



# Perceptions of Cancer Status Disclosure in Lebanon

Sally Temraz<sup>1</sup> · Miza Salim Hammoud<sup>1</sup> · Ahmad Saleh<sup>1</sup> · Maya Charafeddine<sup>1</sup> · Deborah Mukherji<sup>1</sup> · Ali Shamseddine<sup>1</sup> 

Published online: 28 June 2018

© American Association for Cancer Education 2018

## Abstract

In Lebanon, cancer used to be regarded as a taboo and referred to as “the disease” and was rarely disclosed to patients. However, patients are now increasingly interested in knowing their cancer status but with varying degrees of information requested. The aim of this qualitative descriptive study was to explore the perceptions of cancer patients, their families, oncologists, and healthy individuals concerning the disclosure of cancer prognosis. In-depth interviews were conducted with 21 family members, 20 middle-aged cancer patients, 11 elderly cancer patients, 22 healthy individuals, and 6 oncologists at the American University of Beirut Medical Center. The interviews focused on the following: general perception of cancer in Lebanese society, type, and extent of information that should be disclosed, factors affecting patient autonomy, and elements contributing to the decisions taken by oncologists and patients. The oncologist’s compassion and communication with patients affected their emotional status greatly, and some gaps in communication skills of oncologists were in need of standardized training courses to improve the process of cancer status disclosure. Also, patients had an increased preference towards the disclosure of cancer prognosis, and a desire to know the truth and this need increased as the patient progressed to a terminal state. Future work should be directed at addressing the needs of cancer patients through every disease stage. More research and further deliberation are needed to confirm the findings of this study since the Lebanese Code of Medical Practice does not protect the right of full disclosure.

**Keywords** Cancer · Disclosure · Autonomy · Stigmatization · Perception · Lebanon

## Background

Disclosing the diagnosis of a life-threatening disease such as cancer may provoke anxiety and stress. No one likes having to disclose bad news like cancer; however, oncologists and other healthcare professionals inevitably have to perform this task [1]. In Western countries, physicians are less likely to withhold unfavorable information from cancer patients [2]; however, in Middle Eastern [3] and Asian countries [4–6], physicians tend to withhold information about cancer diagnosis or prognosis and are more likely to address the family before disclosing any hurtful truth to the patient. However, regardless of culture and origin, studies have reported that approximately 60 to 80% of patients show interest and eagerness to know their cancer status, with varying degrees of information requested [7, 8].

Several factors have been identified in Middle Eastern culture as influencing disclosure to patients. A patient’s family is one of the main reasons behind non-disclosure as many families request that the medical team not disclose any information about the disease to the patient [3]. Other factors include a lack of the physician communication skills necessary to control the emotional reactions of patients and the physician’s desire to avoid breaking bad news to the patient [3, 9]. In addition, the lack of a legal code requiring informing patients of their cancer status and time and work load all play pivotal roles in controlling what information is shared with patients and their families [3, 9, 10]. The Lebanese Code for Medical Practice (LCMP) 2012 also highlights the right of the patient to information disclosure but with specific limitations [11]. For instance, physicians have the right to refrain from disclosing all information relating to a person’s diagnosis if disclosure is deemed “dangerous” to the patient.

It is now obvious that informing patients of their medical status has many benefits, including involvement in the decision-making process, increased satisfaction, and improved adherence to treatment [12]. It is thus the physician’s responsibility and the patient’s right to have full disclosure, and contemporary laws and regulations emphasize complete

---

✉ Ali Shamseddine  
as04@aub.edu.lb

<sup>1</sup> Department of Internal Medicine, American University of Beirut Medical Center, Riad El Solh, Beirut 1107 2020, Lebanon

disclosure and informed consent for curative and palliative care [13, 14]. Since patients are now more eager to know about their cancer status and withholding information used to be implemented by family members as well as oncologist, we thus want to assess the prevalent perception of cancer nowadays in Lebanon and the influence of oncologists, patients, and family members on the disclosure process and decisions throughout the course of the disease. This information will shed light on the proper information needs of patients and families in Lebanese society and to identify gaps in cancer care in Lebanon.

