<sup>[5]</sup>

As a matter of fact, taking into consideration the patients' and their parents' needs to know about what they want, leads to increase satisfaction of hospital services. This shows the importance of patients' relatives education. Because it decreases fear and anxiety about disease and therapeutical alternatives which results in improving clients' satisfaction. Furthermore, patient education leads to diminish care and remedy costs,

promote health, decrease side effects and admission duration by knowledge and skill development.<sup>[5]</sup>

In addition, positive correlation between care behaviours and patients' satisfaction of their relatives shows that nurses combine humane feeling with nursing art in their care giving, spend more time for direct communication with patients, pay attention to their problems and social aspects of care, play important role in making the clients satisfied and, finally, assist to increase patients treatment compliance and improve their performance.<sup>[22]</sup> Hospital staffs should consider parents' and children's needs through holding sessions with presence of child consultant and expert people, because it is strived nowadays that patient would be the main core of treatment process so that all therapeutical measures supposed to be done for him/her. In fact, patients' satisfaction could be known as providing the services qualifyingly.

This sort of satisfaction is not made by high technology but staffs' behaviours and performance are so important. In other words, patient's satisfaction can be presented by his/her needs, expectations, preferences and experiences of receiving health cares. It shows that treatment and health staffs are aware of the significance of biological, mental and social needs of the patients and the importance of providing efficient response to them.

Finally, it can be concluded that health literacy improvement affects considerably health condition and health promotion of the people. In general, this project showed very insufficient level of patients' families' health literacy which illustrates the essentiality to pay more attention to this issue in health promotion programs. This goal can be attained by cooperation of different sectors such as mass media as the most important health information resources for the majority of the people and the country health system.

## LIMITATIONS

Since this study was done among children suffering from cancer, its finding cannot be generalized to other age groups. In addition, another study should be conducted to search the effect of health literacy on different aspects of health among this people. The other limitation of this investigation was self-reporting of responses and collected data.

## CONCLUSION

45 (108 cases), 31.7 (76 cases) and 23.3 (56 cases) percent of the studied patients had insufficient, borderline and enough level of health literacy, respectively. The mean scores of satisfaction of medical, welfare and nursing services were  $82.27 \pm 19.86$ ,  $71.33 \pm 25.25$  and  $85.23 \pm 29.44$  respectively. The mean scores of satisfaction of medical, welfare and nursing services were rather appropriate. There was significant relation between fathers' age and their satisfaction of

medical and welfare services provided in the hospitals. Also, significant relation was seen between mothers' age and three studied sorts of services. Besides, there was significantly converse relation between parents' education level and satisfaction of medical services. The same relation was also reported between mothers' education level and satisfaction of welfare service. A significantly direct relation was found between the history of patient admission and satisfaction in three sorts of mentioned services. There was significantly direct correlation between health literacy and parents' health education levels, Also between health literacy and Mother's age. There were also significantly direct relation between three kinds of services reciprocally. As noted, the improvement of hospital services quality is accompanied by increase in patient's satisfaction level so that implementing of educational programs including communication and care skills to health and treatment staffs is a cornerstone for patient treatment, the health promotion of society and also quality promotion. In general, developing of health literacy skills in society and also increasing the satisfaction of services can be achieved by providing comprehensive programs, media establishment and providing easy and understandable instruction materials for the people with insufficient health literacy, regular relation between health stakeholders with services receivers and also sufficient educational interventions.

#### ACKNOWLEDGEMENT

This article is submitted in Social Factors Affecting Health Research Center of Sharekord University Of Medical Sciences with the number of 2348 and IR. SKUMS. REC. 1395. 178 Ethical Code. The authors thank all officials and patients' relatives and parents participating in this research.

