2019

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Recommended Citation

Gagin R, HaGani N, Zigelboim E, Shinan-Altman S. Patient-initiated second opinions during acute hospital care. *Patient Experience Journal*. 2019; 6(3):66-73. doi: 10.35680/2372-0247.1381.

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Patient-initiated second opinions during acute hospital care

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Abstract

Second opinions are used in medicine in order to make better-informed decisions. Only a few studies have examined patient-initiated second opinions, and even fewer have examined it in the context of acute hospitalization. It is not clear whether patients and families are aware of this right and how often they exercise it during acute hospitalization. The objective of this paper is to identify factors associated with the awareness and utilization of patient-initiated second opinions. A survey was conducted among 92 neurosurgical patients who completed a questionnaire that included information regarding: awareness of second opinion consultations, reasons for not seeking a second opinion, satisfaction from the second opinion and sharing the results of the second opinion with the first physician. Multivariate Logistic Regression analysis was performed to identify potential confounders associated with awareness and seeking a second opinion. Findings revealed that 79% percent of the participants were aware of their right to receive a second opinion; however, only 31% opted to receive a second opinion before/during the hospitalization. Fifty-eight percent received a second opinion related to previous medical conditions. Fifty-four percent did not inform the first physician about the results. The Logistic Regression showed that health insurance, education, religiosity and gender predicted awareness and utilization of second opinions. Current findings indicate that although patients are aware of their right to a second opinion and many have used it in the past, they rarely use it during acute hospitalization. Encouraging health professionals in hospitals to refer their patients to a second opinion as part of shared decision-making, may improve the liability and efficacy of patients' care.

Keywords

Patient-initiated second opinions, shared decision making, patient-centered care, physician-patient relationship, social work in healthcare, health communication

Background

Patients and families often request a second opinion in order to reevaluate their medical diagnosis or treatment options, with the intention of returning to their first physician¹. Seeking a second opinion provides patients with a sense of control and involvement in their treatment plan². In some countries, such as the Netherlands, Australia and Israel, second opinions are embedded in the patients' bill of rights. Patients are entitled to seek a second opinion during hospitalization and the medical institution needs to assist them.^{1,3-4}

Second opinions may influence the diagnosis, prognosis and treatment in a critical manner. By reexamining the patient's condition and test results, second opinions can minimize medical errors and negligence and improve patients' sense of safety and health-related quality of life.⁵ For example, in a study conducted among 506 neuroradiology patients, there were 13% major and 21% minor discrepancy rates between first and second readings of computed tomography (CT) and magnetic resonance

imaging (MRI).⁶ In another study, 12% of the patients received changes in their treatment plan after surgery because of the second review of their radiologic imaging.⁷ These studies emphasize the differences in interpretation of medical findings, and demonstrate the importance of physicians reviewing their medical care in order to prevent medical errors.

Either physicians or patients can initiate second opinions. Physicians may propose a second opinion because they sense patients' dissatisfaction with their recommendations or in order to validate their diagnosis and treatment plan. Moreover, advice from a more experienced physician may aid the first physician, especially if they have reached a dead-end in determining the type of treatment.⁸ Patients' primary motivation for seeking a second opinion include their perceived need for clarity and reassurance regarding the first physician's assessment or dissatisfaction with the communication with the first physician.^{2,9}

Patients and families receiving acute care often need to make immediate decisions that may have a critical effect

on their lives. Although they may benefit from a second opinion at this time, they are overwhelmed and distressed, and may not have the emotional and physical stamina to seek a second opinion¹⁰. Furthermore, patients and families are confronted by various barriers when seeking a second opinion, including: financial considerations, low accessibility to professionals and lack of awareness to treatment options. In addition, patients are often concerned about how the second opinion might affect their relationship with the first physician.^{2,9} In a study conducted among orthopedic surgeons and neurologists, physicians confirmed that they struggle with patients who decide to seek a second opinion. They reported feeling offended, embarrassed and resentful towards their patients for seeking a second opinion. Physicians also reported that patients tend to conceal their intentions to seek a second opinion. As a result, the physician is unable to cooperate or implement the second opinion recommendations.⁸

