DEVELOPMENT OF A SATISFACTION QUESTIONNAIRE FOR CANCER PATIENTS IN TURKEY

Salih Akyüz[1], Jülide Yıldırım[2], Dilek Öztaş[3]

1. Ankara Yıldırım Beyazıt University Atatürk Education and Research Hospital, Director of Administrative and Financial Services, Ankara, Turkey
2. TED University, Department of Economics, Ankara, Turkey
3. Ankara Yıldırım Beyazıt University, Department of Public Health, Ankara, Turkey

Abstract
Purpose is to develop and validate a novel patient satisfaction questionnaire for Turkish cancer patients. A questionnaire has been constructed. The survey questions relate to patient satisfaction with healthcare providers, medical care received and hospitals, in addition to questions exploring the expectations of the patients about advanced care. 710 cancer patients participated in the survey from eight public hospitals in Ankara. Both exploratory and confirmatory factor analysis have been employed to verify the scale dimensions. A hypothetical model was evaluated by structural equation modelling to determine the adequacy of goodness-of-fit to sample data. The exploratory factor analysis identified three interpretable dimensions which explained 92 per cent of the variance for the patient satisfaction. The subscales derived from these factors were satisfaction from healthcare providers; satisfaction from hospital and satisfaction from health service. Each subscale had acceptable to excellent internal consistency (Cronbach's alpha ranged from 0.70–0.95). Structural equation modelling resulted in a sufficient model fit of 19 items within three domains. This study developed and validated a reliable patient satisfaction instrument for cancer patients in Turkey. The instrument showed excellent psychometric properties, thus it can be incorporated into an existing hospital quality monitoring system to monitor patient satisfaction.
Keywords: Cancer; factor analysis, patient satisfaction, structural equation modelling, Turkey.

TÜRKİYE'DEKİ KANSER HASTALARI İÇİN MEMNUNİYET ANKETİ GELİŞTİRME

Çalışmanın amacı, Türk kanser hastaları için yeni bir memnuniyet anketi geliştirmektir. Anket soruları, hastaların ileri düzey bakım konusundaki beklentilerini araştıran soruların yanı sıra sağlık hizmeti sağlayıcıları, tıbbi bakım ve hastanelerdeki hasta memnuniyeti ile ilgilidir. Ankara'daki sekiz devlet hastanesinden 710 kanser hastası araştırmaya katıldı. Ölçek boyutlarını doğrulamak için açımlayıcı ve de doğrulayıcı faktör analizi kullanılmıştır. Bir hipotetik model, örnek verilere uygunluğun yeterliliğini belirlemek için yapısal eşitlik modellemesi ile değerlendirilmiştir. Açımlayıcı faktör analizi, hasta memnuniyeti için varyansın yüzde 92'sini açıklayan üç yorumlanabilir boyut belirlemiştir. Bu faktörlerden elde edilen alt ölçekler; sağlık hizmeti sağlayıcılarından memnuniyet, hastane memnuniyeti ve sağlık hizmetlerinden memnuniyet. Her bir alt ölçek mükemmel iç tutarlılık nedeniyle kabul edilebilirdi (Cronbach alfa değeri 0.70-0.95 arasındaydı). Yapısal eşitlik modellemesi, üç alan dahilinde 19 maddeden oluşan uygun bir model oluşturmuştur. Bu çalışma, Türkiye'de kanser hastaları için güvenilir bir hasta memnuniyeti aracını geliştirdi ve onayladı. Ölçme aracı mükemmel psikometrik özellikler gösterdi, böylece hasta memnuniyetini izlemek için mevcut bir hastane kalite izleme sistemine dahil edilebilir.

Anahtar Kelimeler: Faktör analizi, hasta memnuniyeti, yapısal eşitlik modellemesi, kanser, Türkiye.

Corresponding Author: *Dilek Öztaş, Department of Public Health, School of Medicine, Ankara Ankara Yıldırım Beyazıt University, Ankara, Turkey. e-mail: doztas@hotmail.com*