## Methods

### Study Design and Participants

This is a descriptive qualitative study which adopts the convenience sampling method. All participants were recruited from Naef K. Basile Cancer Institute (NKBCI) at the American University of Beirut Medical Center (AUBMC), one of the largest tertiary referral centers for cancer patients in Lebanon, between December 2015 and September 2016. The convenience sample consisted of patients, who were aged  $\geq 18$  years and had a definitive diagnosis of cancer, of which they were aware of. Only close family members who accompanied the patients during their scheduled visits were included, such as spouses and children. As for healthy individuals, all people who were spotted at the AUBMC area with a negative past medical and surgical history of cancer were eligible to complete an interview. Oncologists at NKBCI who showed interest in participating in this study were enrolled as well. If an individual had a history of dementia or was not able to comprehend the consent and the questionnaire form, he/she was not considered eligible for enrolment. Six oncologists, 22 healthy individuals, 21 family members, and 31 cancer patients were included. Eleven patients were elderly ( $> 65$  years) and 20 were middle-aged (between 18 and 65 years). Table 1 shows the demographics of patients as well as family members and healthy individuals.

### Data Collection

A research fellow approached patients, family members of patients, healthy individuals, and oncologists and asked if they were interested in participating in a face-to-face interview regarding the disclosure of cancer. Interested subjects were asked to sign a consent form and were interviewed at a time and place convenient to them. Interviews were audio-recorded. The interviews focused on the following categories: general perception of cancer in Lebanese society, type and extent of information that should be disclosed, factors affecting patient autonomy, and elements contributing to the decisions

taken by the oncologist and patient. Table 2 shows the interview questions that were asked to patients, healthy individuals, family members, and oncologists.

The semi-structured questionnaires deployed in this study were not based on standardized ones. Rather, they were based on a literature review of similar research done in the same domain to investigate the information needs of adult cancer patients, elderly patients, and their relatives, as well as for surveys and questionnaires done with health professionals to identify the support needed during disclosure and follow-up of cancer. However, the questionnaires we used were tailored according to the Lebanese population. The goal of each interview was to obtain a rich description of all those related to a patient's experience when disclosing cancer. Open-ended questions and probes were used to encourage a full description of the experience. Interviews lasted between 30 and 59 min.

### Data Analysis

The data were analyzed according to Braun and Clarke's thematic analysis scheme [15]. Audio tapes were transcribed and translated to English; the interviews were conducted in Arabic to ensure comprehension by the interviewees. The data were analyzed by two researches AS and MC who have expertise in qualitative research. First, MC and AS carefully read the interviews to become familiar with the data and merged the data with the field notes of the interviewer. The purpose of these notes was to enhance the richness of the data and to support the rigor and trustworthiness of the analysis. Second, MC and AS generated initial codes manually and collated together data that are identified by the same code. They then sorted the codes into potential themes. MC and AS created a map from their codes and potential themes and then generated from this map themes and sub-themes. They then reread the transcripts to make sure no data were left un-coded and that the generated themes reflected the data. The principal researcher then developed the interpretation of themes and final interpretations were agreed by consensus of all authors. The final report included five themes which are reported explicitly in the "Results" section. To assess possible associations with living conditions such as accommodations, expense coverage, health coverage, ..., demographic data were gathered for the study samples of patients, healthy individuals, and family members. This methodology allowed us to establish a good level of rapport in gaining deep information from each study sample regarding their overviews on cancer status disclosure and factors affecting the decision-making and to identify relationships between different themes and factors deduced from the interviews.