Although patient-initiated second opinion has become an increasingly routine phenomenon within outpatient health care,¹¹ there is a paucity of studies on patient-initiated second opinion,¹²⁻¹³ especially in cases of acute hospitalization. Most studies that examined second opinions during hospitalization focused on second opinions initiated by physicians.¹⁴⁻¹⁵ Studies that did examine patients' initiated second opinion were mostly among oncology patients.⁹ These studies focused on reasons, motives and expectations in relation to second opinion,^{1,16} and did not focus on the barriers patients are facing when seeking a second opinion. To the best of our knowledge, no prior study to date has examined patient-initiated second opinion within the context of acute hospitalization.

Although seeking a second opinion is considered as a patient's right,¹⁷ and it has the potential of preventing medical errors and negligence, it remains underutilized by patients during acute hospitalization.

Objective

The overall objective of the current study was to identify factors associated with awareness and utilization of patient-initiated second opinion during acute hospitalization. Such information is important for healthcare professionals, mainly physicians, in order to improve communication with patients, prevent medical errors, and increase patients' adherence to treatment.

Method

Participants and procedure

A survey was conducted among 92 adult patients admitted to the neurosurgical department of a large hospital. We chose the neurosurgical department because it provides treatment in extreme situations and conditions such as

tumors of the brain and spine, making second opinion consultations a significant issue for both patients and physicians.

The Institutional Review Board of the Medical Center approved this study. Participation was voluntary and was mitigated by the neurosurgical department's social workers. Patients and families were approached during their hospitalization and were interviewed using a structured questionnaire. Inclusion criteria were: age 18 or above, being a patient in the neurosurgical department and having the necessary physical and mental capability to complete the questionnaire. All participants gave their informed consent. The questionnaire was constructed specifically for the purpose of this study, based on previous literature.^{1,16} In order to test the questionnaire for clarity, a pilot study was conducted among a small sample of five patients from the target population. The questionnaire was revised for unclear questions or phrases according to patients' feedback.

Measures

Dependent variables included: 1. *Awareness of the Patient's Rights Law section 7, indicating the right to receive a second opinion* (Yes/No); 2. *Utilization of second opinions* using one question: "Have you ever requested a second opinion?" (For the current medical condition/ for other medical conditions/ not at all).

Other factors associated with seeking and using a second opinion were measured by the following items: 1. Who initiated the consultation? (Patient, family, friends, physician); 2. How did you choose the second opinion physician? (Recommendation from family/friends, physician, internet, other patients); 3. Did you share your intention of seeking a second opinion with the first physician? (No, Partly, Yes); 4. Was the first physician sympathetic to your intention to seek a second opinion? (1=not at all, 4=very much); 5. Reasons for not seeking a second opinion consultation: no time, trust in the first physician, did not think about this option (Yes/No/Other); 6. Satisfaction from the second opinion, based on the following questions: Was the second opinion different from the first opinion? (1=not at all, 4=very different); Did the second opinion clarify your medical condition? (1=not at all, 4=very much).

Participants were encouraged to expand their responses in regard to their experience of using a second opinion, by open ended questions, for example: "Describe how you felt after sharing your intention to seek a second opinion with the first physician?"; "Describe why did you decide not to seek a second opinion?"; "Describe how did the second opinion contribute to you?". Participants' responses were recorded and summarized.

The independent variables included: Age, gender (Men/Women), family status (Single, Widower/Divorced, Married/Lives with a partner), years of education, socioeconomic status (Poor/ medium/ good/ very good), employment (employed/ unemployed), supplementary health insurance ownership (Yes/No), reported health status (1=good, 2=medium 3=severe), religiosity level (1-4, 1=not at all, 4=very much) and reason for hospitalization (tumor, head injury, an accident, back/leg problems, operation/catheterization).

