



BACKGROUND

- Cancer related fatigue is a side effect of cancer and cancer treatment (1).
- In pediatrics receiving chemotherapy, the prevalence is 70-100% of cases (2,3).
- To our knowledge these statistics for pediatrics are lacking in Egypt.
- Multiple risk factors have been linked with CRF: maintaining (current health, demographic, and lifestyle factors), modulating (age at diagnosis and gender factors), triggering (disease and treatment-related factors), and pre-disposing(genetic disposition factors) (4).
- The main questionnaires used in this study are: PROMIS Pediatric Short Form v2.0 Fatigue 10a and PedsQL multidimensional fatigue.

AIM

- 1) Record the prevalence of fatigue in the oncology pediatric patients.
- 2) Explore the relationship between fatigue and demographic data, cancer type, treatment, depression, functionality and selected related medical data.

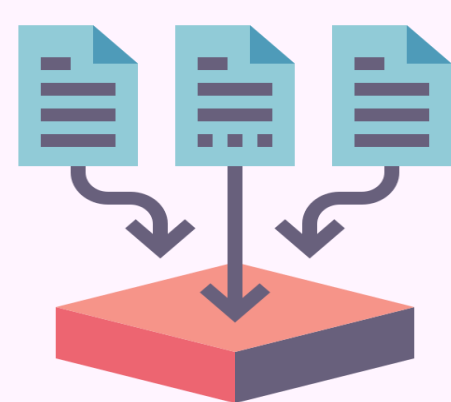
METHODS

Data collection

- Consent
- Child fills questionnaire
- Demographic data is collected

Statistical analysis

- Correlation analysis
- Step wise regression



RESULTS

Table 1: Sample characteristics (N=42)

characteristics	Participants N(%)	In-patients (n=13) n(%)	Out-patients (n=29) n(%)	P value
Age:				0.861
Mean (SD)	12.1 (3.3)	12.3 (3.4)	12.1 (3.3)	
Gender:				0.514
Female	20 (47.6)	5 (38.5)	15 (51.7)	
Type of cancer:				0.005
Hematological tumor	35 (83.3)	10 (76.9)	25 (86.2)	
Solid tumor	5 (11.9)	3 (23.1)	2 (6.9)	
Time since diagnosis:				0.003
>6 months	17 (40.5)	10 (76.9)	7 (24.1)	
6-12 months	12 (28.5)	2 (15.4)	10 (34.5)	
<12 months	13 (30.5)	1 (7.7)	12 (41.3)	
Current treatment status:				0.007
Active treatment	36 (85.7)	9 (69.2)	27 (93.1)	
Between cycles	4 (9.5)	4 (30.8)	0	
Other	2 (4.8)	0	2 (6.9)	

