

# Life satisfaction of cancer patients: what contributes to a better satisfaction with life?

**Yongyi Chen, PhD, RN, FCAN**

Hunan Cancer Hospital/  
The Affiliated Cancer Hospital of Xiangya School of Medicine, Central South University



# CONTENT

- **01** | **Background**
- **02** | **Methods**
- **03** | **Results**
- **04** | **Discussions**
- **05** | **Conclusions**

# 1 Background

Given shifting trends of medical model, the objective indicators, such as incidence or mortality of disease, were not the only what captured health care providers' attention. The patients' subjective well-being was increasingly important outcomes.

# 1 Background

- Cancer, which was seen as a catastrophic life event by public, can destroy not only the health-related quality of life such as physical, functional, psychological, social, and spiritual well-being, but also threatens their working ability, employment, financial status, family life and future prospect, which may decline one's life satisfaction (LS) as a whole.

# 1 Background

- Exploring LS in patients with cancer is indispensable to figure out in which aspects of their life are out of balance between personal expectations and current life conditions.
- The purpose of this study was to explore LS among the patients diagnosed with cancer and its association with social, medical and health variables.

# 2 Methods

## ■ Research design

This study was a **descriptive, cross-sectional study** carried out among patients with cancer in China.

# 2 Methods

## ■ Participants and Setting

Cancer patients hospitalized in a tertiary cancer hospital in Changsha, Hunan, China between March and April 2017 were potential participants.

### **Inclusion criteria**

- age  $\geq 18$  years capable of language communication;
- mentally stable;
- informed of his/her disease;
- voluntarily participating in the study on the principle of informed consent.

### **Exclusion criteria:**

- did not fill out the questionnaire
- mentally unstable
- had major mental disorder

## 2 Methods

### ■ Analysed variables-----*Life satisfaction*

Life satisfaction was evaluated by 10-item Brief Multidimensional Life Satisfaction Scale (BMLSS-10). The scale was divided to four main dimensions and two additional health-associated items (health situation and own abilities to deal with daily life). **The four dimensions are intrinsic** (myself, overall life), **social** (friendships, family life), **external** (work, where I live), **perspective** (financial situation, future Prospects). **All** these items were scored on a 7-point scale from dissatisfaction to satisfaction. The total score of the scale was referred to a 100% level (transformed scale score). Scores above 50% represent high life satisfaction, while scores below 50% represent low satisfaction.

## 2 Methods

### ■ Analysed variables-----*Socio-demographics, Medical variables*

Socio-demographics included participants' gender, age, year of schooling, self-perceived religiosity, marital status, residence area, household monthly income, et al.

Participants' medical variables involved disease stage, time since confirmed diagnosis, hospitalization frequency, whether receiving chemotherapy.

# 2 Methods

## ■ Analysed variables-----*Health*

- Health variables involved participants' physical well-being(PWB), emotional well-being(EWB), social/family well-being(SWB), functional well-being(FWB), and spiritual well-being(SpWB).
- PWB, EWB, SWB, FWB were investigated using Functional Assessment of Cancer Therapy-General (FACT-G), a scale used to measure participants' HR-QOL.
- Participants' SpWB was evaluated by the Functional Assessment of Chronic Illness Therapy-Spiritual Wellbeing (FACIT-Sp).

# 2 Methods

## ■ Statistical analyses

- All data were analyzed using SPSS version 19.0.
- Socio-demographic and medical characteristics of the participants were described as frequencies and percentages.
- Health-related characteristics of the participants were expressed as mean and standard deviation (SD).
- The independent effect of determinants of LS was analyzed using multiple linear regression analysis.
- $p < 0.05$  was considered statistically significant.

# 3 Results

## ■ (1) Socio-demographic and medical characteristics of the participants

In total 200 cancer patients were recruited in the investigation and 185 out of them completed the questionnaires. Socio-demographic and medical characteristics of the participants were described in table 1.

