Original Article

JHSMR Journal of Health Science and Medical Research

Evaluating the Impact of Peer Sharing Sessions on Oral Cancer Survivors' Psychosocial Well-Being

Muhd Firdaus Che Musa, Ph.D.[1,2], Jennifer Geraldine Doss, Ph.D.[2,3], Wan Maria Nabillah Ghani, Ph.D. [3]

[1]Kulliyyah of Dentistry, International Islamic University Malaysia, Department of Paediatric Dentistry and Dental Public Health, Pahang 25200, Malaysia.

[2]Department of Community Oral Health and Clinical Prevention, Faculty of Dentistry, University of Malaya, Kuala Lumpur 50603, Malaysia.

[3]Oral Cancer Research and Coordinating Centre (OCRCC), Faculty of Dentistry, University of Malaya, Kuala Lumpur 50603, Malaysia.

Received 4 August 2024 ● Revised 19 December 2025 ● Accepted 28 December 2025 ● Published online 4 September 2026

Abstract:

Objective: Peer support programs have been demonstrated to enhance social and emotional support for the psychosocial needs of oral cancer (OC) survivors attending the oral cancer clinic. This study aimed to i) explore the impact of face-to-face (F2F) peer sharing sessions on health-related quality of life for OC survivors; ii) assess the factors affecting the attendance of these sessions.

Material and Methods: A mixed-methods strategy involving two stages of assessment was adopted at both pre and post F2F peer sharing sessions. Data were collected using the Functional Assessment of Cancer Therapy–Head and Neck (FACT-H&N), a supplemental survey, and qualitative semi-structured interviews.

Results: Analyses indicated that survivors' social well-being, emotional well-being (significant change), and subsequent psychosocial well-being improved over time after attending a minimum of two F2F peer sharing sessions. Factors that influence attendance at the sessions were categorised into four themes: "session," "information," "interaction," and "facilitator."

Conclusion: These findings suggest the benefits and importance of peer support programs in enhancing the psychosocial well-being of oral cancer survivors, as well as the key factors influencing attendance at these sessions.

Keywords: Malaysian, oral cancer peer support group, psychosocial well-being, social support

Contact: Jennifer Geraldine Doss, Ph.D.
Department of Community Oral Health and Clinical Prevention, Faculty of Dentistry, University of Malaya, Kuala Lumpur, Malaysia.
E-mail: jendoss@um.edu.my

J Health Sci Med Res
doi: 10.31584/jhsmr.20261408
www.jhsmr.org

Introduction

Oral cancer (OC) (ICD-11 code 2B6E.0)[1] is recognized as a major global public health problem[2], particularly in Asia[2]. According to the GLOBOCAN 2022 report, lip-oral cavity cancer ranks as the sixteenth most common cancer worldwide[3] and the eighteenth most common in Malaysia[4]. There is increasing evidence that peer support programs can enhance social and emotional support to address the psychosocial needs of these patients[5,6]. In cognisance of oral cancer as a major public health problem globally[7-9], it can be even more debilitating than other forms of cancer as it impacts many basic daily functions, namely speech, chewing, swallowing, and aesthetics due to the disease condition and side-effects of treatment modalities[10,11]; supportive care for oral cancer patients' unmet needs during and post-operatively cannot be trivialised or ignored[12]. Thus, the type and quality of supportive care are paramount and should be an essential part of the treatment plan in order to improve and maintain patients' Health-related quality of life (HRQoL) during the trajectory of recovery and survivorship[13,14].

Peer support programs through the counselling of family and friends are some of the recommended types of support programs reported to improve personal relationships and social support[5,6], and provide a sense of belonging[15]. A counselling-based support program provides emotional and psychosocial support, which could help patients or their caregivers embrace any difficulties and cope with changes[16]. It has a direct and positive effect on one's physical and emotional health by satisfying their basic social requirements, such as love, affection, self-esteem, and a sense of belonging[17-20], indirectly increasing their internal spirit[21]. It has also been consistently shown to offer informational and emotional benefits to patients[22]. Customised patient care is therefore very much needed for cancer patients, including oral cancer patients and survivors.

Social support is of paramount importance for patients with cancer. Perceived social support was reported to be effective for patients with multiple physical illnesses and facilitated their psychosocial adjustment to illness[23]. Likewise, emotional support from family members and friends has been shown to be positively correlated with physical and psychological adjustment to cancer[24]. Previous studies from other countries, such as the US, have shown that over 90% of patients perceived supportive care programs as beneficial[25]. In addition, a systematic review concluded that there was a high level of satisfaction with peer support programs[26]. Peer support has the capacity to boost patients' self-esteem and self-worth, thus encouraging them to take positive steps, such that they can sustain an improved quality of life for the remaining years of their lives. The more pronounced impact seen among late-stage patients suggests the need for supportive services to be integrated into patient management[27,28]. It has been shown to improve patients' social and emotional well-being, as well as their overall HRQoL[27,28].

Although the positive impacts of peer support programs have been acknowledged, there are gaps in the global literature regarding the impact of support programs on the psychosocial well-being of patients with cancers in the oral cavity, especially from developing countries, where the disease is most prevalent. In cognisance of the increasing OC survivorship with high unmet psychosocial needs, this study examined the impact of a peer support face-to-face sharing session on enhancing the social well-being (S-WB) and emotional well-being (E-WB), and thus the psychosocial well-being (PS-WB) of Malaysian OC survivors.

Material and Methods

Study design

This study applied a mixed-method research design. Two different approaches of quantitative and

qualitative research methods were employed for data collection, involving a cohort of Malaysian oral cancer survivors between 2019 and 2021. Ethical approval was obtained from the Medical Ethics Committee, Faculty of Dentistry, University of Malaya (Reference number: DF CO1911/0052(L).