Data analysis

All statistical analyses were conducted using IBM SPSS Statistics, version 25. Descriptive statistics were used in order to describe participants' demographic characteristics as well as the research variables. Pearson correlations were used to assess the associations between the main research variables. Two logistic regression models were conducted in order to predict awareness and utilization of second opinion consultations. Logistic regression is a form of statistical analysis, which aims to predict an outcome by more than one independent variable. It is used to explain the relationship between one dependent binary variable and one or more independent variables. In this study, only socio-demographic variables that were found to have significant associations with the outcome variables in the preliminary tests were entered into the Multivariate Logistic Regression models. These included: education, age, gender, supplementary health insurance ownership, reported medical status, religiosity level, and reason for hospitalization. Quotes from patients' responses to the open-ended questions were integrated into the quantitative results.

Results

The study population's socio-demographic characteristics are presented in Table 1.

The total sample included 92 participants. The majority were men (64%), were married (63%) and not employed (65%). The average age was 58.7 (SD=19.24). Half reported having severe health status (51%). Participants had an average of 12 years of education and most perceived their income as medium (35%) or good-very good (35%). The most common reasons for hospitalization were brain tumors (28.7%) and brain hemorrhaging / stroke (21.8%).

Awareness and utilization of second opinion consultations

Most participants were aware of their right to a second opinion (79%). However, only 19% reported seeking out a second opinion before hospitalization, and even less reported seeking a second opinion during the hospitalization period (12%). In addition, 50% of the participants said they do not intend to seek a second

opinion in the future and 32% said they have not decided whether they would seek a second opinion in the future. The most common reason for not seeking a second opinion for one's current medical condition was satisfaction and trust in the first physician (48%), as reported by participants: *"I trust the physicians in this hospital"*. Others reported they wanted to seek a second opinion but lacked the time or resources to do so (31%): *"It's not easy bringing an expert to the hospital, we need help"*. The least common response was lack of awareness regarding this option (10%): *"I did not know it was possible"*; *"She (mom) did not know it is her right"*. Other reasons (11%) included avoiding a conflict with the first physician, difficulties in seeking a second opinion, and ambiguity regarding the patient's medical condition (data not presented in table): *"If my physician would have told me- sorry, I can't help you, then it's one thing. But to go to two physicians at once? This is not my way of doing things"*.

Table 2 presents previous experiences with seeking a second opinion, as reported by participants.

Most participants reported that they requested a second opinion in the past (58%). The majority of participants initiated the second opinion by themselves or with the help of their family (89%). Only 7% said that the first physician initiated the consultation: *"Everybody recommended that I should see a second opinion, family, friends and even my physician"*. Most patients mentioned that they informed the first physician about their intention to seek a second opinion and reported that they felt comfortable to share their intentions with the first physician. They reported that the first physician was sympathetic regarding their wish to seek a second opinion and that turning to a second opinion increased their confidence in the first physician: *"The information I received in the second opinion increased my trust in my treating physician"*. However, some reported that they did not feel comfortable sharing their intentions with the first physician: *"I felt very uncomfortable, even though my physician recommended that I should get a second opinion"*. Less than half (46%) of the participants reported that they shared the results of the second opinion with the first physician.

Satisfaction with the second opinion

Most participants (69%) reported that the second opinion was helpful and significantly clarified their medical condition (65%): *"It gave me more information about the problem and the treatment"*; *"It was an unknown situation, now I know what to do"*; *"It helped me to make the decision to go to surgery"*. Other patients reported that the second opinion reassured them and made them feel more secure with the decision to go to surgery: *"It reassured us that the initial diagnosis was correct, that we are in the right place"*; *"It helped me psychologically"*.