### Ethics Approval

Approval was obtained from the social and behavioral Institutional Review Board at AUBMC to conduct in-depth

**Table 1** Demographics of patients, family members, and healthy individuals

Study sample	Patients	Family	Healthy individuals
Gender			
Female	16 (51.6%)	15 (71.4%)	16 (72.7%)
Male	15 (48.4%)	6 (28.6%)	6 (27.27%)
Age			
18–35	5 (16.1%)	9 (42.8%)	8 (36.3%)
36–45	5 (16.1%)	5 (23.8%)	4 (18%)
46–65	10 (32.3%)	6 (28.5%)	7 (31.8%)
Greater than 65 (elderly)	11 (35.5%)	1 (4.7%)	3 (13.6%)
Partner			
Yes	27 (87.1%)	14 (66.6%)	9 (40.9%)
No	1 (3.2%)	6 (30%)	9 (40.9%)
Widowed	3 (9.7%)		4 (20%)
Education			
Related to the medical field	1 (3.22%)	2 (9.5%)	5 (22.7%)
Not related to the medical field	26 (83.8%)	19 (90.4%)	13 (59%)
Not known	4 (12.9%)	0	4 (18.2%)
Treatment coverage by health insurance/social security			
Complete coverage	16 (51.6%)	13 (61.9%)	15 (68.1%)
Partial coverage	12 (38.7%)	6 (28.5%)	1 (4.54%)
Private	3 (9.7%)	1 (4.7%)	6 (27.2%)
Total	31	21	22

interviews with patients, family members, healthy individuals, and oncologists (IRB ID: IM.ST.05). A research fellow obtained written informed consent from all participants before starting the interviews. Patients were informed that their responses would be kept confidential and would not negatively affect their care then or in the future.

## Results

Analysis of the patients', family members', healthy individuals', and oncologists' perception of cancer disclosure revealed five theme categories. The five theme categories are presented in this section and are illustrated with quotations from the interviews.

### Stigmatization of Cancer

Cancer remains a frightening topic and is sufficient to cause anxiety among people, as evidenced by the refusal of some to refer to the disease by its name. When asked how society views cancer, common answers described it as a “taboo” due to its lethal character, regardless of the possible good outcomes and treatment achievements. This feeling was noted despite the current improved understanding of cancer and the elimination of false beliefs of cancer as contagious or inherited. Most participants, from all study samples, agreed

that cancer is still much stigmatized in Lebanon, and only few opposed this ideation. As confirmation, 14 of 22 healthy individuals representing the Lebanese social and cultural background agreed that cancer is a source of stigmatization that was unfortunately negative rather than positive, even among adults and elderly cancer patients: “People look at us in a pitiful way. They give solace to our families and consider us on the death bed.”

However, patients belonging to the elderly age group did not express fear of cancer, in contrast to healthy individuals, family members, and adult cancer patients: “I consider cancer like a common cold. Death awaits us all, we aren't immortal, and cancer is just a way of death rather than a cause.”

### Attitudes About Cancer Disclosure

When attempting to identify elements of convenient disclosure (a disclosure in which a common ground is reached between the physician and his/her patient and a detailed comprehension of the cancer status is well established), controversial perspectives were obtained. Members of the healthy individual and family member study groups were against informing the patient about bad news related to survival and prognosis. They expressed the following: “If we tell them bad news about their disease status, they might not want to continue treatment and they might become dismal and depressed and stop responding to treatment.”