Study population and recruitment

The study population consisted of current patients aged 18 years and older (n=39) diagnosed with oral cavity cancer and under follow-up at the Oral Cancer Clinic, Faculty of Dentistry, University of Malaya. Patients who were mentally compromised or terminally ill were excluded. Of these, 31 prospective participants who had attended at least two face-to-face peer sharing sessions were contacted by phone. They were informed of the purpose of the study and were invited to participate. Informed consent was obtained prior to data collection.

Data collection and analyses

The peer sharing session was conducted face-to-face (F2F) in groups of fewer than 10. A credible and highly motivated oral cancer survivor with relevant experience in social work or related fields was selected to serve as the facilitator for the F2F peer sharing session. Sharing sessions were scheduled on dates and times convenient for participants, coordinated with their follow-up visits at the oral cancer clinic. Sessions were conducted in a private, closed room, with dental practitioners and supporting staff serving as note-takers to ensure confidentiality. Each session lasted approximately one to two hours.

Assessments were conducted at two time points: baseline (pre-treatment, Stage 1) and one to two months post-treatment during participants' second follow-up visit (Stage 2), with face-to-face peer support sessions held during these visits. This timeframe was considered sufficient for participants to reflect on and experience the effects of the sessions on changes in their overall HRQoL mean scores[16]. The Functional Assessment of Cancer Therapy–Head and Neck (FACT-H&N) Version 4.0, which had previously been cross-culturally adapted and validated for the Malaysian population[29], was used for this assessment. English and Malay versions of the instruments were used as these languages are the most frequently used in this population.

Only two original sub-scales of the FACT-H&N, namely the S-WB and E-WB sub-scales, were evaluated in this study. S-WB and E-WB combined denote the PS-WB. The respondents were instructed to rank each item using ordinal scores of 0 (not true at all), 1 (somewhat true), 2 (quite true), 3 (true), and 4 (very true). Reversed scoring was also performed on the negative statement before summing the individual items to ensure all the scores are in an equivalent direction and positive statement. In this regard, a higher score indicates better QoL. Baseline data (Stage 1) were collected prior to patients being exposed to the F2F peer sharing session, whereas post data (Stage 2) were collected after survivors had attended a minimum of two sessions.

Quantitative data described the samples' characteristics, including an assessment of their socio-demographic and disease characteristics. Descriptive analyses, including multivariate analysis MANOVA Test, were then undertaken based on the HRQoL gradients of S-WB, E-WB, and PS-WB at baseline (Stage 1) and post F2F peer sharing sessions (Stage 2), according to demographics and disease characteristics. Differences in HRQoL mean scores between pre and post F2F peer sharing sessions were analysed using a paired samples t-test. All statistical analyses were conducted using Statistical Package for the Social Sciences (SPSS) version 26.0 software (SPSS Inc., Chicago, IL, USA). p-value<0.05 was considered statistically significant.

In addition, the cohort of survivors was invited to respond to a post F2F peer sharing session questionnaire

survey and a qualitative interview as supplementary assessments at Stage 2. The questionnaire survey and interview guide were developed to collect information on the factors influencing survivors' attendance at the sharing sessions and to evaluate the general impact of the sessions on their psychosocial well-being. The items of the questionnaire survey used a 5-point ordinal scale, ranging from strongly agree to strongly disagree. The interview sessions were recorded, transcribed verbatim manually, and analysed qualitatively using thematic analysis. This approach comprises data management, followed by descriptive analysis, and finally, an explanatory analysis. The key steps involved are familiarisation with the data, development of an index for themes and subthemes, sorting by theme or concept, and finally, synthesising the data to provide descriptive and explanatory summaries.

Quantitative findings from Stage 1 and Stage 2 were examined and triangulated with qualitative results to provide insights into the views of Malaysian oral cancer survivors on the impact of F2F sharing sessions on their psychosocial well-being.

Results

A total of 39 oral cancer survivors initially agreed to participate in this study. However, only 31 (79%) attended the F2F peer sharing session, completed the pre-and post-assessments, and subsequently were included in the analysis.

The characteristics of the study population are shown in Table 1. Almost half of the survivors were between 50 and 64 years old (48.4%), with a mean age of 59.1 years (S.D.=9.61). Two-thirds were females (67.6%), of Chinese ethnicity (61.3%), with tertiary education (45.2%), and of married status (64.5%). In terms of disease characteristics, most of them were diagnosed in the last 3-5 years (45.2%), diagnosed at an early-stage (71.2%), diagnosed with cancers of the tongue/floor of mouth (74.2%), and treated

Table 1 Characteristics of oral cancer survivors (n=31)

Characteristics	n	%
Age group		
<50 years	5	16.1
50-64 years	15	48.4
>64 years	11	35.5
*Mean Age (S.D.)	59.1 (9.61)	
Sex		
Male	10	32.3
Female	21	67.7
Ethnicity		
Malay	4	12.9
Chinese	19	61.3
Indian	5	16.1
Others	3	9.7
Education level		
None	1	3.2
Primary	4	12.9
Secondary	12	38.7
Tertiary	14	45.2
Marital status		
Single	7	22.6
Married	20	64.5
Widowed	4	12.9
Family income		
Below RM 3,000	12	38.7
RM 3,001- RM 4,000	4	12.9
RM 4,001- RM 5,000	5	16.1
Above than RM 5,001	10	32.3
Diagnosed as Oral Cancer Patients		
1-6 months	1	3.2
7-12 months	1	3.2
1-2 years	9	29.0
3-5 years	14	45.2
More than 5 years	6	19.4
Tumour site groups		
Tongue+FOM	23	74.2
Gingiva and palate	2	6.5
BM+lips	4	12.9
Others	2	6.5
Cancer stage groups		
Early	22	71.0
Late	9	29.0
Treatment groups		
Surgery only	14	45.2
Surgery + CT and/or RT	16	51.6
No surgery (CT and/or RT)	1	3.2

HRQoL=health-related quality of life, CT=chemotherapy, RT=radiotherapy

with combined treatment (surgery+chemotherapy (CT) and/or radiotherapy (RT)] (51.6%). Except for gender, significant differences were seen between survivors with different socio-demographic and disease characteristics.