Table 1. Socio-demographic characteristics of the study population (n=92)

		N (%)
Gender	Men	59 (64%)
	Women	33 (36%)
Age	Mean (S.D)= 58.70 (19.24)	
Education (years)	Mean (S.D)= 12.02 (3.62)	
Financial status	Poor	26 (30%)
	Medium	31 (35%)
	Good-very good	31 (35%)
Reported health status	Good	6 (7%)
	Medium	37 (42%)
	Severe	46 (51%)
Family Status	Single	13 (14%)
	Widower/Divorced	21 (23%)
	Married/Lives with a partner	58 (63%)
Employment	Employed	32 (35%)
	Not employed	59 (65%)
Religiosity level	Non-Religious	44 (49%)
	Religious	33 (37%)
	Very religious	12 (14%)
Supplementary health insurance	Yes	70 (79%)
	No	17 (21%)
Reason for hospitalization	Tumors	25 (28.7%)
	Accidents	9 (9.8%)
	Brain hemorrhaging/ Stroke	19 (21.8%)
	Back and legs problems	13 (14.9%)
	Falling down	11 (12.6%)
	Operation / catheterization	10 (11.5%)

and emotionally, to go in to surgery calmer and more secure. It was totally worth the peace of mind". However, some reported that the second opinion confused them: "It caused me doubts about the treatment, made it more difficult to make a decision"; "It can be confusing in complicated cases. I feel like there should be a department in the hospital that bridges different medical conditions".

Fifty percent reported that the second opinion was different from the first: "I had a second opinion which contradicted the first one. So I had to take a third one. I ended up doing something in between the three recommendations". In some

cases participants reported that the second opinion changed or saved their life: "Finally, I had a diagnosis. Everyone thought the spine was the problem and he (the physician) gave direction to the real problem"; "They told me I can't have children, so I went to another physician. Short time after I got pregnant". Some participants appreciated the individualized care and thorough treatment they received from the second opinion: "It's a more personal treatment. He (the physician) gave me additional tests that the other physician didn't give me".

Table 2. Previous experience with second opinion consultations (regarding current and past medical conditions)

		N (%)
Previous second opinion consultations	Yes	46 (58%)
	No	33 (42%)
Who initiated the second opinion?	Physician	3 (7%)
	Patient	23 (50%)
	Family	18 (39%)
	Other	2 (4%)
Did you share your intention of having a second opinion consultation with the first physician?	Yes	28 (61%)
	No	18 (39%)
Was the first physician sympathetic to your intention of having a second opinion consultation?	Very much	20 (74%)
	Somewhat	5 (18%)
	A little	1 (4%)
	Not at all	1 (4%)
Did you share the results of the second opinion with the first physician?	Yes	19 (46%)
	No	22 (54%)
Was the first physician sympathetic to the results of the second opinion consultation?	Very much	11 (65%)
	Somewhat	5 (29%)
	Not at all	1 (6%)

Most of the participants (85%) reported that they would recommend others to seek a second opinion and spoke about the importance of it (data not presented in table): "With open-heart surgery, you can't put your trust only on one physician"; "It is important because it is not exact science. Like in an auto-shop- sometimes you need to take your car for a second opinion". Participants described the contribution of second opinion to patients and families' sense of control: "It feels like you can do something for your family member".

Prediction of awareness and utilization of second opinions

Multivariate logistic regression analysis was conducted in order to predict awareness and utilization of second opinions by socio-demographic characteristics. The

following parameters were entered: education (years), age, gender, supplementary health insurance ownership (yes/no), reported medical status (poor, medium, and good), religiosity level (not religious, religious, and very religious), reason for hospitalization (tumor, head injury, accident, back and leg problems, operation/ catheterization). Table 3-4 presents the factors that were found significantly predicting awareness of second opinion consultations.

As indicated in Table 3, two factors were found to be significant in predicting awareness of second opinion consultations. The most common contributing factor was years of education. An increase in years of education predicted a higher awareness of second opinions (OR=1.27, P=0.01 with 95% CI=1.05-1.54). Second,

Table 3. Multivariate logistic regression for the prediction of awareness of second opinion consultations

		P-value	Odds Ratio	95% C.I.* for Odds Ratio	
				Lower	Upper
Step 1^a	Education (Years)	.01	1.27	1.05	1.54
Step 2^b	Education (Years)	.02	1.23	1.02	1.48
	Supplementary health insurance ownership (yes vs. no)	.05	3.86	.96	15.41

