

Introduction

Psychological distress is an important indicator of the mental health status of a population. It is widely used as a non-specific measure of serious mental illness in population-based health surveys and as an outcome measure in clinical trials and intervention studies. In Qatar, young women constitute a high-risk population for poor mental health and obesity due to a variety of sociocultural factors. Yet, there is currently limited information on the epidemiology of psychological distress including its association with body- and eating-related attitudes and behaviors in this vulnerable segment of the population

Objective

To estimate the 30-day prevalence of psychological distress and identify potential risk and protective factors in a large representative sample of female students attending Qatar's national university

Methods & Materials

A probability sample of predominately undergraduate female students from Qatar's National University population completed a thirty-minute online survey of nutrition and on nutrition and body perceptions in April of 2016.

Distress in the past 30 days was assessed using the 6-item version of the Kessler psychological distress scale (K6) [Kessler, Barker, Colpe, Epstein et al. 2003]. Information about level of impairment in daily functioning due to these symptoms was also collected.

Body-shape concerns and eating-related attitudes and behaviors were assessed using shortened versions of the the body-shape questionnaire (BSQ-8) [Cooper, Taylor, Cooper, Fairburn, 1987] and the Eating Attitudes Test (EAT-26) [Garner, Olmsted, Bohr & Garfinkel, 1982]. Information about height, current weight, desired weight, and body weight satisfaction was also collected.

Prevalence of psychological distress was calculated as the proportion of participants who scored 13 or above. Bivariate and multivariate analyses were carried out in STATA (Version14).

Results

The 30-day prevalence was 37.5% (95% CI: 35.0-40.1) (Figure 1). Approximately 23.9% of the sample reported experiencing higher than usual levels of distress compared to 51.7% who reported that their distress levels were about the "same as usual" for them. Relative to the lowest tertile of K6, the highest tertile was associated with higher than usual levels of distress (41.8% vs. 9.1%) and significantly higher levels of mentally unhealthy days (Figure 2, mean difference=9.0; Tukey $p<0.0001$).

Results from MANOVA (Table 2) showed significant association between BMI and highest tertile of K6 relative to the lowest tertile (Coeff=1.47, $p<0.0001$, Figure 3) and between middle and highest tertiles versus lowest tertile for BSQ-8 (Figure 4) and EAT-26 (Table 2). We found significantly higher proportion of desire for thinness (72.5% vs. 60.0%, $p<0.0001$) and body weight dissatisfaction (62.1% vs. 39.4%, $p<0.0001$) among those in the highest tertile of K6 versus lowest tertile.

Table 2 Association between Tertiles of K6, BSQ and Eat-26

	Coefficient	P> t	95% Confidence Interval	
BMI				
Mid= 9-13	0.0566	0.879	-0.6739	0.7871
High= 14-24	1.4750	0.000	0.7448	2.2059
BSQ				
Mid= 9-13	2.7910	0.000	1.6932	3.8895
High= 14-24	6.4213	0.000	5.3232	7.5195
EAT-26				
Mid= 9-13	2.6684	0.000	1.5201	3.8167
High= 14-24	6.2631	0.000	5.1148	7.4114

Kessler Psychological Distress Scale (K6)

In the PAST 30 DAYS, how often did you have each of the following feelings?						
VARIABLE NAME		All the time	Most of the time	Some of the time	A little of the time	None of the time
{Q: NERVOUS}	...nervous?					
{Q: HOPELESS}	...hopeless?					
{Q: RESTLESS}	...restless or fidgety?					
{Q: DEPRESSED}	...so depressed that nothing could cheer you up?					
{Q: EFFORT}	...everything was an effort?					
{Q: WORTHLESS}	...worthless?					

Conclusion

Psychological distress as measured by the K6 appears to be highly prevalent in this population. Those who scored 13 or above, a cut-off point established from validation studies in some Western non-clinical populations, were also more likely to report higher levels of impairment in daily functioning, poorer overall physical health, and worse body- and eating-related outcomes. Therefore, the K6 may serve as a good screening tool for poor psychological health in relation to poor eating- and weight-related outcomes in this population. Young female Qataris and Arab women represent the future of this nation. Immediate attention to their psychological needs especially in higher education settings may provide a valuable opportunity for early detection and effective clinical intervention.