Impact of the F2F peer sharing sessions on social, emotional, and psychosocial well-being

Tables 2 and 3 show the variation in the mean scores of the social, emotional, and psychosocial well-being sub-scales. At baseline, a multivariate test indicated no significant difference in terms of socio-demographic and disease characteristics, except for tumour site, as shown in Table 2. In terms of the social well-being of the survivors, there was a significant difference in mean score based on tumour site at pre F2F peer sharing session, whereby those with cancers of the gingiva and palate had significantly lower mean scores compared to those with cancers at other sites of the oral cavity. At post F2F peer sharing session, no significant differences were seen in the S-WB, E-WB, and PS-WB mean scores across all demographic and disease characteristics (Table 3).

Table 4 shows the impact of the F2F peer sharing sessions on the S-WB, E-WB, and PS-WB of the study population. Overall, participants' S-WB, E-WB, and PS-WB showed an improved trend after attending a minimum of two F2F peer sharing sessions. However, statistical significance was achieved only for E-WB [mean difference of 1.581, 95%CI 0.037, 3.125].

Factors influencing attendance at the F2F peer sharing sessions

The themes regarding the factors influencing a patient's decision to attend the F2F peer sharing session were primarily identified from the qualitative analysis and substantiated by quantitative analysis (triangulation). Four main themes emerged, namely "session," "information," "interaction," and "facilitator" (Figure 1). Qualitative data indicated that the leading factors determining survivors' attendance at F2F peer sharing sessions were related to all the themes, in particular 1) the session being a source of information/learning, 2) being able to compare with other survivors' experiences, 3) gaining knowledge and relevant information, and 4) support from a knowledgeable facilitator who encourages two-way communication.

All four themes are interrelated; hence, a change in one factor would likely impact the others. For example, the survivors obtained rich knowledge and relevant information during the F2F peer sharing sessions as a result of interactive, moderator-facilitated interactions and two-way communications with other peers, which provided them with an opportunity to enhance their survivorship and quality of life.

In the next section, the results for each factor are presented to further explain and support the identified themes. Verbatims are labelled based on the survivors' study ID, age, gender, and ethnicity to provide insights into the characteristics of the survivors while ensuring anonymity. Verbatims have been corrected grammatically to facilitate ease of understanding. For each theme, the broad overview is presented first, and any divergent views are highlighted and discussed to provide an understanding of the relevant issues. The results of the quantitative analysis are also integrated into each theme to show the triangulation of data, simultaneously providing an integrated understanding of each factor.

Theme 1: session

The survivors characterised the F2F peer sharing sessions as an opportunity to meet and gain motivation/inspiration, which is central for learning to live healthily. Based on the quantitative survey, nearly 60% of survivors strongly agree/agree on this aspect. Their perceptions of these sessions are demonstrated in the following verbatim,

Table 2 Pre F2F peer sharing sessions (Stage 1): Variation in HRQoL mean scores by demographic and disease characteristics (n=31)

Characteristics	Social well-being (S-WB) Mean±S.D.	p-value	Emotional well-being (E-WB) Mean±S.D.	p-value	Psychosocial well-being (PS-WB) Mean±S.D.	p-value	[b]p-value
Age group *Mean age (S.D.) 59.1 (9.61)		0.847		0.205		0.676	0.395
<50	22.17±6.19		15.40±5.03		37.57±10.51		
50–64	23.52±4.31		17.20±4.62		40.72±7.72		
>64	22.26±8.22		19.55±4.06		41.80±9.57		
Sex							
Male	24.88±3.72	0.120	17.80±5.61	0.962	42.68±7.72	0.364	0.422
Female	21.89±6.77		17.71±4.17		39.60±9.09		
Ethnicity							
Malay	23.25±3.95	0.538	16.50±2.65	0.352	39.75±4.57	0.331	0.590
Chinese	21.82±7.09		17.58±5.27		39.40±10.08		
Indian	26.40±2.61		20.80±2.95		47.20±4.44		
Indigenous	22.94±4.51		15.33±1.53		38.28±2.98		
Education level							
None	28.00±0.00	0.651	24.00±0.00	0.452	52.00±0.00	0.420	0.741
Primary	20.50±5.45		17.50±2.65		38.00±7.70		
Secondary	23.82±3.53		18.42±5.35		42.24±7.62		
Tertiary	22.33±7.90		16.79±4.28		39.12±9.68		
Marital status							
Single	21.50±10.06	0.458	17.86±6.36	0.121	39.36±11.82	0.169	0.300
Married	22.65±4.58		16.85±3.88		39.50±7.45		
Divorced/ Widowed	26.25±3.50		22.00±2.16		48.25±5.56		
Family income							
Below than RM 3,000	22.49±8.29	0.806	19.33±3.99	0.102	41.82±10.12	0.528	0.253
RM 3,001- RM 4,000	25.71±3.85		17.25±3.30		42.96±6.34		
RM 4,001- RM 5,000	22.77±3.60		19.80±4.71		42.57±7.34		
Above than RM 5,001	22.20±4.85		15.00±4.81		37.20±8.27		
Diagnosed as oral cancer patients							
1-6 months	23.00±0.00	0.843	10.00±0.00	0.462	33.00±0.00	0.722	0.748
7-12 months	16.00±0.00		17.00±0.00		33.00±0.00		
1-2 years	22.33±4.82		17.00±3.67		39.33±7.87		
3-5 years	23.42±7.82		18.71±3.89		42.13±9.35		
More than 5 years	23.44±3.62		18.00±7.04		41.44±9.54		
Tumour site groups							
Tongue+FOM	22.99±4.42	*0.003	17.04±4.78	0.452	40.03±8.10	0.120	*0.002
Gingiva and Palate	9.92±14.02		21.00±1.41		30.92±15.44		
BM+lips	28.00±0.00		20.25±4.35		48.25±4.35		
Others	24.00±5.66		17.50±3.54		41.50±9.19		
Stage groups							
Early	22.45±6.70	0.153	17.73±4.84	0.747	40.17±9.59	0.841	0.733
Late	23.85±4.29		17.78±4.18		41.63±6.20		
Treatment groups							
Surgery only	20.64±7.22	0.215	16.07±5.09	0.478	36.71±9.29	0.071	0.660
Surgery+CT and/or RT	24.47±4.38		19.06±3.86		43.53±6.96		
No surgery (CT and/or RT)	28.00±0.00		20.00±0.00		48.00±0.00		