* C.I. = Confident Interval

Table 4. Multivariate logistic regression for the prediction of previous experience with second opinion consultations

		P-value	Odds Ratio	95% C.I.* for Odds Ratio	
				Lower	Upper
Step 1^a	Supplementary health insurance ownership (yes vs. no)	.03	6.35	1.15	34.81
Step 2^b	Religious	.01			
	Religious (religious vs. non-religious)	.005	.12	.03	.54
	Religious (very religious vs. non-religious)	.32	.359	.047	2.75
	Supplementary health insurance ownership (yes vs. no)	.008	15.16	2.05	112.18
Step 3^c	Religious	.01			
	Religious (religious vs. non-religious)	.004	.10	.02	.48
	Religious (very religious vs. non-religious)	.34	.35	.04	2.97
	Supplementary health insurance ownership (yes vs. no)	.004	24.22	2.73	214.47
	Sex (men vs. women)	.05	3.83	.99	14.79

* C.I. = Confident Interval

supplementary health insurance ownership was found to increase the probability of being more aware of second opinions (OR=3.86, P=0.05 with 95% CI=0.97-15.41). As indicated in Table 4, three factors were found to be significant in predicting previous experience with second opinion consultations. First, it was found that supplementary health insurance ownership increases the probability of having previous experience with second opinions (OR=6.35, p=0.03 with 95%CI=1.15-34.81). Second, being religious or very religious was found to decrease the probability of having previous experience with second opinions (OR=0.12 P=0.005 with 95%CI=0.03-0.54). Finally, being a man was found to increase the probability of having previous experience with second opinions (OR=3.83, p=0.05 with 95%CI=0.99-14.79). It should be noted that the large confidence intervals were due to using small groups (five participants and under) in the model.

Discussion

To this date, patient-initiated second opinions have mostly been researched in outpatient settings or in relation to specific diagnoses, such as among oncology patients.^{3, 9, 13} In order to overcome these shortcomings in the literature, the purpose of the current study was to identify factors associated with the awareness and utilization of patient-initiated second opinions among patients hospitalized for acute care. Our findings show that the majority of participants were aware of the option of a second opinion consultation. However, only a minority of the participants

exercised this option during hospitalization. The most common reasons for patients not seeking a second opinion for their current medical condition included trust in the first physician and lack of time. The multivariate analysis shows that awareness and utilization of second opinions are mostly affected by years of education, supplementary health insurance ownership, religiosity level and gender.

Second opinions are described in the literature as an important tool for preventing medical errors and for providing patients with the most effective treatment possible.¹⁵ Therefore, both physicians and patients may benefit from second opinion consultations. However, this study demonstrated that acute care patients often show passive attitude towards seeking a second opinion during hospitalization, although some reported seeking a second opinion in the past (not during a hospitalization period). Patients who had previous experience with second opinion reported that they did not receive help or encouragement from the first physician. Physicians' encouragement and empowerment is crucial for patients trying to exercise their rights within the health system context.¹⁸ Patients who are suffering from a serious medical condition, are in a vulnerable position and might feel uncomfortable suggesting a second opinion.² Increasing the use of second opinions may improve patient-physician relationship, enhance treatment compliance and prevent errors or negligence.^{5, 19}

Patient-initiated second opinion is common in outpatient care.¹¹ However, less is known about how patients feel towards second opinion during hospitalization. In this study, patients reported that the main reason for not seeking a second opinion during the current hospitalization period was trust in the first physician. This finding is compatible with previous literature, which showed that when seeking a second opinion, patients often feel obligated to the first physician and worry about negative consequences.² Patients may also feel overwhelmed and frightened regarding their medical situation and might not be emotionally available to examine other therapeutic options.¹⁰ Some patients perceive the first physician as their "savior". This may explain why the participants in the current study were reluctant to seek a second opinion during hospitalization. Compatible with previous findings,² we found that most patients were satisfied with previous second opinions and found the information and outcomes different from the first consultation.^{12, 16} Literature shows that patients who seek a second opinion are hoping to receive a different diagnosis or treatment.²⁰ In addition, by the time they actually get the second opinion, patients may have already processed some of the information, gathered more information, and might be more receptive to the second opinion physician, perceiving him/her as more professional and a better communicator compared to the first physician.²¹

Supplementary health insurance ownership was found to be a major contributor regarding both awareness and utilization of second opinion consultations in this study. Previous research found that health insurance ownership is associated with socioeconomic status.²² It was also demonstrated that there is a relationship between socioeconomic status and seeking second opinions.²³⁻²⁴ The current findings are in line with previous literature and suggest that some of the barriers to second opinion are resulted from low income and resources.