**Table 2** Interview questions that were asked to study participants

Study participants	Interview questions
Healthy individuals	<ul style="list-style-type: none"> <li>• How do you think the general public view “cancer”? Do you believe that cancer patients might be stigmatized due to their cancer status?</li> <li>• If a patient does not wish to be told of his/her potential diagnosis with cancer, how should the patient communicate his/her desire not to know this information?</li> <li>• What if a patient does wish to be told of his/her potential diagnosis with cancer, how much information do you think the physician should tell him/her?</li> <li>• If you were diagnosed with cancer at some point in your life, would you prefer to be notified of such a diagnosis?</li> </ul>
Family members	<ul style="list-style-type: none"> <li>• How do you think the general public view “cancer”? Do you believe that cancer patients might be stigmatized due to their cancer status?</li> <li>• How do you define autonomy? Do you think elderly people retain their autonomy?</li> <li>• Is your relative aware of her diagnosis with cancer? How was that negotiated? And are you satisfied/content about this situation?</li> <li>• If your relative progressed to an advanced/terminal stage at some point in his/her life, would you prefer that he/she is notified of such a diagnosis?</li> </ul>
Cancer patients	<ul style="list-style-type: none"> <li>• How do you think the general public view “cancer”? Do you believe that cancer patients might be stigmatized due to their cancer status?</li> <li>• If a patient does not wish to be told of his/her potential diagnosis with cancer, how should the patient communicate his/her desire not to know this information?</li> <li>• What if a patient does wish to be told of his/her potential diagnosis with cancer, how much information do you think the physician should tell him/her?</li> <li>• How much do you value being informed about your cancer status?</li> <li>• If you have progressed to an advanced/terminal stage at some point in your life, would you prefer to be notified of such a diagnosis?</li> </ul>
Oncologists	<ul style="list-style-type: none"> <li>• How do you think the general public view “cancer”? Do you believe that cancer patients might be stigmatized due to their cancer status?</li> <li>• When do you believe that withholding information on cancer diagnosis and or related medical information permissible?</li> <li>• If you are going to disclose the information to a cancer patient, what are information that should be shared? Are there factors that might deter you from disclosing a cancer diagnosis to a patient?</li> <li>• The following are summaries from the LCMP, please tell us how much do you agree with them and/or how do you interpret them into your practice: (1) Physicians must respect patients will unless the patient may not be able to state his will; (2) Physicians can withhold bad news from patients if poor prognostic outcomes are certain; (3) Physicians may notify the family with the diagnosis unless requested not to by the patient; (4) Physicians may withhold information from the patient when asked for a written report that they believe is not in the best interest of the patient.</li> </ul>

On the contrary, family members welcomed the idea of informing patients about their disease prognosis if the prognosis was good. They stated: “if they know that they will become better and survive after treatment, they will be encouraged to do what is necessary.”

Surprisingly, most patients from both age groups preferred acknowledging that the progression of their illness had become life-threatening. However, most were not interested in survival predictions during initial visits. The patients attributed these opposing needs to the inaccuracy of survival predictions and to their faith in God, as “He is the only one who determines the precise time of death.”

Additionally, predicting a time of death causes patient distress, concern, and non-compliance to treatment. This need changes as the disease progresses, and death is confirmed to be inevitable. Nearly all healthy individuals and patients expressed curiosity about the terminal nature of their illness to plan their last days, say farewell to their beloved ones, and arrange their wills. It is important to note that this decision was more prominent in the elderly age group: 8 of 11 demanded to be conscious of such news. Thus, this highlights the

importance of proper disclosure by the treating physician so that patients know where they stand and what they are to expect from their treatment. The family members were divided into 2 equal groups: those who desired to protect the patient’s right to know all information about his/her illness and those who desired to protect the patient from bad news (Table 3).

**Patient Satisfaction About Cancer Disclosure**

Here, the aim was to assess patient satisfaction about the way they were informed and the value of the information that was disclosed. Patients and their families seek a compassionate attitude and optimism on the part of the treating oncologist when discussing their case as they emphasized: “a supportive and positive physician is essential for building a strong bond and for giving us hope.”

However, when a doctor appears emotionally disconnected, when his/her description of the current situation is vague, or when he/she is discrete about sensitive information, patients are often disappointed. Patients criticized this discrete attitude and stated that “they would prefer to understand what future

**Table 3** Disclosure preference of terminal state by healthy individuals, patients, and their families

Study sample	Patient acknowledgement of progression of a disease to a terminal illness			Total sample (100%)
	Yes	No	No answer	
Healthy individuals	16 (72.7%)	5 (22.8%)	1 (4.5%)	22
Family members	8 (38.1%)	8 (38.1%)	5 (23.8%)	21
Middle-aged patients	9 (45%)	6 (30%)	5 (25%)	20
Elderly patients	8 (72.7%)	3 (27.3%)	0	11

steps await them regarding the treatment period and management strategies of their disease.”

This disappointment frequently caused them to seek another doctor’s care, intensified their confusion, and led them to seek more details concerning their disease. This was not the case in the elderly age group; they complained that “too many medical details will escalate their ignorance rather than alleviate their anxiety.”