No surgery (chemotherapy and/or radiotherapy only); surgery+CT and/or RT (combined treatment), *[b]Significance level at 0.05, using multivariate test; Significance level at 0.0125, using MANOVA Test (Bonferroni correction), HRQoL=health-related quality of life, S.D.=standard deviation, FOM=floor of mouth, BM=buccal mucosa, CT=chemotherapy, RT=radiotherapy, RM @ MYR = Ringgit Malaysia

Table 3 Post F2F peer sharing session (stage 2): variation in HRQoL mean scores by demographic and disease characteristics (n=31)

Characteristics	Social well-being (S-WB) Mean±S.D.	p-value	Emotional well-being (E-WB) Mean±S.D.	p-value	Psychosocial well-being (PS-WB) Mean±S.D.	p-value	[b]p-value
Age group *Mean Age (S.D.) 59.1 (9.61)							
<50	21.44±2.91	0.319	19.80±1.10	0.904	41.24±3.08	0.589	0.395
50–64	24.17±3.16		19.33±3.37		43.50±4.94		
>64	22.80±4.40		19.09±2.74		41.89±5.63		
Sex							
Male	23.45±3.76	0.831	19.80±2.70	0.526	43.25±4.83	0.601	0.814
Female	23.14±3.68		19.10±2.93		42.24±5.03		
Ethnicity							
Malay	23.50±3.42	0.344	19.75±3.10	0.988	43.25±5.62	0.567	0.758
Chinese	23.24±3.64		19.32±2.91		42.55±5.17		
Indian	24.97±3.26		19.20±3.35		44.17±2.42		
Indigenous	20.07±4.31		19.00±2.65		39.07±6.00		
Education level							
None	25.67±0.00	0.531	22.00±0.00	0.570	47.67±0.00	0.366	0.695
Primary	23.00±2.94		18.00±4.69		41.00±5.60		
Secondary	22.14±3.61		19.08±2.94		41.22±4.55		
Tertiary	24.09±3.91		19.71±2.20		43.80±4.98		
Marital status							
Single	24.39±5.18	0.380	19.71±2.98	0.901	44.10±6.62	0.438	0.738
Married	22.56±3.12		19.15±3.01		41.71±4.52		
Divorced/ Widowed	24.67±2.94		19.50±2.08		44.17±3.18		
Family income							
Below than RM 3,000	24.14±3.34	0.720	19.67±3.31	0.458	43.81±5.20	0.526	0.711
RM 3,001– RM 4,000	23.05±4.08		21.00±2.16		44.05±5.29		
RM 4,001– RM 5,000	22.00±4.64		19.00±1.87		41.00±4.36		
Above than RM 5,001	22.87±3.66		18.40±2.80		41.27±4.83		
Diagnosed as oral cancer patients							
1–6 months	20.00±0.00	0.760	18.00±0.00	0.782	38.00±0.00	0.538	0.919
7–12 months	20.00±0.00		16.00±0.00		36.00±0.00		
1–2 years	23.11±3.41		19.33±2.83		42.44±3.97		
3–5 years	23.86±3.92		19.71±3.00		43.57±5.32		
More than 5 years	23.08±3.98		19.17±2.99		42.25±5.48		
Tumour site groups							
Tongue+FOM	22.73±3.31	0.349	19.26±3.02	0.780	41.99±4.63	0.650	0.602
Gingiva and Palate	22.00±8.49		21.00±4.24		43.00±12.73		
BM+lips	25.96±2.76		19.50±2.08		45.46±3.16		
Others	25.00±4.24		18.00±0.00		43.00±4.24		
Stage groups							
Early	23.16±3.42	0.848	19.55±3.25	0.503	42.71±4.86	0.808	0.770
Late	23.44±4.36		18.78±1.39		42.22±5.31		
Treatment groups							
Surgery only	22.68±3.41	0.364	19.50±3.21	0.876	42.18±5.22	0.758	0.641
Surgery+CT and/or RT	23.44±3.83		19.25±2.65		42.69±4.86		
No surgery (CT and/ or RT)	28.00±0.00		18.00±0.00		46.00±0.00		
Use a smart phone							
Yes	23.13±3.79	0.613	19.07±2.79	0.134	42.2±4.91	0.215	0.315
No	24.28±1.86		21.67±2.52		45.94±4.19		