Introduction

Cancer patients have significant symptom distress (1,2).The most common symptoms include pain, fatigue, weight loss, lack of appetite, nausea, anxiety, shortness of breath, and confusion (3,4). Unrelieved symptoms adversely affect patients' quality of life and ability to function, as well as the effectiveness of treatment (5). Hence providing quality care, focusing on symptom management, and preventing suffering, is an essential part of an effective cancer treatment. There has been increasing emphasis on the use of patient satisfaction surveys in healthcare services to assess elements of quality of care. Patient satisfaction has been regarded as an important and commonly used indicator of quality in healthcare, as it is associated with continuity of care which leads to better treatment outcomes. Whereas dissatisfaction with care may increase the risk of malpractice lawsuits (6). Moreover, patient satisfaction surveys provide patients an opportunity to participate in their care and hence build confidence and engagement. Even though satisfaction with care has its limitations as an endpoint and does not equate with overall quality of care, it articulates the perspectives of vulnerable patients (7). Understanding the patients' perceptions about the relative importance of elements of care and explore their expectations about the course of their treatment, has potentially important implications for the improvements in design and implementation of the treatment. Alternative patient satisfaction instruments have been developed for Western countries, especially for USA and Canada (8-10). Yet their results may not be generalized for Turkey. The aim of this paper is to develop and validate a novel instrument to measure satisfaction of cancer patients, in order to provide useful insights for healthcare policy makers in promoting palliative care services. The aim of this study is develop and validate a novel patient satisfaction questionnaire for Turkish cancer patients.

Material and Method

In order to develop and evaluate the validity of a novel patient satisfaction questionnaire, cross-sectional survey of cancer patients has been carried out in 8 public hospitals in the capital city Ankara. 710 cancer patients participated in the survey. Both exploratory and confirmatory factor analysis have been employed to verify the scale dimensions. The sample was randomly divided using a 50/50 split so that different samples were used for the exploratory and confirmatory factor procedures. This allowed us to test the validity of the satisfaction dimensions in an independent sample and addressed the concerns about sample specific factor structure.

The patient charts have been screened in collaboration with the healthcare providers in the respective hospitals to identify the potential participants. The patients were eligible for the study if they met the following inclusion criteria: over 18 years of age; has cancer at an advanced stage; minimum expected hospital longer than 72 hours. The total number of eligible cancer referrals during the period of study was around 1100. Before prospective respondents agreed to participate in the study, they have been informed about the aim of the study and the overall subject of the questions. The researcher made it clear that the information provided was confidential

and full names would not be used in the reporting. Interviewees/participants were informed that they could leave the interview at any point or request that the interviews were terminated.

Questionnaire Development:

Following a thorough literature survey, to help identify the domains and items related to quality of care, the questionnaire has been developed. Then additional elements have been considered which were based on the experiences of the main researcher (SA) who was a member of the Palliative Care Commission which functions under the National Cancer Advisory Commissionat the Ministry of Health of Turkey. Moreover, discussions with the health care providers at the participating hospitals also contributed to the design and development of the questionnaire. At the end of questionnaire development phase, a comprehensive list of 19 elements of care has been identified, relating to medical and nursing care; satisfaction with the health care institution; and satisfaction with the health care. In order to assess the degrees of satisfaction, response options have been employed using a 5-point ordinal scale that ranged from one to five (i.e., 'not satisfied at all' to 'very satisfied'). The survey instrument also contained questions regarding the respondent's demographic factors, such as gender, age, marital status, education level, income level, the presence of previous hospitalization in other hospitals, and the presence of previous hospitalization in the hospital studied.

The survey development process has involved two rounds of piloting at Gülhane Military Medical Academy Hospital, where the questionnaire has been administered to 94 cancer inpatients. The results of the pilot survey have been used to revise the questionnaire. In line with the patients' comments and contributions regarding the wording and clarity of the questions, minor adjustments were made, but no items were removed or added.

Statistical Analysis:

In order to develop and cross-validate the patient satisfaction scale for cancer patients in Turkey, we randomly assigned the 710 participants to either an exploratory sample (N = 355) or a confirmatory sample (N = 355). In the exploratory sample we conducted an exploratory factor analysis (EFA) using the principal axis method and Varimax rotation. The results of the EFA were crossvalidated using the confirmatory sample employing confirmatory factor analysis (CFA).Data were analysed with Stata 14. Missing values were imputed by the expectation maximization method(11). Descriptive statistics, including frequencies, percentages, means and standard deviations (SDs), were calculated for the socio-demographic variables.

