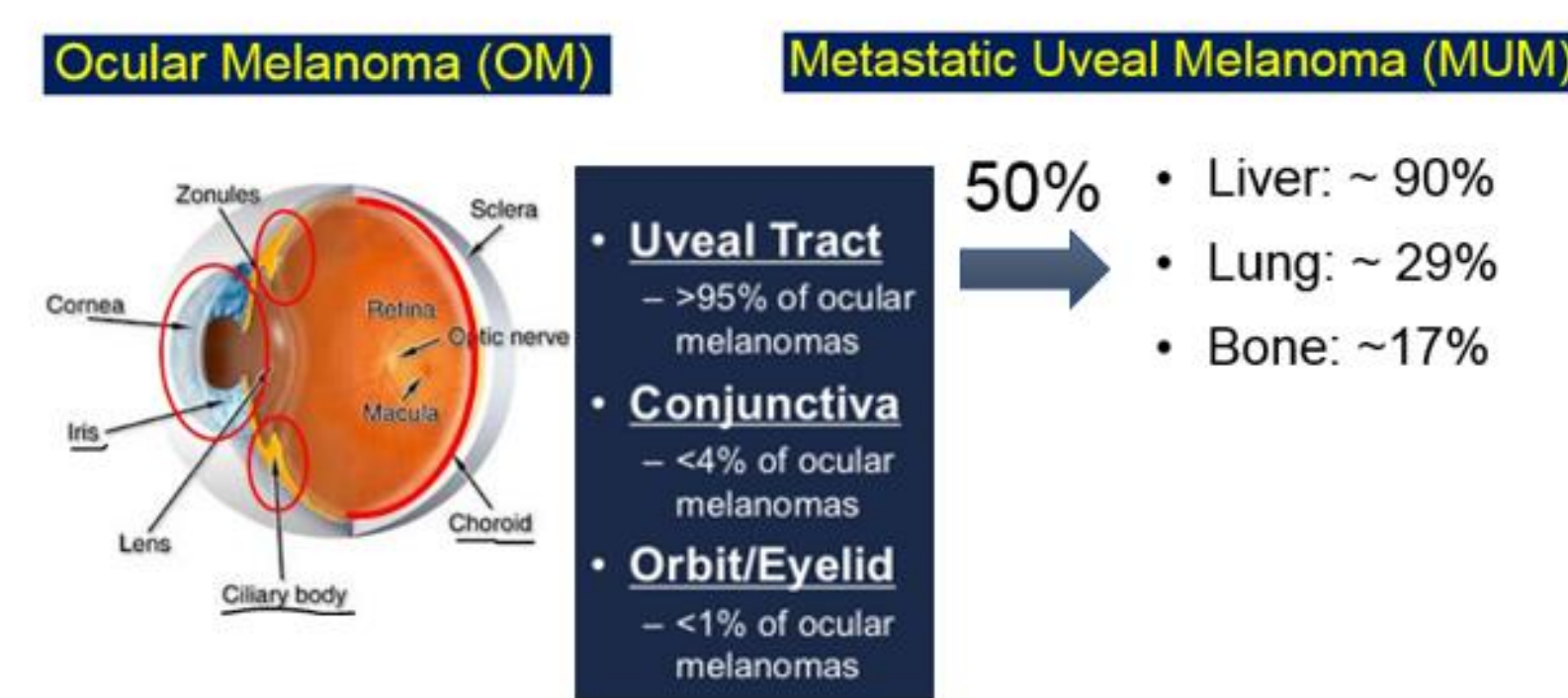


Pilot Study of Anxiety, Depression, and Quality-of-Life in Patients with Metastatic Uveal Melanoma

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Background

Metastatic uveal melanoma (MUM) is a rare malignancy that originates to the melanoma of the uveal tract without known risk factors (American Cancer Society [ACS], 2014).