Table 3 (continued)

Characteristics	Social well-being (S-WB) Mean±S.D.	p-value	Emotional well-being (E-WB) Mean±S.D.	p-value	Psychosocial well-being (PS-WB) Mean±S.D.	p-value	[b]p-value
Using a smart phone							
Very easy	24.30±3.59	0.223	19.44±2.56	0.644	43.74±5.07	0.212	0.465
Easy	21.92±4.17		19.33±2.67		41.25±5.12		
Not so easy	22.88±2.60		18.43±3.41		41.31±4.31		
Very difficult	26.22±1.58		21.00±3.61		47.22±2.04		

No surgery (chemotherapy and/or radiotherapy only); surgery+CT and/or RT (combined treatment),*[b]Significance level at **0.05**, using multivariate test; Significance level at 0.0125, using MANOVA Test (Bonferroni correction), F2F=face-to-face, HRQoL=health-related quality of life, S.D.=standard deviation, FOM=floor of mouth, BM=buccal mucosa, CT=chemotherapy, RT=radiotherapy

Table 4 Assessment of social, emotional, and psychosocial well-being pre and post F2F peer sharing sessions (n=31)

Sub-scales mean scores	Stage 1: Pre-F2F session (95% CI for difference)		Stage 2: Post-F2F session		Mean difference		p-value
	Mean±S.D.	Range	Mean±S.D.	Range			
Social well-being (S-WB)	22.85±6.06	(0-28)	23.24±3.64	(16-28)	0.388	(-1.956, 2.733)	0.738
Emotional well-being (E-WB)	17.74±4.59	(5-24)	19.32±2.83	(13-24)	1.581	(0.037,3.125)	*0.045
Psychosocial well-being (PS-WB)	40.60±8.67	(20-52)	42.57±4.91	(33-52)	1.969	(-1.117,5.054)	*0.202

Psychosocial well-being: social support+emotional well-being, *p-values<0.05, F2F=face-to-face, 95% CI=95% confidence interval, S.D.=standard deviation

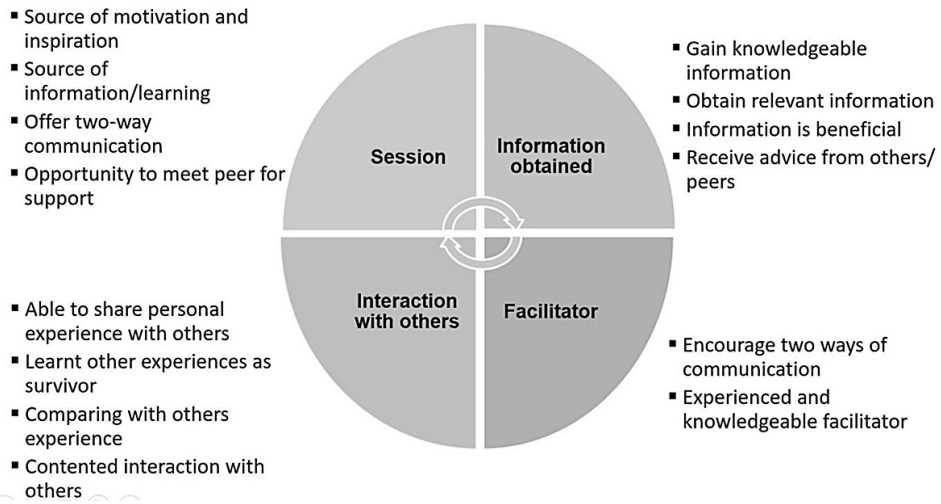

Figure 1 Identified themes and their respective subthemes for the overall factors influencing survivors' attendance at the face-to-face (F2F) peer sharing sessions

"Inspiration….I get to know [other patients]. That's why I'm looking forward to taking a challenge… in joining the F2F… and motivated to live well and be healthy." ID-1 [68, Chinese, age, ♀]

"I used to see (from the sharing session) …is one factor that could help us. Thank you." ID-12 [64, Malay, ♀]

In addition, the sessions allow the survivors to listen and establish two-way communication with each other on a better way of living.

"It's two-way communication…I hear everybody's experience." ID-6 [62, Chinese, ♂]

"Peer support and sharing with people who understand this clearly." ID-23 [66, Indian, ♀]

The items comprising the "session" theme were quantitatively tested for internal consistency. A Cronbach alpha value of 0.949 indicates an excellent level of internal consistency for this theme. Quantitative analysis of items under the "session" theme shows that participants strongly agreed that 'Timeliness of sessions' (38.7%), 'Able to have an open and flexible discussion' (35.5%), and 'Increases the ability to meet other friends for support' (32.3%) are the factors that motivated them to attend the sessions.

Theme 2: Information obtained

Almost three-quarters (70%) of survivors strongly agree/agree that the knowledge, relevant information, and beneficial advice gained following the F2F peer sharing session was an influencing factor for them to attend the sessions.

"For myself, I think it's [F2F sharing session] quite beneficial… and…also very knowledgeable… Anyhow, my friends, my family, we can share our knowledge (experience) together." ID-3 [56, Chinese, ♀]

"…I would like to share with all of you. If your friends and relatives got something [anomaly]…please ask them to look at it seriously... Please do not ignore it… A bit of ignorance can cause very serious and harmful to us… If something is wrong with your body, seek a doctor." ID-10 [65, Chinese, ♂]

In this regard, the survivors recognized that these benefits have long-term consequences for an improved quality of life.