Limitations

The current study has several limitations. First, this study was conducted among neurosurgical patients from one healthcare center, which may not represent other types of medical conditions. Second, the sampling method was based on a convenience sampling and on patients who were available to participate at the time. Therefore, it may not represent the majority of the population. Third, the large confidence intervals due to using small groups (5 participants and under) in the regression models, indicate a high level of heterogeneity and a small sample, which could affect the power of this study. Despite these limitations, the current study offers new insights into the practice of patient-initiated second opinions during acute care.

Conclusions and policy implications

The information derived from this study adds to the existing body of literature on second opinions by contributing the preferences and difficulties of patients experiencing acute care. There is a need to encourage and empower patients' autonomy and their increasing need for medical information, especially among populations with special needs. Second opinions should be an equal right and not dependent on financial abilities. Policymakers in healthcare should contribute to an organizational change in the medical system by administrating regulations that will simplify the process of seeking a second opinion during hospitalization. It is important to raise the awareness of health professionals through training and workshops, and to provide practical tools in order to encourage and implement this approach in healthcare settings. Educating medical staffs about the benefits of referring patients to second opinions and explaining the importance of creating open channels for patient-physician communication will increase the liability of treatments and patients' adherence. More research is needed on patient-initiated second opinion during hospitalization, especially among different population groups such as older adults, in order to identify those populations that might have difficulties in getting a second opinion.

Conflict of interest

This paper has not been submitted for publication to any other journal. We have no relationships that might lead to a conflict of interest.

Ethics

We confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details given in the study.

References

1. Tattersall, MH, Dear, RF, Jansen, J, Shepherd, HL, Devine, RJ, Horvath, LG, Boyer, MJ. Second opinions in oncology: the experiences of patients attending the Sydney Cancer Centre. *Med J Australia*. 2009;191(4):209-12.
2. Philip, J, Gold, M, Schwarz, M, Komesaroff, P. Second medical opinions: the views of oncology patients and their physicians. *Support Care Cancer*. 2010;18(9):1199-205.
3. Mordechai, O, Tamir, S, Weyl-Ben-Arush, M. Seeking a second opinion in pediatric oncology. *Pediatr Hemat Oncol*. 2015;32(4):284-9.
4. Vashitz, G, Pliskin, JS, Parmet, Y, Kosashvili, Y, Ifergane, G, Wientroub, S, Davidovitch, N. Do first