In the United States, the incidence of uveal melanoma is about 2,000 adults per year. The 5-year relative survival rate of MUM is only 15% (ACS, 2014)

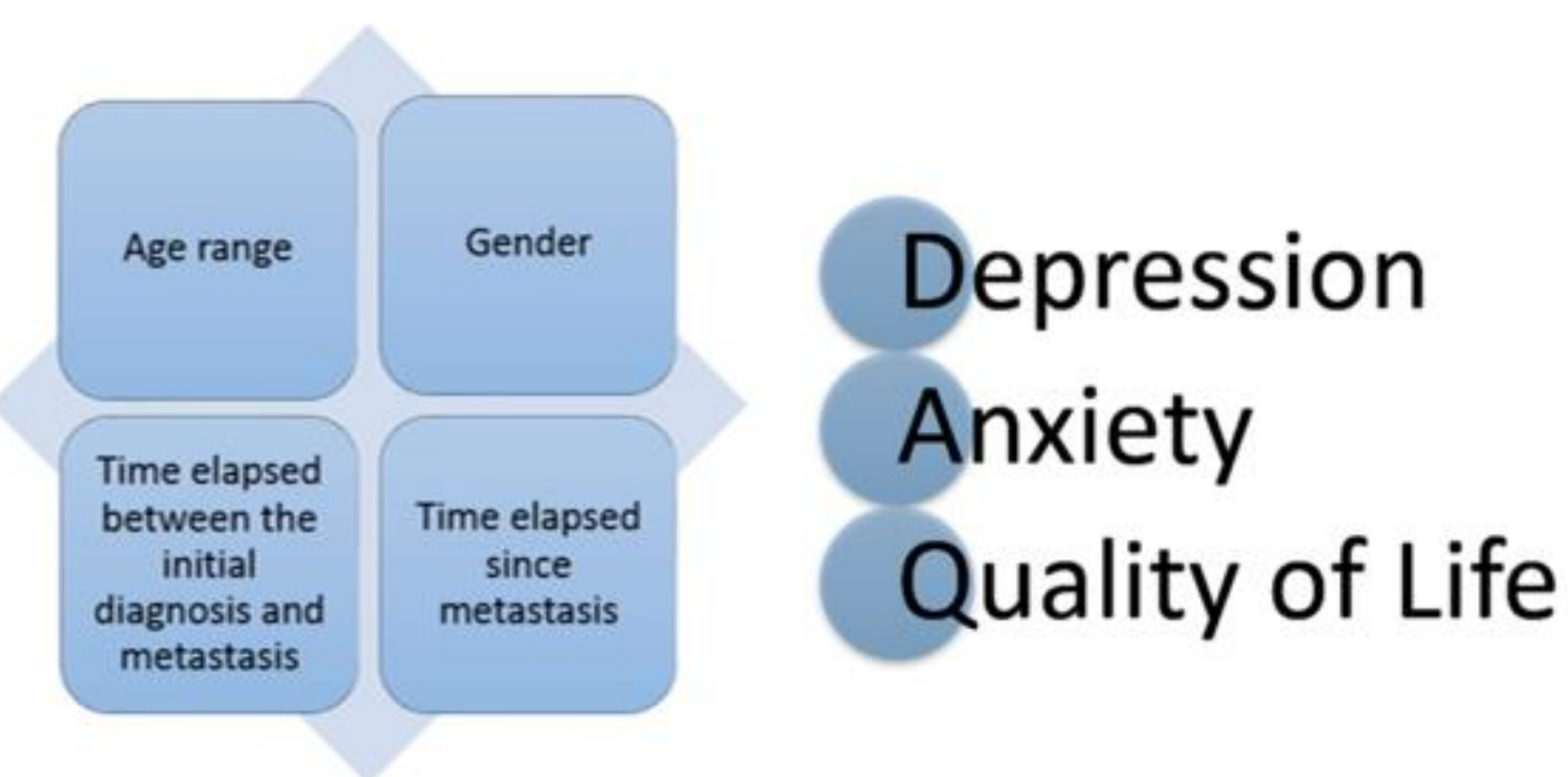
Psychosocial needs of patients with MUM have not been routinely assessed and addressed in our institution's clinical practice. Yet, awareness of patients' anxiety, depression, and perceived quality of life in those with MUM can influence care that meets patients' bio-psycho-social-spiritual needs.

Objectives

Measure the level of anxiety, depression, and quality of life in patients with metastatic uveal melanoma.

Identify patients with MUM who have at least borderline anxiety (scores ≥ 8), at least borderline depression (scores ≥ 8), and a decrease in global QOL (scores < 7).

Explore differences in anxiety, depression and quality of life scores by gender, age range, time elapsed between the initial diagnosis and the diagnosis of metastasis, and duration of illness since metastasis.