"It was beneficial to me… so, I think I have learned a lot from this session as well. ID-4 [63, Chinese, ♂]

"My two words about the peer sharing session are that it is helpful and beneficial for the post-surgery oral cancer patients. Very-very helpful indeed." ID-11 [55, Malay, ♀]

"Able to share the issue with other people and to get more information regarding the nature of the disease and how to face it." ID-24 [57, Chinese, ♀]

Akin to the "session" theme, there is excellent internal consistency for items in the questionnaire under the "information" theme, with a Cronbach alpha value of 0.905. Items underpinning the "information" theme that motivated them to attend the sessions are 'I also obtain clinically relevant information' (22.6%), 'The information I got was very helpful to me' (19.4%), and 'I was able to get relevant information' (19.4%). In substantiating this data, a large number of respondents disagreed that they 'Found it difficult to understand information during the sessions because of language barriers' (38.7%).

Theme 3: Interaction with others

During the F2F peer sharing session, the survivors also recognised this was a good platform to share their own experiences and the opportunity to learn other ways to survive:

"Through this platform, we get to share our experiences with." ID-30 [49, Chinese, ♂]

"I can see that other people have similar problems to me. … have gone through…. all of them have suffered a lot. So, I think I have learnt a lot from this session as well." ID-4 [63, Chinese, ♂]

Almost two-thirds (60%) of survivors strongly agreed/agreed that the sharing sessions could help them understand others' struggles and support each other in dealing with this battle.

"I can compare my own experience with other people." ID-6 [62, Chinese, ♂]

"I find it very beneficial… especially when we share our problems…and try to understand each other. We can learn from each and every one in this group." ID-8 [68, Chinese, ♀]

About 7% of survivors strongly agreed they could not fully understand others due to differences in socio-cultural background and language barriers. For the "interaction" domain, quantitative analysis obtained a Cronbach alpha value of 0.338, which indicates a low and unacceptable level of internal consistency of the items in the questionnaire. Quantitatively, descriptive analyses of the participants' responses to the items under the "interaction" domain show that most respondents disagreed with 'I find it difficult to interact with others because of language barriers' (41.9%) and 'I feel uncomfortable/shy to share my personal experience with others in the group' (45.2%). Only a quarter (25.8%) strongly agreed that interacting with others about their cancer experiences had given them more confidence in dealing with their situation.

Theme 4: Facilitator

The quantitative survey found that nearly three-quarters (75%) of survivors strongly agreed/agreed that the appointed facilitator indirectly encouraged two-way communications when mediating the discussion.

"I enjoy the session, it's very informative… and… two-way communication…I hear everybody's experience."ID-6 [62, Chinese, ♂]

"Able…to get more information regarding the nature of the disease and how to face it." ID-24 [57, Chinese, ♀]

Cronbach's alpha assessment of the items under the theme of "facilitator" also showed an excellent level of consistency with a value of 0.952. Descriptive analyses of the participants' responses on the items under this theme showed that almost half (45.2%) of the respondents strongly agreed that the 'experienced facilitator' motivated them to attend the sharing sessions. They also had positive perceptions regarding other items in the "facilitator" theme.

Perceived impact of the F2F peer sharing sessions on psychosocial well-being

Quantitative analyses of the survivors' responses to their perceived impact of attending the F2F sharing sessions demonstrated that 32.3% strongly agreed to 'I feel less afraid of undergoing follow-up treatment', followed by 'I feel motivated to improve my quality of life' (29.0%) and 'I feel more positive about managing my illness' (25.8%). These verbatim statements below further support the positive impacts of the F2F peer sharing sessions as perceived by survivors,

"I used to see (from the sharing session) … in some points that…. Now, I feel I am in a bit of good shape…." ID-12 [64, Malay, ♀]

"After the whole session...Today, I felt sort of…I know how to handle my feelings when feeling down… depressed... stressed... all that…." ID-5 [76, Chinese, ♂]

"Inspiration… motivated to live well and be healthy." ID-1 [68, Chinese, age, ♀]

Discussion

The present study observed that participants' S-WB, E-WB, and overall PS-WB improved over time after being exposed to F2F peer sharing sessions. The factors influencing the survivors' attendance at the sessions were the information obtained, opportunities for interaction, and the experienced facilitator moderating the session. The study findings suggest the importance of peer support programs for Malaysian oral cancer survivors in improving their S-WB

and E-WB (significant improvement), and subsequently PS-WB. Notwithstanding, no significant difference in HRQoL was detected across socio-demographic or disease characteristics, except for tumour site of the S-WB sub-scale at baseline.

Oral cancer survivors are considered the most distressed compared to other cancer patients. This is because the disease hinders important daily functions, particularly eating and speaking[30]. In addition, this disease affects and impairs an anatomical feature that is centrally located, the facial area, subsequently significantly affecting the psychosocial well-being of the sufferers[31].

The psychosocial health of cancer patients, in general, is commonly affected by a lack of self-esteem and psychological support[30-32]. Social support is observed to be an important element in improving patients' psychosocial well-being. This is even more the case in an Asian context, where extended family structures are based on this premise. Psychosocial and emotional support received from significant others, namely family, relatives, and friends[13], has been shown to reduce their discomfort and increase their coping skills, thereby enabling them to positively adjust to the impact of their disease and its related treatment[24]. Therefore, peer support programs would translate to improved social support[5, 6] and provide a sense of belonging[15], which have been consistently shown to offer informational and emotional benefits to patients[22].