Within the analytical framework of the study, structural equation model (SEM) was performed. The defined model tested in this study related to the statements within three predefined domains: satisfaction from healthcare providers; satisfaction from hospital and satisfaction from health service. Depending on the complexity of the tested model, a sample size exceeding 200 cases could be considered large (12). Linear SEM estimates two kinds of models: a measurement model and a structural model. A measurement model is one that specifies some number of latent, unmeasured variables or factors, each with a specified number of measured indicators or variables. A structural model includes a set of paths (regression coefficients) or correlations between the various measured and unmeasured variables in the overall model (13). The fit of the model was evaluated using multiple criteria: Chi square/df ratio, comparative fit index (CFI), Standardized Root Mean Square Residual (SRMR), and the root mean

square error approximation (RMSEA). The chi-square statistic assesses the fit between the hypothesized statistical model and the set of observed items. A statistically significant chi-square test suggests lack of satisfactory fit to data. CFI compares the fit of a null model (i.e., when unobserved variables are uncorrelated and independent) with the fit of the researcher's model. A CFI value equal to 0 represents the fit in the null model in which all variables are modelled as uncorrelated. While a CFI value equal to 1 represents the fit of the saturated model in which enough parameters exist to replicate the sample covariance matrix without error. A CFI value of greater than 0.90 shows a psychometrically acceptable fit to the data. RMSEA describes how well the model fits the observed data. The value of RMSEA must be below 0.05 to show good fit.

Results

Table 1: Patient Characteristics

		n	%			n	%
Age	18-45	233	32.82	**Employment status**	Employed	247	34.78
	46-60	244	34.37		Retired	203	28.59
	61-93	233	32.82		Housewife	167	23.52
Gender	Female	323	45.49		Student	18	2.54
	Male	387	54.51		Unemployed	75	10.57
First admission to the hospital	Yes	415	58.45	**Residency**	Rural	297	41.83
	No	295	41.54		Urban	413	58.17
Marital status	Married	532	75	**Treatment time**	Less than a month	145	20.42
	Not married	178	25		1-6 months	253	35.63
Education	Illiterate	57	8.03		7-12 months	140	19.72
	Literate	53	7.46		13- 24 months	108	15.21
	Primary	383	53.94		More than 24 months	64	9.01
	Secondary	152	21.41	**Living arrangement**	Alone	59	8.32
	University	50	7.04		With family	650	91.68
	Graduate	15	2.11				

A total of 710 cancer patients have agreed to participate in the research. The questionnaire has been administered in separate face-to-face interviews, during September 2014 – June 2015. The instrument took approximately 20 minutes to complete. The mean age is 52 with a standard deviation of 14. The majority of the sample is men (54.57 per cent). Nearly 75 per cent of the patients are married and almost 92 per cent of them live with their families. It emerges that a great majority of the patients resides in urban areas and more likely to be primary and secondary school graduates from low income families. Nearly 31.85 per cent of the patients are employed and one third of them are retired (Table 1). Consistent with the latest global cancer figures (14), the most common primary diagnosis cancer type is lung cancer which is followed by breast cancer. Breast cancer is the most frequently diagnosed cancer among

females, accounting for 14.65 per cent of the total cancer cases. Lung cancer is the leading cancer site in males, comprising 27.39 per cent, of the total new cancer cases.

Exploratory Analysis:

An exploratory factor analysis was conducted, loading on the dimensions using principal components extraction with Varimax rotation. The Kaiser-Meyer-Olkin measure of sampling adequacy had an acceptable score of 0.93, implying that survey items were sufficiently correlated to warrant conducting a factor analysis. The factor loadings associated with the exploratory factor analysis were presented in column 2 of Table 2, where any item with loadings less than 0.4 was excluded. Three factors emerged with strong eigenvalues over 1.0 accounting for 81 per cent of the overall variance. Factor one had an eigenvalue of 8.3, factor 2 had an eigenvalue of 2.02, and factor 3 had an eigenvalue of 1.14. These factors were named according to the aspects of patient satisfaction, they reflected: satisfaction with healthcare providers (ten items), satisfaction with the health care institution (six items), and satisfaction with health services (three items).

On the basis of these findings, our questionnaire included19 items within satisfaction with the healthcare providers, the health care institution, health services; and advanced care planning (Table 2). Empirical analysis revealed that nearly half of the total variance (57 per cent) was explained by Factor 1, satisfaction with healthcare providers; a little over one fifth of total variance (24.4 per cent) was explained by satisfaction with the health care institution, and the rest (18.6per cent) of the total variance was explained by the remaining factor.