Figure 3 - Psychological Distress & BMI

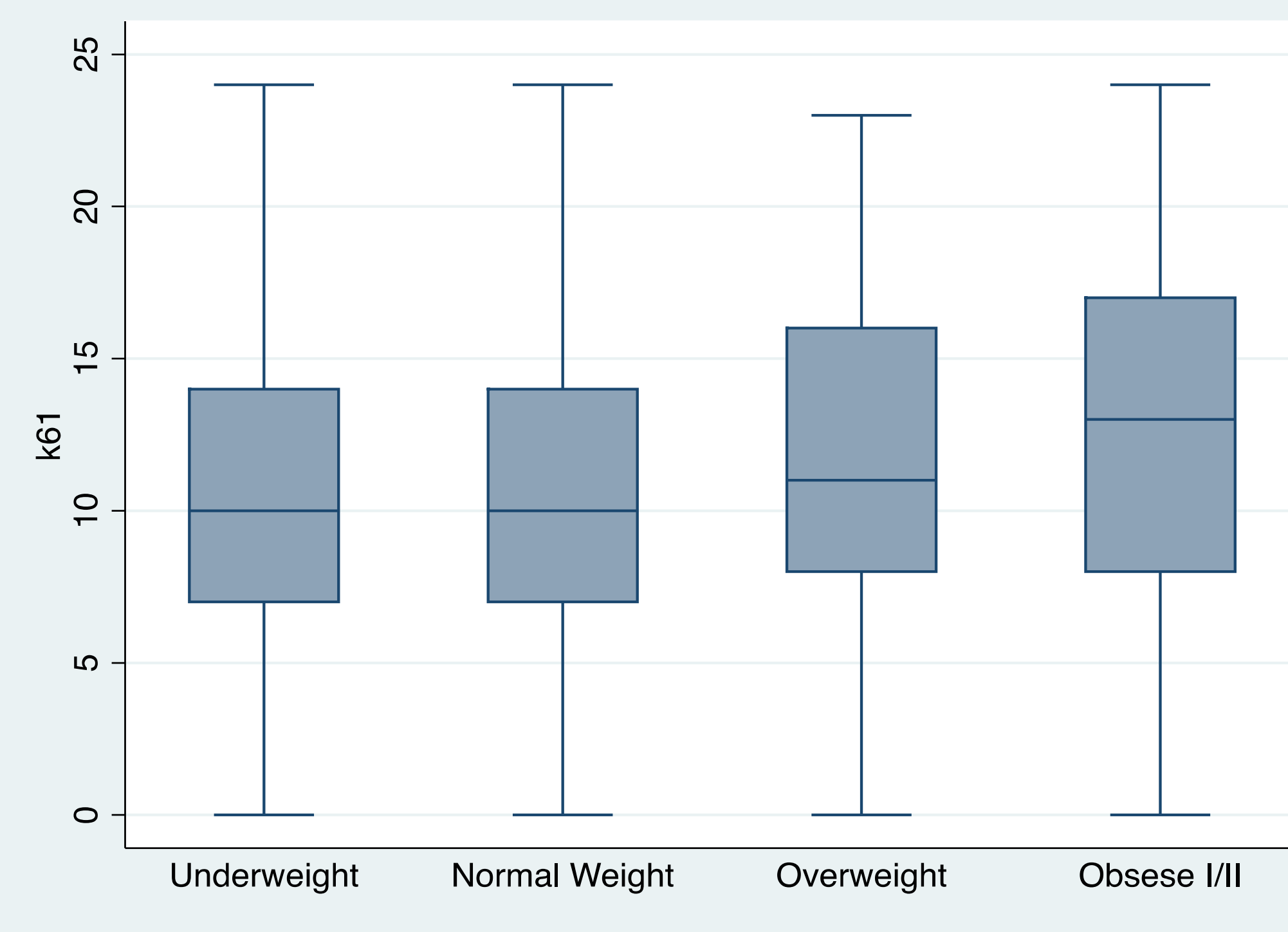