### Autonomy

Autonomy allows patients to direct the course of their own medical care and to be given reasonably full information in order to make medical decisions. Participants in this study encouraged the notion of patient autonomy; however, they noted that autonomy is still not fully implemented in Lebanese society as there are several factors that hinder patient’s autonomy. First, the distress and pain of the disease will have an influence on the patient’s rational thinking and judgment. The expense of treatment will also affect therapeutic options as many patients in the Lebanese society are not able to pay all expenses or even the remaining expenses if partially covered by insurance companies or social security. Therefore, financial issues may alter patient’s therapeutic options and obligate them to choose the medications they can afford. Table 1 illustrates the coverage of medical treatment fees for healthy individuals and chemotherapy fees for cancer patients and family members. Also, family members in the Lebanese society have a great influence on patient autonomy. Fortunately, this threat was only detected in the elderly patient and the healthy individual study samples. That is because almost all adult patients and family members viewed the decision of notifying the family about the cancer status of the patient solely belongs to the patient: except in cases of emergency, in concordance with Art 27/4 of the LCMP. On the other hand, elderly patients and healthy individuals accentuated the family’s role in directing patient’s choices regarding their treatment and management. Healthy individuals saw that “Cancer patients are not competent in controlling their choices because of the emotional distress they are faced with, and it is wiser of more neutral people to lead the treatment choices and discussions with the oncologists.”

In addition to this argument, elderly patients claimed that “Their limited knowledge about medical advancements will disable them to choose the proper treatment therefore they prefer wavering this decision to their children and oncologists.”

Other factors that were investigated were age and educational level. All study samples agreed on the preservation of autonomy of elderly patients in the absence of cognitive impairment. Educational background was also not considered a threat to patient’s autonomy if the patient was properly educated about his/her situation by the physician. For example, very few participants had a medical educational background and professions as nursing, medical representatives in pharmaceutical companies, and pharmacists, so there was no correlation between the educational medical background and them having a better understanding of cancer status (Table 1). Thus, age and educational level did not affect patient autonomy to a great extent as did anxiety, stress, financial burden, and family influences.

### Factors Influencing Disclosure by the Oncologist

The majority of participants placed the responsibility of proper disclosure on the oncologist by stating the following: “Patients will comprehend their status better if information comes from their oncologist rather than us.” Four oncologists preferred partial disclosure while the other two preferred full disclosure. Oncologists were also asked about the factors influencing how and what information they disclosed to their patients. The deciding factor was the patient’s ability to accept his/her diagnosis. If the patient was not well prepared, the help of close family members was often requested. Another deciding factor was a bad prognosis (defined as little chance of recovery from cancer), which would typically result in limited disclosure. Educational background was a tool for informing patients rather than a deciding factor because oncologists used the patient’s knowledge and occupation to describe the situation, treatment, and future follow-up measurements. Oncologists stated that “it is hard when it comes to disclosing prognosis to cancer patients specifically if the prognosis is not that good, we fear patient’s emotions and psychological state will be greatly affected.” As a conclusion, they admitted that such sessions are individualized to favor patient beneficence

without threatening their autonomy. In complicated cases, most oncologists noted the need for psychiatrists to assist them in managing a patient's psychological distress.

## Discussion

Cancer is one of the most feared diseases in Lebanese society. The continuing stigmatization of cancer patients can have detrimental effects on a patient's life. Feelings of fear, pain, and pity are all experienced by cancer patients. Instead of providing support, the family and friends of cancer patients treat them as if they are disabled and on their death bed. Stigmatization affects a patient's morale and self-esteem. The notion in Lebanese society that cancer equals death remains common despite advances in medicine.

All study subjects, including patients, family members, and healthy individuals, defended the right of the patient to full knowledge about his/her illness, with the exception of survival predictions. This figure has changed dramatically in the last 20 years. In a study conducted in Lebanon that included 400 participants, 42% generally preferred the truth to not be disclosed directly to patients [16]. In that same study, preference for disclosure was associated with younger age, better education, and tendency for rapport-building with physicians. In a more recent study conducted in Lebanon in 2015, approximately 82% preferred to be informed about their diagnosis [8]. It is thus obvious that the expectation for concealment of a cancer diagnosis has decreased as the Lebanese public is increasingly demanding direct and full disclosure of serious diagnoses.