The findings of our study are in concordance with previous findings. We found a significant improvement in emotional well-being among survivors who attended the peer support program. In this regard, the literature has documented that these programs are perceived to directly and positively affect one's physical and emotional health by satisfying their basic social needs, such as love, affection, self-esteem, and a sense of belonging[16]. This further corroborates the improvement seen in all the sub-scales in the present study, particularly for emotional well-being. In addition, compared to other populations, social support is ingrained in this study's population as an inherent characteristic of Asian culture. Thus, this further explains the improvement seen in the social well-being of our study population, albeit it was non-significant.

The above findings resonate with the three proposed theoretical perspectives by Lakey & Cohen[33]. First, the stress and coping perspective proposes that support contributes to health by protecting people from its adverse effects. Therefore, patients need a good relationship, especially with social support, to enhance their self-esteem and express and share their feelings, stress, and problems[34]. Second, the social constructionist perspective proposes that support directly influences health by promoting self-esteem and self-regulation, regardless of stress. Third, the relationship perspective predicts that the health effects of social support cannot be separated from the relationship processes that often co-occur with support, such as companionship, intimacy, and low social conflict[33]. In this regard, understanding the importance of peer support programs based on the concept of social integration in different circumstances is critical to understanding the disease's impact holistically.

Evaluation of the program would examine its impact on the participants' psychosocial well-being to ensure the program could improve the survivors' well-being. In this study, the facilitator-moderated peer support program helped the participants meet others for support and obtain relevant, beneficial information to boost their confidence in challenging situations, as similarly reported in other countries such as the US[21]. Based on these benefits, facilitators play a pivotal role in providing social and emotional support, as seen in the present study, and could potentially provide valuable information on coping strategies (based on their own experience) to Malaysian oral cancer survivors to help them improve their overall health and well-being.

Strengths and Limitations

This is the first study to evaluate the role and impact of face-to-face sharing sessions on both S-WB and E-WB among Malaysian OC survivors. The findings indicate the potential role of a peer support group in improving oral cancer survivors' PS-WB and its future integration into holistic patient care in tertiary referral centres for oral cancer management in the Malaysian scenario.

A cross-culturally validated instrument, the FACT-H&N V4.0, was used to obtain OC patients' HRQoL data, providing relatively useful comparisons[29]. The internal consistency of the post-session questionnaire items (present study) was acceptable, with Cronbach's alpha values ranging from 0.905 to 0.952, except for the "interaction" theme, which had a value of 0.338.

In this study, two different approaches of quantitative and qualitative were combined in a single research inquiry, conducted both pre and post session to complement the findings on the general HRQoL. In addition, factors across four themes: "session," "information," "interaction," and "facilitator," which encouraged survivors to opt-in to the F2F peer sharing sessions, were explored.

Several study limitations need to be considered when interpreting the findings. First, most of the sample across the visits were elderly patients treated with chemotherapy and/or radiotherapy, who were often frail and highly dependent on others. Consequently, a high attrition rate was observed. Further studies are needed to explore the psychosocial needs and peer support experiences of this population. Additionally, patients' perspectives on their HRQoL may vary at different time points due to the potential effects of the 'response shift' phenomenon, highlighting the need to review and update the findings of this study regularly.

Conclusion

The findings highlight the importance of interactive and beneficial peer support programs for Malaysian oral cancer survivors to improve their S-WB and E-WB, and subsequently their PS-WB. As such, concerted efforts to integrate these elements into routine patient management cannot be emphasised enough for optimal patient outcomes and improved quality of life during survivorship.

Acknowledgement

The authors acknowledge the contributions of all the oral cancer survivors and staff who contributed to and managed the primary dataset.

Conflict of interest

All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest.

Funding sources

Funding for this research was obtained from the University of Malaya Impact-Oriented Interdisciplinary Research Grant Programme (IIRG025A-2019)

Author contributions

All authors have made substantial contributions to the conception and design of the study. All authors have been involved in interpreting the results, drafting the manuscript, revising it critically, and have given final approval of the version to be published.

Patient consent

Declaration and informed consent were signed by the patients/legal representatives during primary data collection.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