# 3 Results

## (1) Socio-demographic and medical characteristics of the participants

Table 1 Socio-demographic and medical characteristics of the participants (n = 185)		
Variables	n	%
<i>Socio-demographic variables</i>		
Gender		
Male	87	47.0
Female	98	53.0
Age		
18~40	53	28.6
40~65	106	57.3
≥65	26	14.1
Years of schooling		
≤9 years	129	69.7
>9years	56	30.3
Self-perceived religiosity		
Not religious	145	78.4
Religious	40	21.6
Marital status		
Not married	21	11.4
Married/cohabitation	160	86.5
Divorced/widow	4	2.2
Residence area		
Urban	66	35.7
Rural	119	64.3
Household monthly income		
Below 1000 Yuan/month	40	21.6
1001-2000 Yuan/month	53	28.6
2001-3000 Yuan/month	41	22.2
3001-4000 Yuan/month	32	17.3
Above 4001 Yuan/month	19	10.3
<i>Medical variables</i>		
Disease stage		
Stage I	22	11.9
Stage II	84	45.4
Stage III	70	37.8
Stage IV	9	4.9
Time since confirmed diagnosis		
≤6 months	141	76.2
6 months~1year	28	15.1
≥1year	16	8.6
Hospitalization frequency		
Once	62	33.5
Twice~ five times	87	47.0
More than five times	36	19.5
Whether receiving chemotherapy		
No	77	41.6
Yes	108	58.4

# 3 Results

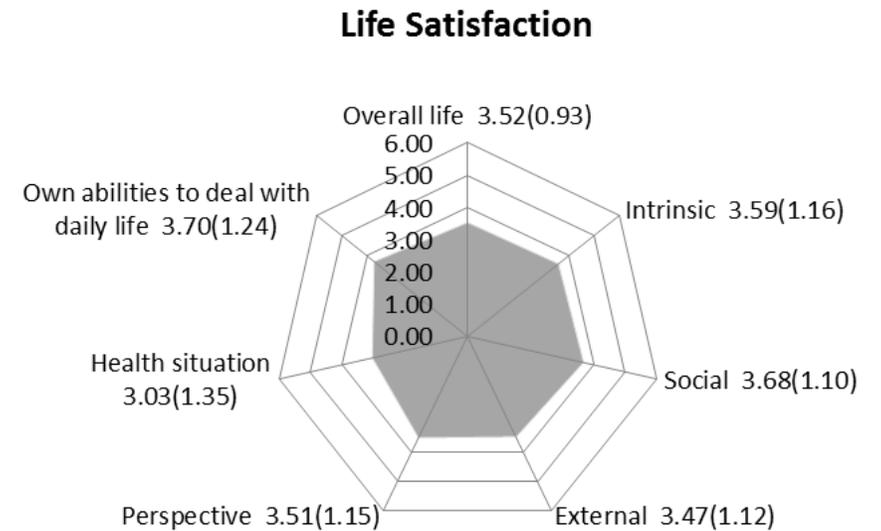
## ■ Socio-demographic and medical characteristics of the participants

- As demonstrated, 87 were male and 98 were female. Participants' age were  $(48.94 \pm 13.97)$  years. Most of the participants (69.7%) had less than 9 years of schooling. 78.4% of them had no religious affiliation. 86.5% were married or cohabitation and 64.3% were rural.
- In terms of medical characteristics, greater number (76.2%) of them were diagnosed in recent 6 months. 80.5% had been admitted to hospital less than five times before the investigation. 41.6% of them didn't receive chemotherapy while the rest of them did.

# 3 Results

## (2) Life satisfaction of participants

- Figure 1 displayed the LS for this cohort of cancer patients. The score of cancer patients' LS was  $58.75 \pm 15.48$ , which was over 50%. And 70.3% of the participants had a LS over 50%.
- Among the different dimensions and additional health-associated items, **satisfaction towards own abilities to deal with daily life received the highest score** followed by social, intrinsic, perspective, and external. **Satisfaction towards health situation was the lowest.**



**Figure 1** LS as measured by BMLSS-10

# 3 Results

## ■ Health-related characteristics of the participants

Table 2 quality of life and spiritual well-being of the participants ( $n = 185$ )

Variables	Mean	SD	Minimum	Maximum
Quality of life	59.84	13.09	27	106
PWB	16.28	4.62	4	28
EWB	13.57	4.12	1	24
SWB	15.77	5.53	0	28
FWB	14.23	5.34	0	28
SpWB	24.38	6.46	8	48
Meaning	8.41	2.74	2	16
Peace	7.97	2.35	2	16
Faith	8.00	3.42	0	16

*PWB, Physical well-being; EWB, Emotional well-being; SWB, Social/family well-being; FWB, Functional well-being; SpWB, spiritual well-being*

# 3 Results

## ■ (3) Multiple linear regression equation of the LS and associated variables

Multiple linear regression was analyzed when the score of overall LS was set as the dependent variable and social, medical as well as health variables set as independent variables. **Table 3 demonstrated the results of multiple linear regression analysis.**

Table 3 Results of multiple linear regression analysis of associated factors of LS for patients with cancer (n=185).