Despite widespread favor of disclosure, the issue of partial or complete disclosure remains. In this study, four oncologists reported that they would opt for partial disclosure (defined as informing patients about their condition in a general manner but not in detail), whereas only two said they would fully disclose disease status to their patients. Approximately 80% of family members and friends of cancer patients did not favor full disclosure to patients, and 60% of oncologists respect this cultural context and thus first address those closest to the patient before proceeding with full or partial disclosure [8]. In another study conducted at AUBMC approximately 20 years ago reported that Lebanese oncologists were evenly divided between those who usually told the truth to patients and those who did not [17]. This previous study also showed that Lebanese doctors, at that time, used their own life experience, personal values, and convictions to decide how to approach the patient. Moreover, they were influenced by the trends and values predominant in the culture at that time to guide them through this process [16, 17]. By comparison, oncologists now prefer to disclose the disease to their patients and employ the family to assist them in mentally adjusting the patient to this new condition. This method is preferred because

bad news is easier to receive from family than from the oncologist [1]. Unfortunately, oncologists continue to use their own experience to approach disclosure, confirming the lack of guidelines or specific training sessions to assist them in such complex situations. This finding was further exemplified by the physicians' desire for patients to undergo psychiatric evaluation prior to discussing the illness. Studies report that only a limited number of oncologists who undergo training to respond to difficult emotional reactions [18, 19] and so is the case for Lebanon.

Moreover, analysis of the responses made by patients when asked about their satisfaction with their cancer disclosure revealed that the main factor influencing their satisfaction is the oncologist. They relied on their physician for connectedness, optimism, and compassion. If this was not felt by the patient, usually, they would seek another physician to whom they feel they can trust and is close to them. It is thus crucial on the behalf of the oncologist to have the necessary skills not just to break the news to the patient but be compassionate and connect with them as well. Therefore, communication training courses in Lebanese oncology fellowship programs are needed to correct the gaps occurring in such consultations. This training was also recommended by the consensus meeting on communication skills training (CST) in oncology performed by the Swiss Cancer League in 2009, which suggested this course be mandatory at all educational levels [20]. Disclosing sensitive information is not reporting all medical details to the patient. Many of the study samples, especially elderly patients, noted increased anxiety when overwhelmed with medical knowledge. Hence, a physician should work on finding a "common ground" with his/her patients by considering their feelings, perceptions, beliefs, expectations, and concerns to reinforce the establishment of trust between the physician and patient. One such reported methodology includes five communication strategies: (1) elicit patient perspective, (2) provide information, (3) respond to patient's expression of emotion (acknowledging and containing emotions), (4) encourage commitment to treatment, and (5) provide hope [21].

Evaluation of what participants wanted to know about their disease revealed that needs varied during disease progression. When a patient is diagnosed with cancer, family members and healthy individuals expressed their preference for non-disclosing information to patients about survival and prognosis. However, patients, healthy individuals, and half of the family members approved notifying the patient that his/her illness had progressed to a terminal stage and that death is inevitable. Similarly, Yun et al. reported that 96.1% of the patient study sample wanted to be told if they had a terminal illness [22]. This implies that the information needs of patients varied during the progress of the disease and would suggest assessing these needs during different stages of the disease. Nearly all study samples in the present study placed the responsibility for announcing such bad news on the treating

physician, reflecting their trust in the oncologist's expertise. Thus, a physician should assess a patient's need for information about prognosis [22], especially changes in this need during the course of the disease. Initially, most participants did not want to know about survival prediction because they believed that such critical data might destroy a patient's hope and faith in being cured. However, when the disease advanced to a terminal stage, both elderly and middle-aged patients wanted to know the truth to allow them to write wills, resolve unfinished business, relieve themselves and their families of the burden of useless or aggressive treatments, and plan how to spend their last days peacefully with their beloved ones. On the other hand, Matsuyama et al. reported that cancer patients' information needs decrease yet remain high over time. Patients' information needs are highest near diagnosis and change throughout the course of their treatment [23].