The reliability of each attribute was examined by the Cronbach's alpha coefficients. Table 3shows the reliability estimates for the dimensions,healthcare providers, the health care institution, health services, and the total satisfaction score. Cronbach's alpha for the scale dimensions ranged from 0.70 to 0.95 and was 0.92 for the total satisfaction score, indicating a strong internal reliability among items with the same attributes. The internal consistency reliability of the overall scale exceeded Nunnally's criteria of 0.90, suggesting that there is little measurement error in the instrument (15). Correlations between the items and their dimensions, the inter-item correlation, ranged from 0.39 to 0.75.

Confirmatory Factor Analysis:

Confirmatory Factor Analysis (CFA) was performed with an independent sample of 355 patients to provide evidence for construct validity and to test the three factor structure of patient satisfaction survey for cancer patients. CFA tests whether a proposed model 'fits' the observed variance covariation matrix between items. Maximum likelihood was the estimation method and covariance matrices were analyzed to test the original factor structure of the survey. Results of the confirmatory factor analysis indicated a good fit (16) for original three factor structure of the survey for the present sample(X^2 (149)= 463.27, p<0.000, X^2/df-ratio = 3.11; CFI=0.90; SRMR=0.04; RMSEA=0.074).

Table 2: Factor Loadings From The Exploratory Factor Analysis (Efa), The Confirmatory Factor Analysis (CFA)

To what extend do you agree with the following statement?	EFA	CFA
Factor 1: Healthcare providers		
My doctor/ nurse/ physician who examined me was respectful to me.	0.84	0.82
The doctor who examined me paid attention to my personal privacy / dignity (closed the door during the examination; or provided a screen while dressing or undressing).	0.81	0.79
My doctor/ nurse/ physician answered my questions about my condition and treatment explicably.	0.86	0.83
My doctor/ nurse/ physician provides me (enough) support to enhance my quality of life.	0.86	0.75
I believe that my doctor/ nurse/ physician has full information about my condition.	0.83	0.73
I have confidence and trust in the way I am being treated.	0.87	0.84
I do not consider changing my doctor.	0.73	0.72
My doctor/ nurse/ physician provides sufficient care / service for cancer treatment.	0.82	0.76
I am satisfied with the attitude and attentiveness of the chemotherapy / radiotherapy staff (answering questions / providing help)	0.77	0.73
I can freely / easily communicate with my doctor/ nurse/ physician.	0.76	0.82
Factor 2: Healthcare institution		
There are enough seats and places to spend time in the waiting room.	0.63	0.50
I can easily express my complaints to hospital administration.	0.58	0.62
There are places to spend time in the hospital after receiving chemotherapy / radiotherapy.	0.74	0.59
My hospital provides psychological support services for me.	0.69	0.65
Hospital staff informed me about the institutions/ centers where I can get pain treatment.	0.70	0.64
I can easily commute to my hospital.	0.48	0.49
Factor 3: Health service		
I am able to cope with my daily life easily after cancer treatment / intervention.	0.72	0.69
I received relevant / satisfactory information about my complaints and illness.	0.61	0.79
Receiving treatment in the same environment with non-cancer patients has a positive psychological effect for me.	0.62	0.57

In order to investigate the predictive validity of the questionnaire a structural equation modelling has been performed. The hypothesized threefactor model identified via EFA consisted of three first-order latent variables representing the following three dimensions: satisfaction with healthcare providers (10 items), the health care institution (6 items), and health services (3 items). Column 3 of Table 2 summarizes the results of the confirmatory factor analysis (CFA). The structural model consists of three interrelated constructs, satisfaction with healthcare provider, satisfaction with the healthcare institution, and satisfaction with health services. The deviance

statistic quantifies the fit of a model compared with the saturated model (i.e., a model that fits perfectly with the empirical data). The likelihood ratio test was used to compare the relative fit of the two models. $\chi^2(149) = 463.27$ (p value <0.001) imply that model has good fit compared to the saturated model. This model also explained 76 per cent of the variation in the data. Internal consistency was high for the resulting 19-item questionnarre (0.92) and acceptable.

Reliability analysis for the confirmatory sample showed an internal consistency of 0.95 for healthcare providers, 0.77 for hospital / institution, and 0.65 for health service. The standardized factor loadings range from 0.77 to 0.82 for healthcare providers, 0.49 to 0.65 for hospital / institution, and 0.57 to 0.79 for health service. It can be concluded that our exploratory findings were successfully replicated in the confirmatory analysis. The three-factor solution in the exploratory sample emerged also in the confirmatory sample and the reliability statistics demonstrated good internal consistency across both samples.