1. WHO. International Statistical Classification of Diseases and Related Health Problems (ICD) [homepage on the Internet]. Malta: WHO; 2022 [cited 2025 Sep 20]. Available from: https://icd.who.int/browse/2025-01/mms/en#472349708.
2. Gupta N, Gupta R, Acharya AK, Patthi B, Goud V, Reddy S, et al. Changing Trends in oral cancer – a global scenario. Nepal J Epidemiol 2016;6:613-9.
3. WHO-Global Cancer Observatory. Globocan 2022: All Cancer [homepage on the Internet]. Lyon: International Agency for Research on Cancer; 2022 [cited 2025 Aug 15]. Available from: https://gco.iarc.who.int/media/globocan/factsheets/cancers/39-all-cancers-fact-sheet.pdf.
4. WHO-Global Cancer Observatory. Globocan 2022: Malaysia [homepage on the Internet]. Lyon, France: International Agency for Research on Cancer; 2022 [cited 2025 Sep 20]. Available from: https://gco.iarc.who.int/media/globocan/factsheets/populations/458-malaysia-fact-sheet.pdf.
5. Dunn J, Steginga SK, Occhipinti S, Wilson K. Evaluation of a peer support program for women with breast cancer—lessons for practitioners. J Community Appl Soc Psychol 1999;9:13-22.
6. Dennis CL. Peer support within a health care context: a concept analysis. Int J Nurs Stud 2003;40:321-32.
7. Chaturvedi AK, Anderson WF, Lortet-Tieulent J, Curado MP, Ferlay J, Franceschi S, et al. Worldwide trends in incidence rates for oral cavity and oropharyngeal Cancers. J Clin Oncol 2013;31:4550-9.
8. Petersen PE. The World Oral Health Report 2003: Continuous improvement of oral health in the 21st century--the approach of the WHO Global Oral Health Programme. Community Dent Oral Epidemiol 2003;31(Suppl1):3-23.
9. WHO-Global Cancer Observatory. Lip and oral cavity (cancer) Factsheets: Globocan 2020 [homepage on the Internet]. Lyon: International Agency for Research on Cancer; 2021 [cited 2025 Aug 20]. Available from: https://gco.iarc.fr/today/data/factsheets/cancers/1-Lip-oral-cavity-fact-sheet.pdf.
10. Infante-Cossio P, Torres-Carranza E, Cayuela A, Gutierrez-Perez JL, Gili-Miner M. Quality of life in patients with oral and oropharyngeal cancer. Int J Oral Maxillofac Surg 2009;38:250-5.
11. Nascimento ML, Farias AB, Carvalho AT, Albuquerque RF, Ribeiro LN, Leao JC, et al. Impact of xerostomia on the quality of life of patients submitted to head and neck radiotherapy. Med Oral Patol Oral Cir Bucal 2019;24:e770-5.
12. Jasni MFN. Supportive Care Needs Among Oral Cancer Patients in Malaysia. Kuala Lumpur: University of Malaya; 2017.
13. Bilal S, Doss JG, Cella D, Rogers SN. Quality of life associated factors in head and neck cancer patients in a developing country using the FACT-H&N. J Craniomaxillofac Surg. 2015;43:274-80.
14. van Nieuwenhuizen AJ, Buffart LM, Brug J, Leemans CR, Verdonck-de Leeuw IM. The association between health related quality of life and survival in patients with head and neck cancer: a systematic review. Oral Oncol 2015;51:1-11.
15. Gray RE, Fitch M, Davis C, Phillips C. Interviews with men with prostate cancer about their self-help group experience. J Palliat Care 1997;13:15-21.
16. Doss JG, Ghani WMN, Razak IA, Yang YH, Rogers SN, Zain RB. Changes in health-related quality of life of oral cancer patients treated with curative intent: experience of a developing country. Int J Oral Maxillofac Surg 2017;46:687-98.
17. Ikeda A, Kawachi I, Iso H, Iwasaki M, Inoue M, Tsugane S. Social support and cancer incidence and mortality: the JPHC study cohort II. Cancer Causes Control 2013;24:847-60.
18. Huang CY, Hsu MC. Social support as a moderator between depressive symptoms and quality of life outcomes of breast cancer survivors. Eur J Oncol Nurs 2013;17:767-74.
19. Oztunc G, Yesil P, Paydas S, Erdogan S. Social support and hopelessness in patients with breast cancer. Asian Pac J Cancer Prev 2013;14:571-8.
20. Semple C, Parahoo K, Norman A, McCaughan E, Humphris G, Mills M. Psychosocial interventions for patients with head and neck cancer. Cochrane Database Syst Rev 2013:CD009441.
21. Forouzi MA, Tirgari B, Safarizadeh MH, Jahani Y. Spiritual Needs and Quality of Life of Patients with Cancer. Indian J Palliat Care 2017;23:437-44.
22. Campbell HS, Phaneuf MR, Deane K. Cancer peer support programs-do they work? Patient Educ Couns. 2004;55:3-15.
23. Kocaman N, Kutlu Y, Ozkan M, Ozkan S. Predictors of psychosocial adjustment in people with physical disease. J Clin Nurs 2007;16:6-16.
24. Cinar S. Psychosocial adjustment and social support in hemodialysis patients. Turk Clinical J Nurs Sci 2007;1:12-8.
25. Rosenbaum E, Gautier H, Fobair P, Neri E, Festa B, Hawn M, et al. Cancer supportive care, improving the quality of life for

cancer patients. A program evaluation report. Support Care Cancer 2004;12:293-301.
26. Hoey LM, Ieropoli SC, White VM, Jefford M. Systematic review of peer-support programs for people with cancer. Patient Educ Couns 2008;70:315-37.
27. Yagli NV, Ulger O. The effects of yoga on the quality of life and depression in elderly breast cancer patients. Complement Ther Clin Pract 2015;21:7-10.
28. Rao RM, Raghuram N, Nagendra HR, Kodaganur GS, Bilimagga RS, Shashidhara HP, et al. Effects of a yoga program on mood states, quality of life, and toxicity in breast cancer patients receiving conventional treatment: a randomized controlled trial. Indian J Palliat Care 2017;23:237-46.
29. Doss JG, Thomson WM, Drummond BK, Raja Latifah RJ. Validity of the FACT-H&N (v 4.0) among Malaysian oral cancer patients. Oral Oncol 2011;47:648-52.
30. Falagas ME, Zarkadoulia EA, Ioannidou EN, Peppas G, Christodoulou C, Rafailidis PI. The effect of psychosocial factors on breast cancer outcome: a systematic review. Breast Cancer Res 2007;9:R44.
31. Bower JE, Bak K, Berger A, Breitbart W, Escalante CP, Ganz PA, et al. Screening, assessment, and management of fatigue in adult survivors of cancer: an American Society of Clinical oncology clinical practice guideline adaptation. J Clin Oncol 2014;32:1840-50.
32. Che Musa MF, Doss JG, Ghani WMN, Rogers SN, Ismail SM, Rahman RA. The roles of social support and spiritual aspect in predicting the association between oral functioning and psychosocial well-being among oral cancer patients. Malaysian J Med Health Sci 2024;20:63–71.