This study sheds light on the information needs of elderly cancer patients during the disclosure of their status, which was not been previously reported in any study conducted in Lebanon. Elderly cancer patients clearly wanted society, their family, and the treating oncologist to respect their autonomy, especially given the common practice of physicians to withhold a cancer diagnosis from elderly individuals. There is evidence that many physicians and family members consider the elderly to be incapacitated and tend to make decisions on their behalf [24]. Nearly all elderly patients wanted to be informed of a cancer diagnosis or progression to an end stage. However, they noted different attitudes towards their families' disclosure in these two cases. If they had a cancer diagnosis, most elderly patients commented they would rather know before their family, consistent with Yun et al. [22]. If elderly patients progressed to an end stage, they wanted their families to be informed before them, emphasizing their need for the family's support when their cancer is confirmed to be incurable and death is anticipated.

The strengths of this study are attributed to the inclusion of elderly population which has been missing from previous studies. Also, cancer attitudes change with time and it is vital that we keep assessing patient's information needs as time progresses particularly in developing countries. Limitations of this study include the small sample size and the fact that this study was conducted at a single institution which might not be predictive of the whole Lebanese society.

## Conclusions

Findings from this study suggest that Lebanese patients today, whether adults or elderly, seek empowerment and would rather be told the truth. The extent of information they request regarding survival and prognosis increased as they progressed through their disease. More research and further deliberation are needed to confirm these findings since the LCMP does not

protect the right of full disclosure. Disclosing cancer status should be individualized but should also aim for disclosure according to the patient's psychological state. Results also revealed that there is still a lag in patient-physician communication in Lebanese culture. Thus, due to the complexity of such a process, all oncologists should have standardized training courses that equip them with appropriate methods to strengthen the effectiveness of disclosure and to enhance their competence in dealing with the anticipated emotional tension. However, to achieve full disclosure, patient's autonomy in Middle Eastern societies such as Lebanon ought to leave the notion of "do no harm and beneficence" and embrace the Western notion of "respect for autonomy and justice." Periodic assessment of the information requirements of a patient with cancer is also crucial, considering the ever-changing dynamics of priorities of such information desires [25].

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflicts of interest.

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

This article does not contain any studies with animals performed by any of the authors.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

## References

1. Alrukban M, Albadr B, Almansour M, Sami W, Alshuil M, Aldebaib A, Algannam T et al (2014) Preferences and attitudes of the Saudi population toward receiving medical bad news: a primary study from Riyadh City. *J Fam Community Med* 21(2):85–92. <https://doi.org/10.4103/2230-8229.134763>.
2. Baile WF, Lenzi R, Parker PA, Buckman R, Cohen L (2002) Oncologists' attitudes toward and practices in giving bad news: an exploratory study. *J Clin Oncol* 20(8):2189–2196. <https://doi.org/10.1200/jco.2002.08.004>
3. Bou Khalil R (2013) Attitudes, beliefs and perceptions regarding truth disclosure of cancer-related information in the Middle East: a review. *Palliat Support Care* 11(1):69–78. <https://doi.org/10.1017/S1478951512000107>
4. Tieying Z, Haishan H, Meizhen Z, Yan L, Pengqian F (2011) Health professionals' attitude towards information disclosure to cancer patients in China. *Nurs Ethics* 18(3):356–363. <https://doi.org/10.1177/0969733011398096>
5. Elwyn TS, Fetters MD, Sasaki H, Tsuda T (2002) Responsibility and cancer disclosure in Japan. *Soc Sci Med* 54(2):281–293
6. Pang A, Ho S, Lee S-C (2013) Cancer physicians' attitude towards treatment of the elderly cancer patient in a developed Asian country. *BMC Geriatr* 13(1):35. <https://doi.org/10.1186/1471-2318-13-35>
7. Marc Ho ZJ, Krishna LK, Goh C, Alethea Yee CP (2013) The physician-patient relationship in treatment decision making at the