- opinions affect second opinions? *J Gen Intern Med*. 2012;27(10):1265-71.
5. Schrader, M, Weissbach, L, Hartmann, M, Krege, S, Albers, P, Miller, K, Heidenreich, A. Burden or relief: do second-opinion centers influence the quality of care delivered to patients with testicular germ cell cancer? *Eur Urol*. 2010;57(5):867-72.
6. Briggs, GM, Flynn, PA, Worthington, M, Rennie, I, McKinstry, CS. The role of specialist neuroradiology second opinion reporting: is there added value? *Clin Radiol*. 2008;63(7):791-5.
7. Mallory, MA, Losk, K, Lin, NU, Sagara, Y, Birdwell, RL, Cutone, L, Camuso, K, Bunnell, C, Aydogan, F, Golshan, M. The influence of radiology image consultation in the surgical management of breast cancer patients. *Ann Surg Oncol*. 2015;22(10):3383-8.
8. Greenfield, G, Pliskin, JS, Feder-Bubis, P, Wientroub, S, Davidovitch, N. Patient-physician relationships in second opinion encounters-The physicians' perspective. *Soc Sci Med*. 2012;75(7):1202-12.
9. Hillen, MA, Medendorp, NM, Daams, JG, Smets, EM. Patient-Driven Second Opinions in Oncology: A Systematic Review. *Oncologist*. 2017;22(10):1197-211.
10. Ziebland, S, Chapple, A, Evans, J. Barriers to shared decisions in the most serious of cancers: a qualitative study of patients with pancreatic cancer treated in the UK. *Health Expectat*. 2015;18(6):3302-3312.
11. Hsieh, CI, Chung, KP, Yang, MC, Li, TC. Association of treatment and outcomes of doctor-shopping behavior in patients with hepatocellular carcinoma. *Patient Prefer Adherence*. 2013;7:693-701.
12. Payne, VL, Singh, H, Meyer, AN, Levy, L, Harrison, D, Graber, ML. Patient-initiated second opinions: systematic review of characteristics and impact on diagnosis, treatment, and satisfaction. *Mayo Clin Proc*. 2014;89(5):687-696.
13. Wijers, D, Wieske, L, Vergouwen, MD, Richard, E, Stam, J, Smets, EM. Patient satisfaction in neurological second opinions and tertiary referrals. *J Neurol*. 2010;257(11):1869-74.
14. Eakins, C, Ellis, WD, Pruthi, S, Johnson, DP, Hernanz-Schulman, M, Yu, C, Kan, JH. Second opinion interpretations by specialty radiologists at a pediatric hospital: rate of disagreement and clinical implications. *Am J Roentgenol*. 2012;199(4):916-920.
15. Khalilzadeh, O, Rahimian, M, Batchu, V, Vadvala, HV, Novelline, RA, Choy, G. Effectiveness of second-opinion radiology consultations to reassess the cervical spine CT scans: a study on trauma patients referred to a tertiary-care hospital. *Diagn Interv Radiol*. 2015;21(5):423-427.
16. Mellink, WA, Van Dulmen, AM, Wiggers, T, Spreeuwenberg, PM, Eggermont, AM, Bensing, JM. Cancer patients seeking a second surgical opinion: results of a study on motives, needs, and expectations. *J Clin Oncol*. 2003;21(8):1492-7.
17. Patients' Rights Law, section 4. Ha'Knesset (Israeli parliament): 1996; Israel [In Hebrew].
18. Beauchamp, TL, Childress, JF. *Principles of biomedical ethics*. Oxford University Press, USA; 2001.
19. Westra, WH, Kronz, JD, Eisele, DW. The impact of second opinion surgical pathology on the practice of head and neck surgery: a decade experience at a large referral hospital. *Head Neck- J Sci Spec*. 2002;24(7):684-93.
20. van Dalen, I, Groothoff, J, Stewart, R, Spreeuwenberg, P, Groenewegen, P, van Horn, J. Motives for seeking a second opinion in orthopedic surgery. *J Health Serv Res Pol*. 2001;6(4):195-201.
21. Goldman, RE, Sullivan, A, Back, AL, Alexander, SC, Matsuyama, RK, Lee, SJ. Patients' reflections on communication in the second-opinion hematology-oncology consultation. *Patient Educ Couns*. 2009;76(1):44-50.
22. Green, MS, Hayek, S, Tarabeia, J, Yehia, M, HaGani, N. A national survey of ethnic differences in knowledge and understanding of supplementary health insurance. *Isr J Health Policy*. 2017;6(1):12.
23. Ruetters, D, Keinki, C, Schroth, S, Liebl, P, Huebner, J. Is there evidence for a better health care for cancer patients after a second opinion? A systematic review. *J Cancer Res Clin*. 2016;142(7):1521-8.
24. Tam, KF, Cheng, DKL, Ng, TY, Ngan, HYS. The behaviors of seeking a second opinion from other health-care professionals and the utilization of complementary and alternative medicine in gynecologic cancer patients. *Support Care Cancer*. 2005;13(9):679-84.