#### REFERENCES

1. Mahmood alilo M, Hashemi Nosratabad T, Farshbaf Manisefat F. The effectiveness of play therapy according levy approach in reduction of anxiety in children with diagnosed cancer. *Holist Nurs Midwifery*, 2015; 25(1): 54-62.
2. Afsaneh Zareapour, Dr Masoud Falahi Khoshknab, Zahra Kashaninia, Dr Akbar Biglarian, Roonak Babashahabi. Effect of group play therapy on depression in children with cancer. *Scientific Journal of Kurdistan University of Medical Sciences* 2009; 14(3): 64-72.
3. Martin CG, Turkelson SL. Nursing care of the patient undergoing coronary artery bypass grafting. *J Cardiovasc Nurse* 2006; 21: 109-117.
4. Rezaeian m, sharifi-rad gh r, etemedi a, jazini a Teachers knowledge, attitude and practice of effective communication skills training, research in health system, 2010; 6(2): 217-225.
5. Hosseinian M, Shahshahani M S, Adib-Hajbagheri M. Mothers satisfaction of hospital care in the pediatric ward of Kashan Shahid Beheshti hospital during 2010-11. *Feyz*, 2011; 15(2): 153-160.
6. Kats S. When the child's illness is life threatening: Impact on the parents. *Pediatr Nurs*, 2002; 28(5): 453-463.
7. Ansari H, Ebadi F, Mlasadqy Gh A. Evaluation of patients satisfaction in hospitals under Iran University of Medical Sciences. *J Birjand Univ Med Sci*, 2004; 11(13): 38-45.
8. Hajian K. Inpatient satisfaction of how health services in hospitals and shahid beheshti & Yahyanejad Babol. *J Babol Univ Med Sci*, 2000; 9(2): 51-60.
9. Alamai A, Akbarzadeh K. Review of patient satisfaction of services provided in hospitals in Eilam. *J Ilam Med Sci*, 2004; 12(44) 45: 6-10.
10. Bragadottir H, Reed D. Psychometric instrument evaluation: the pediatric family satisfaction questionnaire. *Pediatr Nurs*, 2002; 28(5): 475-478.
11. Mahnoush Reisi, Firoozeh Mostafavi, Homamodin Javadzade, Behzad Mahaki, Elahe Tavassoli, Gholamreza Sharifirad. Impact of Health Literacy, Self-efficacy, and Outcome Expectations on Adherence to Self-care Behaviors in Iranians with Type 2 Diabetes. *Oman Medical Journal*, 2016; 31(1): 52-59.
12. Mahnoush Reisi, Seyed Homamodin Javadzade, Akbar Babaei Heydarabadi, Firouzeh Mostafavi, Elahe Tavassoli, Gholamreza Sharifirad The relationship between functional health literacy and health promoting behaviors among older adults. *Journal of Education and Health Promotion*, 2014; 3:119.
13. Pourmovahed Z, Dehghani Kh, Shakiba Me, Shahri T. Mothers' satisfaction Rate of Hospital Cares in the Pediatric Ward at Sadoqi Hospital of Yazd (2004). *Behbood J*, 2007; 11(2): 227.
14. Ahmadi B, Ziwdar M, Rafiei S. Patients' satisfaction in first rank Hospitals of Tehran University of Medical Sciences: A cross-sectional study in 2009. *payavard.*, 2010; 4(2-1): 44-53.
15. Sihota S, Lennard L. Health literacy: being able to make the most of health. London: National Consumer Council, 2004.
16. Nutbeam D, Kickbusch I. Advancing health literacy: A global challenge for the 21st century. *Health Promot*, 2000; 15(3): 183-4.
17. WHO. Closing the gap in a generation: health equity through action on the social determinants of health: Commission on Social Determinants of Health final report. Geneva: World Health Organization, 2008.
18. Akbarian MJ. Satisfaction of patients discharged from public hospitals and private in Yazd province. Master degree thesis Health Management tahghighat Tehran University, 2009: 49.
19. Jabraeily M, Rahimi B, Khodayari R, Goli Farhodi G, Mohamadi A. Assessment of inpatient satisfaction with quality services in training centers of Urmia University of Medical Sciences with the servequal model. *IHIMA*, 2013; 7(2): 19-24.

20. Aslanabadi S, Shahbazi S. Mothers' Satisfaction with Nursing Care in a Children's Hospital. *IJN*, 2014; 26(86): 61-70.
21. Moghaddasian S, Abdollah-Zadeh F, Rahmani A, Salehain M, Firouzian AA. Nurse –patient communication and its relation to satisfaction with nursing services in view point of cancer patients hospitalized in shahid ghazi hospital, Tabriz. *Journal of North Khorasan University of Medical Sciences*, 2013; 5(2): 459-466.
22. Chang E, Hancock K, Chenoweth L, Jean Y, Glasson J, Gradidge K, Graham E. The influence of demographic variables and ward type on elderly patients, perceptions of needs and satisfaction during acute hospitalization. *Int J Nurs Pract*, 2003; 9: 191-201.