Theoretical Foundation

The framework for psychosocial oncology care	
Domain	Recommendation
A	Raise attentiveness of psychosocial care.
B	Provide standard of care for screening and management of psychosocial health care needs.
C	Delineate expectation of health care providers in terms of education, training, and communication of psychosocial issues.
D	Define patient and family education.
E	Explain quality oversight and monitor progress of psychosocial care and services.
F	Enlighten workforce skills for cancer services.
G	Standardize transdisciplinary taxonomy and nomenclature for psychosocial services.
H	Promote psychosocial research.

(Turnbull et al., 2012)

Methods

Research Design: A descriptive-comparative design.

Sample: A convenience sample of MUM patients aged 18 and older, English speakers residing in the United States, and being treated at a large teaching hospital from September 1 - December 1, 2017 were included.

Setting: A large teaching hospital in the Mid-Atlantic which is a referral practice of uveal melanoma.

Instruments and Measurement:

Scores of anxiety, depression, and QOL were measured using the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983) and the World Health Organization Quality of Life-BREF questionnaire (WHO, 2004). These instruments were used with permission from GL Education Group Limited and World Health Organization, respectively.

Anxiety and depression scores range from 0-21. The level of anxiety or depression score is estimated to be normal (score 0-7), borderline abnormal (score 8-10), and abnormal (score 11-21).

There is no total score of WHOQOL-BREF. Scores are reported by 4 domains and the two global questions are reported separately. Lower scores denote lower QOL while higher scores denote higher QOL.

WHOQOL-BREF		
QOL Domain	Description	Raw Score
Domain 1	Physical health	7-35
Domain 2	Psychological health	6-30
Domain 3	Social relationships	3-15
Domain 4	Environmental health	8-40
Global	General health	2-10

Results

Figure 1. Sample Demographic and Clinical Characteristic

There were 65 respondents (93% response rate). Of the total sample, the majority were female, >60 years, white, had a college education or above, non-employed, married, parents, but did not have a child <18 years.