Figure 1: score of fatigue questionnaire

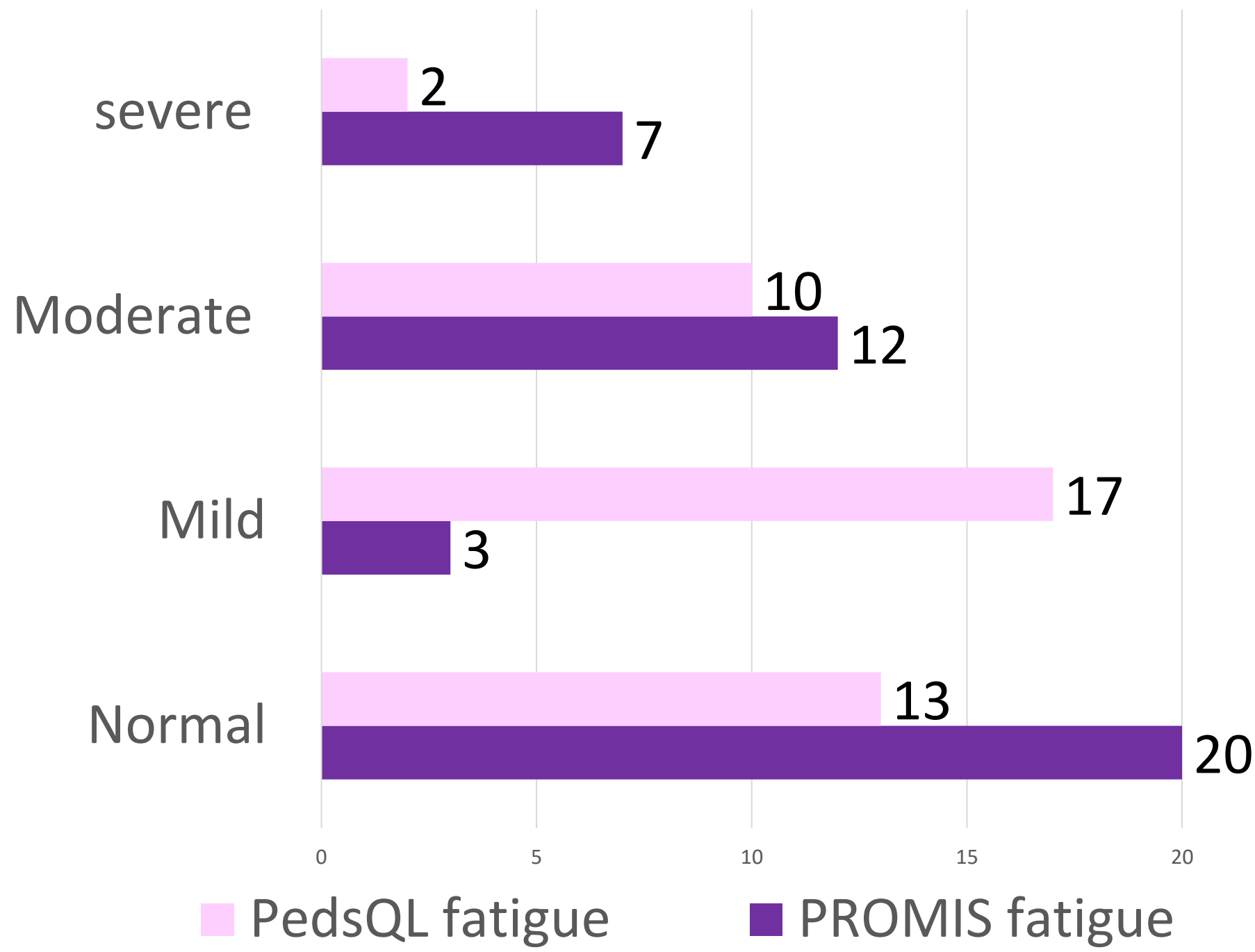


Figure2: correlation between fatigue intensity and characteristics

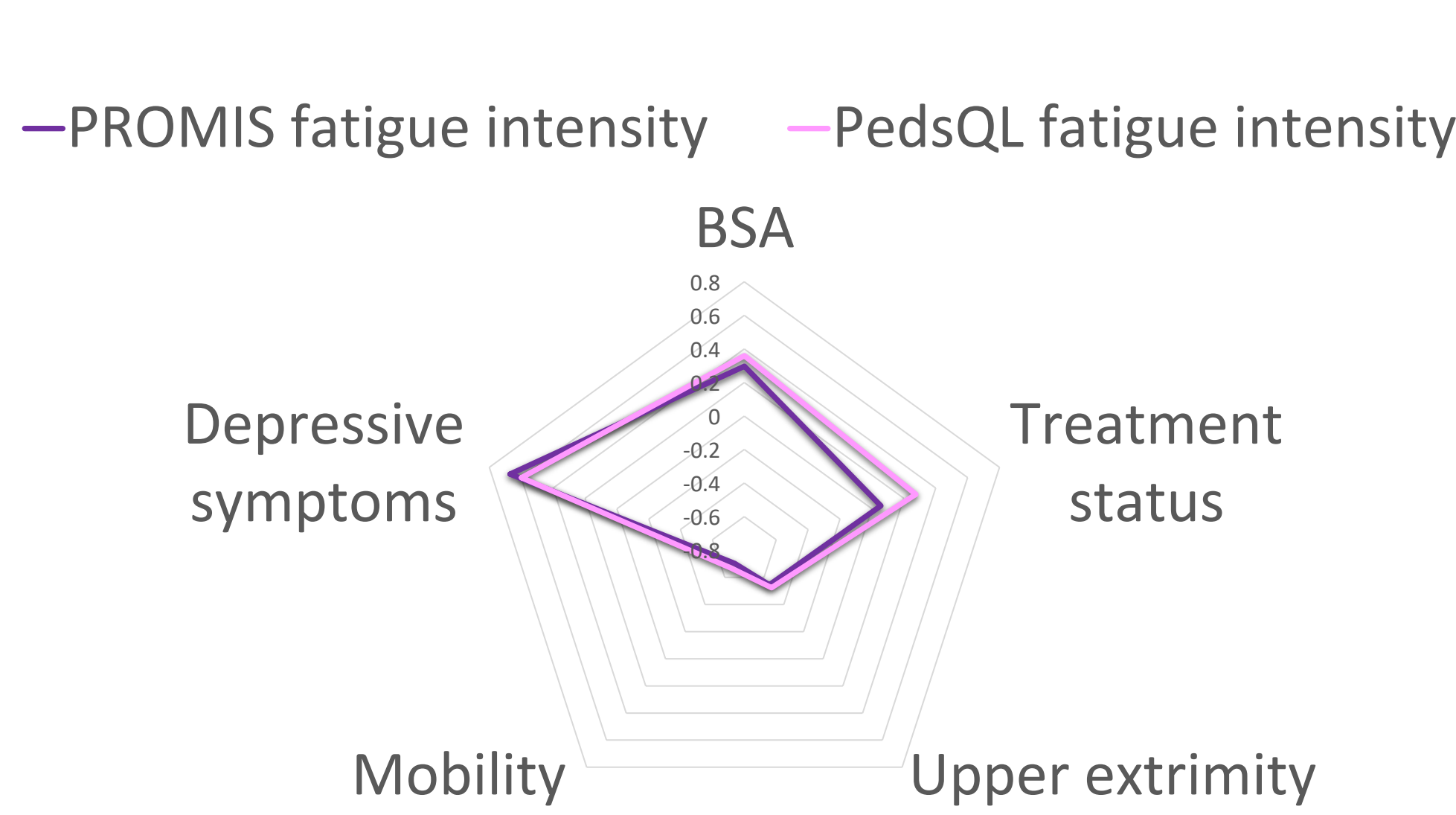


Table 2: Results of stepwise regression predicting PROMIS SF fatigue scores

	Unstandardized β	Standardized β	P value	Standard error	Lower limit	Upper limit
Mobility	-0.56	-0.39	0.002	0.12	-0.64	-0.15
Depressive symptoms	0.75	0.47	<0.001	0.12	0.22	0.71

Table 3: Results of stepwise regression predicting PedsQL fatigue scores

	Unstandardized β	Standardized β	p value	Standard error	Lower limit	Upper limit
Upper extremity	1.51	0.34	0.005	0.117	0.107	0.584
Depressive symptoms	-1.38	-0.49	<0.001	0.117	-0.734	-0.260
Treatment status	-15.44	-0.25	0.013	0.096	-0.447	-0.054

CONCLUSION

- Historically, children with cancer experience fatigue during their treatment that is underreported and undermanaged.
- Reported moderate to severe fatigue in children is between half to third of the children depending on measurement tool used.
- For PROMIS fatigue the mean T score was 53.76 which is <1 point above their U.S counterparts (T score 52.9) and five points above their Chinese counterparts (T score 48.52) (3,5).
- For PedsQL fatigue the mean score was 74.27 which is higher than their U.S counterparts (mean score 70.98) (6).
- Predicting factors were different maybe due to using different tools, predicting factors were: depressive symptoms, upper extremity, mobility and treatment status.
- PedsQL Fatigue presents detailed information about fatigue allowing better care plan design while PROMIS fatigue measures general fatigue which fits for being part of long surveys or research.
- We recommend mapping between the two tools so we could convert the results forward and backwards.
- A wider spectrum of research is needed on children post/pre treatment to measure the extent of fatigue and start considering it in the care plan.

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