Table 3: Reliability Estimates For The Scale Dimensions

Dimension	Number of items within the dimension	Cronbach's α coefficient for the dimension	Mean Dimension Score (SD)	Maximum possible dimension Score	Inter-item correlation (IIC)
Healthcare providers	10	0.95	44.09 (7.18)	50	0.58*-0.71*
Healthcare institution	6	0.77	20.99 (5.13)	30	0.34*-0.49*
Health services	3	0.70	11.32 (2.38)	15	0.39*-0.49*
Total satisfaction score	19	0.92	89.08 (13.29)	95	†

Values for IIC are lowest–highest Spearman rank correlation coefficient.

* Represents statistical significance at 1% level of significance; †Denotes not computable

Discussion

The aim of this study is to contribute to the existing literature by providing the first study which developed a valid and reliable questionnaire assessing satisfaction of cancer patients in Turkey with respect to healthcare providers, institutions and healthcare they receive. For this end following a thorough literature survey and with the help of expert opinions, we have developed a patient satisfaction questionnaire. The survey consists of 19 elements of care, which then were organized into three domains: healthcare providers; healthcare institution; and health services. After two rounds of pilot survey to improve the questionnaire's acceptability and understanding, the questionnaire has been finalized. Data were analyzed with Stata 14. Both exploratory and confirmatory factor analysis were used to assess the underlying factor structure of the questionnaire. The results of the structural equation modelling provided additional evidence for the construct and predictive validity of the patient satisfaction questionnaire. The instrument showed excellent psychometric properties, thus it can be incorporated into an existing hospital

quality monitoring system to monitor patient satisfaction.

Our results showed that the three dimensions of patient satisfaction loaded differentially on the overall patient satisfaction. Although all three dimensions contributed substantially to patient satisfaction, satisfaction with healthcare providers' factor has the highest loading, followed by healthcare institution and health services, respectively. These findings suggest that satisfaction with healthcare providers is the central dimension of total patient satisfaction. It emerged from our analysis that respecting patients' informational and emotional needs, and paying attention to their personal privacy / dignity were essential for patient satisfaction, supporting existing literatüre (16). Moreover, the trust in healthcare providers' expertise, and in the way the cancer treatment has been delivered have proven to be important factors elevating the patient satisfaction. Patients' confidentiality and privacy concerns were major factors in determining patient satisfaction as well as affecting the quality of their medical care. Unless patients trust their healthcare providers, they may withhold information which may compromise

rendering optimal care. In cases where patients do not trust the expertise of the healthcare providers, they may fail to adhere to prescribed therapeutic regimens or drop out from care altogether. However, some patients do not receive cancer screening services because they are embarrassed (17,18). Additionally, our findings indicated that effective patient –healthcare provider communication was also associated with elevated patient satisfaction with care. This could be attributable to enhanced medical staff –patient interactions and patient-centeredness, the importance of which has been emphasized in the literatüre (19-22). With respect to healthcare institution factor, patients valued availability of recreational places at hospital where they could spend time while waiting and / or after receiving chemotherapy / radiotherapy, as an important factor towards to overall patient satisfaction. The ease of communication with healthcare institution as well as ease of commuting were also among the factors enhancing patient satisfaction. Besides, receiving treatment in the same environment with non-cancer patients had a positive impact on overall patient satisfaction.

Conclusions

This study has clarified the nature of patient satisfaction among cancer patients in Turkey. The questionnaire can be used to look at specific areas, such as healthcare providers, healthcare institution and healthcare service, or as a whole. The scale can be a useful tool for assessing patient satisfaction to determine how well the needs of patients are met. The findings from this study are relevant to clinicians and researchers in oncology and algology settings. Although this study has valuable information about the perception and

assessment of inpatient care by cancer patients, it has several limitations.

The central limitation is that the survey for this study has been carried out in a single province. Ankara is the capital city, with a high level of medical services provided compared to the rest of the provinces, only second to Istanbul. Thus, to overcome this limitation impairing generalizability, more research is required surveying more patients across Turkey. Additionally, this study focused on cancer patients without distinguishing among different patient groups. Lastly, this study only considered patient

satisfaction. Hence further research examining the factors associated with patient and family satisfaction for different patient groups and end of life patients, would provide more information for policy makers in designing, improving and implementing policies related to palliative care.