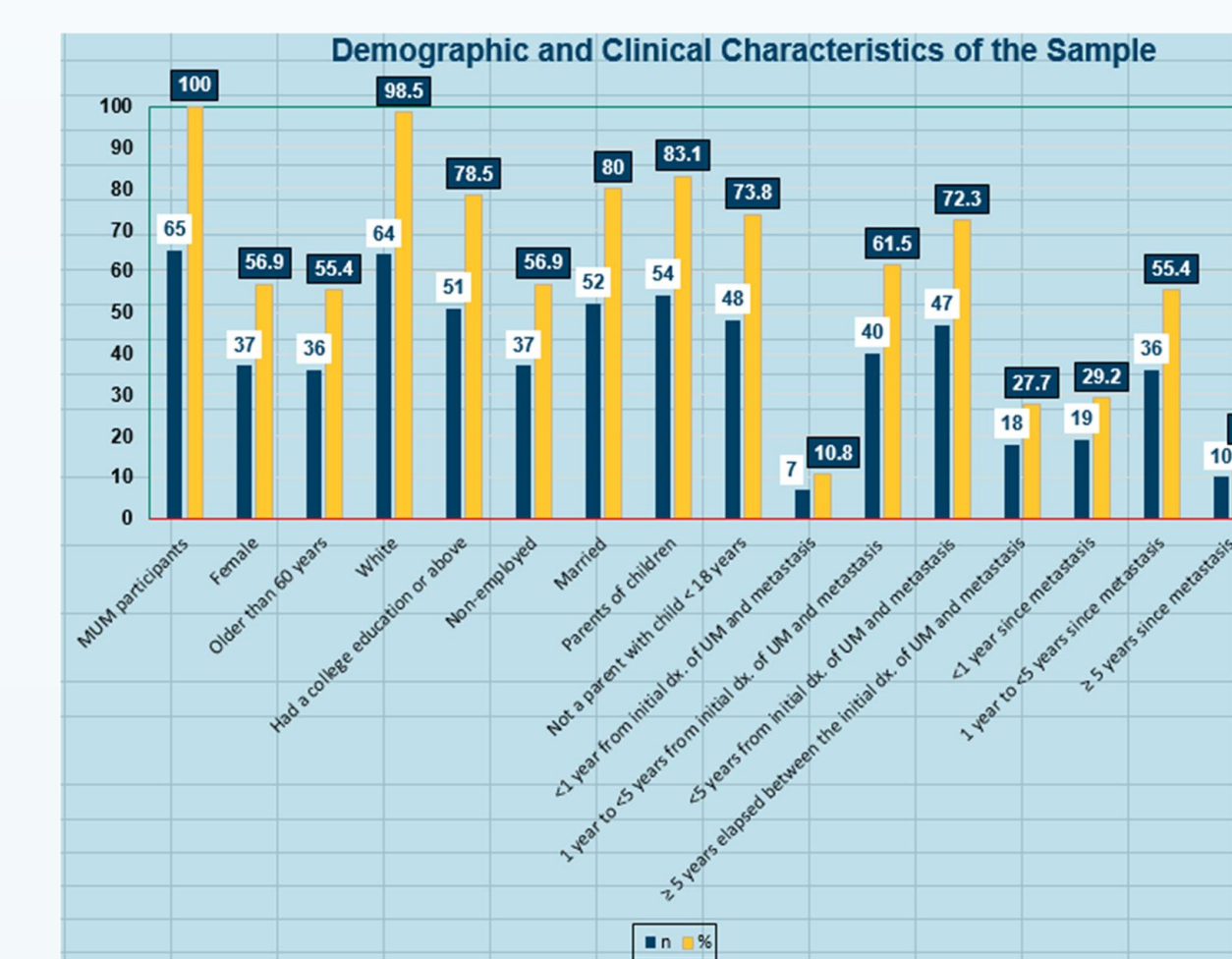


Table 1. Mean Anxiety, Depression, and Quality of Life Scores for Total Group

	Participants Mean (SD) N=65
Anxiety (score)	6.05 (3.64)
Depression (score)	3.48 (3.27)
QOL Domain 1	27.28 (5.38)
QOL Domain 2	23.52 (4.59)
QOL Domain 3	11.71 (2.35)
QOL Domain 4	34.40 (5.13)
Global QOL	7.22 (1.57)

Table 2. Patients with Anxiety, Depression, and Decreased Quality of Life

Participants N (%)	Anxiety score ≥ 8 N (%)	Depression score ≥ 8 N (%)	Global QOL score < 7 N (%)
65 (100)	20 (30.8)	9 (13.8)	21 (32.3)

Table 3. Differences in Anxiety, Depression, and Quality of Life Scores by Gender, Age Range, Time Elapsed Between the Initial Diagnosis and Metastasis, and Duration of Illness since Metastasis

Hypothesis 1: There are differences in anxiety, depression, and QOL scores by gender	Hypothesis 2: There are differences in anxiety, depression, and QOL scores by age groups	Hypothesis 3: There are differences in anxiety, depression, and QOL scores by the time elapsed between the initial diagnosis of uveal melanoma and metastasis	Hypothesis 4: There are differences in anxiety, depression, and QOL scores by the duration of illness since metastasis
No significant differences were found	Participants aged 18 to <50 years had significantly higher anxiety scores (7.52 \pm 3.65) than participants > 60 years (4.86 \pm 3.21, $p=0.003$). Participants aged 18 to <60 years had significantly lower QOL domain 4 scores of environmental health (32.48 \pm 5.23) than participants > 60 years (35.94 \pm 4.55, $p=0.006$). No other significant differences were found.	No significant differences were found	Anxiety scores were significantly higher in the < 1 year group (7.79 \pm 3.72) compared to the 1 year to <5 years group (5.75 \pm 3.45, $p=0.04$), and were significantly higher in the < 1 year group (7.79 \pm 3.72) compared to the ≥ 5 years group (3.80 \pm 2.78, $p=0.004$). QOL domain 1 scores were significantly higher in the < 1 year group (29.11 \pm 4.03) compared to the 1 year to <5 years group (25.81 \pm 5.85, $p=0.03$). No other significant differences were found.

Conclusions

Up to 30% of participants had at least borderline anxiety and a decreased global QOL while up to 10% had at least borderline depression.

Participants 18 to ≤ 60 years had higher anxiety scores and lower QOL domain 4 scores of environmental health. Participants with < 1 year since the diagnosis of metastasis had higher anxiety scores and higher QOL domain 1 scores for physical health. Gender and time elapsed between the initial diagnosis of uveal melanoma and metastasis were not differentiating factors for anxiety scores, depression scores, global QOL scores, or the four QOL domain scores.

The findings of our study guide stakeholders involved in the care of MUM patients to integrate a translational strategic plan addressing bio-psycho-social-spiritual needs to improve the quality of life of these patients in daily clinical practice.

The psychosocial oncology framework by Turnbull et al. (2012) provided a useful model for this study.

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