- end of life: a pilot study of cancer patients in a Southeast Asian society. *Palliat Support Care* 11(1):13–19. <https://doi.org/10.1017/S1478951512000429>
8. Farhat F, Othman A, El Baba G, Kattan J (2015) Revealing a cancer diagnosis to patients: attitudes of patients, families, friends, nurses, and physicians in Lebanon—results of a cross-sectional study. *Curr Oncol* 22(4):e264–e272. <https://doi.org/10.3747/co.22.2351>.
  9. Friedrichsen M, Lindholm A, Milberg A (2011) Experiences of truth disclosure in terminally ill cancer patients in palliative home care. *Palliat Support Care* 9(2):173–180. <https://doi.org/10.1017/S1478951511000046>
  10. Ni YH, Alræk T (2017) What circumstances lead to non-disclosure of cancer-related information in China? A qualitative study. *Support Care Cancer* 25(3):811–816. <https://doi.org/10.1007/s00520-016-3464-z>
  11. Lebanese code of medical ethics. October 22, 2012 in law no.240
  12. Sacristan JA, Aguaron A, Avendano-Sola C, Garrido P, Carrion J, Gutierrez A, Kroes R, Flores A (2016) Patient involvement in clinical research: why, when, and how. *Patient Prefer Adherence* 10: 631–640. <https://doi.org/10.2147/ppa.s104259>.
  13. Narayanan V, Bista B, Koshy C (2010) ‘BREAKS’ protocol for breaking bad news. *Indian J Palliat Care* 16(2):61–65. <https://doi.org/10.4103/0973-1075.68401>
  14. Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP (2000) SPIKES—a six-step protocol for delivering bad news: application to the patient with cancer. *Oncologist* 5(4):302–311
  15. Braun V, Clarke V (2006) Using thematic analysis in psychology. *Qual Res Psychol* 3(2):77–101. <https://doi.org/10.1191/1478088706qp063oa>
  16. Adib SM, Hamadeh GN (1999) Attitudes of the Lebanese public regarding disclosure of serious illness. *J Med Ethics* 25(5):399–403
  17. Hamadeh GN, Adib SM (1998) Cancer truth disclosure by Lebanese doctors. *Soc Sci Med* 47(9):1289–1294
  18. Konstantis A, Exiara T (2015) Breaking bad news in cancer patients. *Indian J Palliat Care* 21(1):35–38. <https://doi.org/10.4103/0973-1075.150172>
  19. Ehsani M, Taleghani F, Hematti S, Abazari P (2016) Perceptions of patients, families, physicians and nurses regarding challenges in cancer disclosure: a descriptive qualitative study. *Eur J Oncol Nurs* 25:55–61. <https://doi.org/10.1016/j.ejon.2016.09.003>
  20. Stiefel F, Barth J, Bensing J, Fallowfield L, Jost L, Razavi D, Kiss A (2010) Communication skills training in oncology: a position paper based on a consensus meeting among European experts in 2009. *Ann Oncol* 21(2):204–207
  21. Korsvold L, Lie HC, Mellblom AV, Ruud E, Loge JH, Finset A (2016) Tailoring the delivery of cancer diagnosis to adolescent and young adult patients displaying strong emotions: an observational study of two cases. *Int J Qual Stud Health Well-being* 11:30763. <https://doi.org/10.3402/qhw.v11.30763>
  22. Yun YH, Lee CG, Kim SY, Lee SW, Heo DS, Kim JS, Lee KS, Hong YS, Lee JS, You CH (2004) The attitudes of cancer patients and their families toward the disclosure of terminal illness. *J Clin Oncol* 22(2):307–314
  23. Matsuyama RK, Kuhn LA, Molisani A, Wilson-Genderson MC (2013) Cancer patients’ information needs the first nine months after diagnosis. *Patient Educ Couns* 90(1):96–102. <https://doi.org/10.1016/j.pec.2012.09.009>
  24. Pang A, Ho S, Lee SC (2013) Cancer physicians’ attitude towards treatment of the elderly cancer patient in a developed Asian country. *BMC Geriatr* 13:35. <https://doi.org/10.1186/1471-2318-13-35>
  25. Belachew SA, Mekuria AB, Erku DA (2017) Preferred information sources and needs of patients with cancer on disease symptoms and management: a cross-sectional study. *J Glob Oncol* 3(2\_suppl):2s. <https://doi.org/10.1200/jgo.2017.009399>