References

1. Teunissen SC, Wesker W, Kruitwagen C, de Haes HC, Voest EE, de Graeff A. Symptom prevalence in patients with incurable cancer: a systematic review. Journal of Pain Symptom Management 2007;34(1):94-104.
2. Akin S, Can G, Aydiner A, Ozdilli K, Durna Z. Quality of life, symptom experience and distress of lung cancer patients undergoing chemotherapy. Eur J Oncol Nurs 2010;14(5):400-409.
3. Barbera L, Seow H, Howell D, Sutradhar R, Earle C.&Liu Y. et al. Symptom burden and performance status in a population-based cohort of ambulatory cancer patients. Cancer 2010;116(24):5767-5776.
4. Bağçivan G, Tosun N, Kömürcü Ş, Akbayrak N, Özet A. Analysis of patient-related barriers in cancer pain management in Turkish patients. J Pain Symptom Manage 2009;38(5):727-737.
5. Cleeland CS, Mendoza TR, Wang XS, Chou C, Harle MT, Morrissey M. et al. Assessing symptom distress in cancer patients. Cancer 2000;89(7):1634-1646.
6. Stelfox HT, Gandhi TK, Orav EJ, Gustafson ML. The relation of patient satisfaction with complaints against physicians and malpractice lawsuits. The American Journal of Medicine 2005; 11:,1126–1133.
7. Heyland, DK, Cook DJ, Rocker GM, Dodek PM, Kutsogiannis DJ, Skrobik Y, et al. The development and validation of a novel questionnaire to measure patient and family satisfaction with end-of-life care: the Canadian Health Care Evaluation Project (CANHELP) Questionnaire. Palliative Medicine 2010; 24(7):682-695.
8. Kristjanson LJ. Validity and reliability testing of the FAMCARE Scale: measuring family satisfaction with advanced cancer care. Social Science & Medicine 1993 36(5), 693-701.
9. Yabroff, K.R., Mandelblatt, J.S. & Ingham, J. The quality of medical care at the end-of-life in the USA: existing barriers and examples of process and outcome measures. Palliative Medicine 2004 18(3), 202-216.
10. Brédart A, Mignot V, Rousseau A, Dolbeault S, Beauloye N, Adam V, et al. Validation of the EORTC QLQ-SAT32 cancer inpatient satisfaction questionnaire by self-versus interview-assessment comparison. Patient Education and Counseling 2004; 54(2): 207-212.
11. Schafer JL. & Graham JW. Missing data: our view of the state of the art. Psychological Methods 2002;7:147–177.
12. Kline R. Principles and Practice of Structural Equation Modeling. 2nd ed. New York, NY: The Guilford Press; 2005.
13. MacCallum RC.&Austin JT. Applications of structural equation modeling in psychological research. Annual Review of Psychology 2000; 51: 201–226.
14. Jemal A, Bray F, Center MM, Ferlay J, Ward E, Forman D. Global cancer statistics. CA: A Cancer Journal for Clinicians 2011; 61(2): 69-90.
15. Nunnally J & Bernstein I. Psychometric theory. 3rd ed. New York, NY: McGraw-Hill, Inc; 1994.
16. Beach MC, Sugarman J, Johnson RL, Arbelaez JJ, Duggan PS, Cooper LA. Do patients treated with dignity report higher satisfaction, adherence, and receipt of preventive care?. The Annals of Family Medicine 2005; 3(4): 331-338.
17. Deniz S, Kurt B, Oğuzoncul AF, Nazlıcan E, Akbaba M, Nayir T Knowledge, attitudes and behaviours of women regarding breast and cervical cancer in Malatya, Turkey. PLoS ONE 2017;12 (11): e0188571.
18. Moore IN, Snyder SL, Miller C, Qui An A. Confidentiality and Privacy in Health Care from the Patient's Perspective: Does HIPPA Help. Health Matrix 2007; 17: 215.
19. Heyland DK, Dodek P, Rocker G. et al. What matters most in end-of-life care: perceptions of seriously ill patients and their family members. Canadian Medical Association Journal 2006; 174(5): 627-633.
20. Guerriere DN, Zagorski B, Fassbender K, Masucci L, Librach L, Coyte PC. Cost variations in ambulatory and home-based palliative care. Palliative Medicine 2010; 24(5): 523-532.
21. Ong LM, Visser MR, Lammes FB, de Haes JC. Doctor–patient communication and cancer patients' quality of life and satisfaction. Patient Education and Counseling 2000; 41(2): 145-156.
22. Hudon C, Fortin M, Haggerty JL, Lambert M, Poitras ME. Measuring patients' perceptions of patient-centered care: a systematic review of tools for family medicine. The Annals of Family Medicine 2011; 9(2):155-164.