Determinants	<i>B</i> (95%CI)	SE	$\beta$	<i>p</i>
SWB	1.198(0.841-1.556)	0.181	0.428	<0.001
FWB	0.478(0.076-0.881)	0.204	0.165	0.020
Peace	1.319(0.489-2.149)	0.421	0.200	0.002
Faith	0.614(0.098-1.130)	0.262	0.136	0.020
Age	2.609(0.161-5.057)	1.240	0.108	0.037

# 3 Results

- Multiple linear regression equation of the LS and associated variables

Five factors were included in the multiple linear regression model, which explained 53.9% of the variation in LS satisfaction ( $R = 0.734$  and  $R^2 = 0.539$ ).

These five factors all showed positive independent association with LS, with LS scores increased with scores of Social/family well-being, Functional well-being, peace, faith, and participants' age.

# 4 Discussions

## ■ (1) Life satisfaction of participants

Overall, our studies have explored LS among patients with cancer. The present study found that the score of cancer patients' LS was over 50%. And 70.3% of the participants had a LS over 50%. These results indicated that **most cancer patients had a high satisfaction**, which was consistent with the results of other researches [20, 29].

# 4 Discussions

## ■ Life satisfaction of participants

the following reasons maybe explain it.

- With improvement of current medical technology and nursing care, patients' physical, emotional and spiritual discomfort can be controlled and alleviated more effectively. So the patients can return back to social or home in a better condition.
- With the popularization of science knowledge about cancer, people had an increased level of awareness towards cancer, cancer patients' family members, friends and important ones can take a better understanding to the disease and provide more support and help.

# 4 Discussions

## ■ (2) Associated variables of life satisfaction : Age

In our study, **older participants were proved to have better LS than younger ones.**

- younger cancer patients may still be building careers and families. They tend to be core members of the family and have greater family and financial responsibilities.
- younger ones may pose better expectations towards their work, future, and life, which would be impacted by the illness.
- **In contrast**, older adults with cancer were found to maintain an active perspective on their lives, devoted themselves to personally meaningful activities and therefore more likely to experience better LS.

# 4 Discussions

## ■ Associated variables of life satisfaction : **Social/family well-being**

**Strong positive association** In between social/family well-being, functional well-being and LS was also confirmed.

- A good status of Social/family well-being reflected that the patients had a satisfactory social network and support system, from which the patients can get effective support to help them pass the suffering journey.

# 4 Discussions

## ■ Associated variables of life satisfaction : **Functional well-being**

- **Functional well-being was another factor contributed positively to LS.**
- Patients of good functional well-being might have moved on with their lives and have a high degree of psychological resilience, their abilities to engage in activities would not be affected by their condition so much. Thus, they showed better LS.

# 4 Discussions

## ■ Associated variables of life satisfaction : Peace

- Among different dimensions of SpWB, peace and faith were found to be associated with LS positively.
- Peace subscale items addressed whether the subjects felt peaceful. Individuals feeling peaceful were reported to have reasons for living, feel productive in life and have a sense of purpose in life.

# 4 Discussions

## ■ Associated variables of life satisfaction : **Faith**

- Possible explanations to why faith was a positive factor of LS was that faith was an intrinsic power that can generate adaptive responses facilitating positive attitudes towards illness and improve active coping process, which was verified to be effective in promoting the level of satisfaction.

# 4 Discussions

## ■ (3) Implications

- These observations provided implications for nursing practices.
- It's highly encouraged for patients to establish intimate relationships with their families and friends and to perceive more support from connection and interaction.
- It's also further suggested that returning back to work and participating social or family activities actively after discharge could facilitate to improve cancer patients' LS.

# 4 Discussions

## ■ Limitations of the study

- Although there were important discoveries revealed by our study, there were also limitations need to be acknowledged.
- This was a cross-sectional survey that had been conducted in a cancer hospital. The sample sources were limited. Whether and to what extent they can reflect LS of other patient population remained to be worked out.

# 5 Conclusions

In conclusion, our study suggested that LS of patients with cancer is relatively high but still need to be further improved. Health care providers need to pay close attention to possible risk factors such as worse social/family well-being, functional well-being, a lack of peace and faith as well as younger age. Interventions strategies may be formulated and tested to improve life satisfaction among this population.

*Thanks for listening!*