Figure 4 - Psychological Distress & BSQ

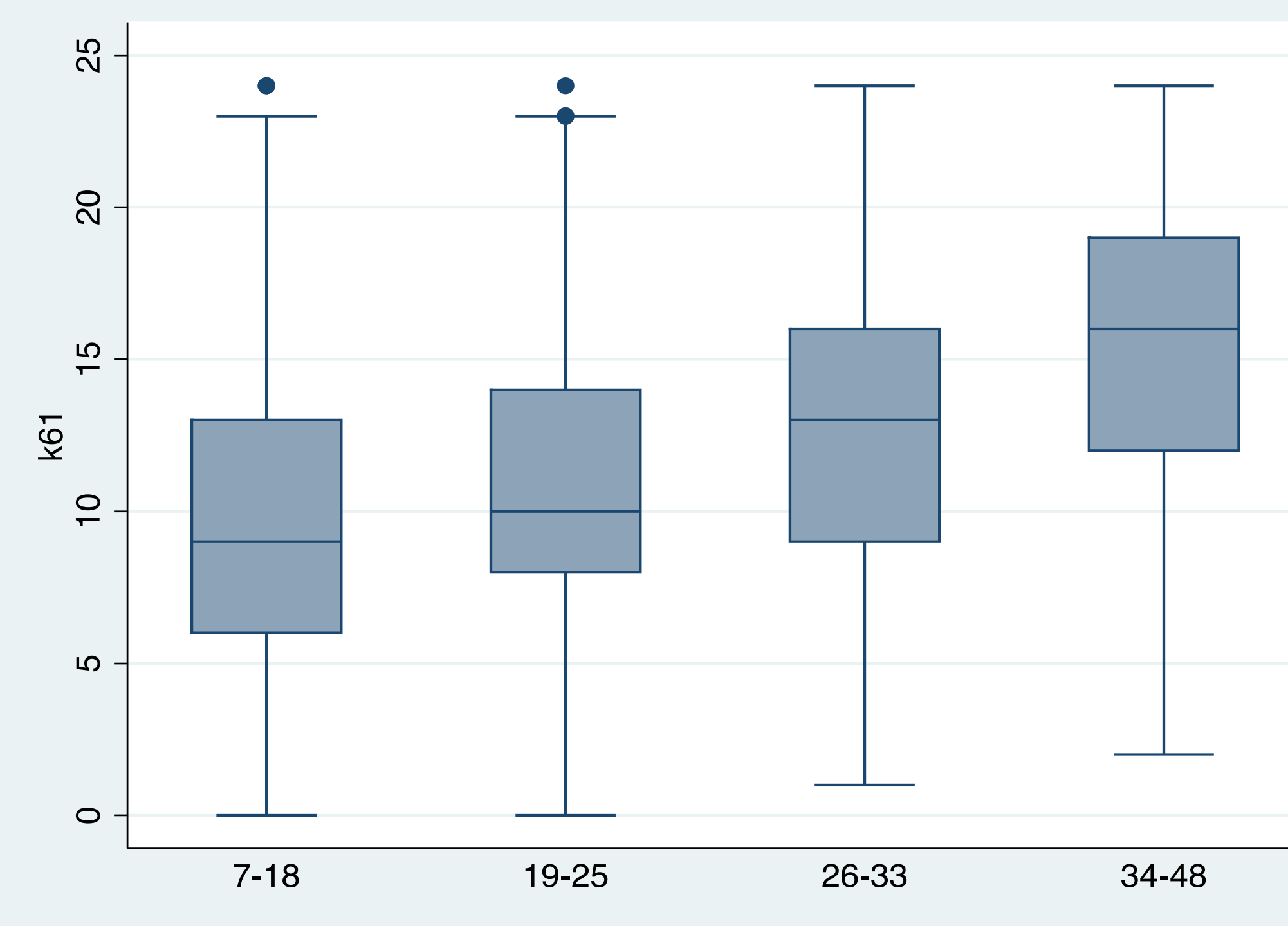
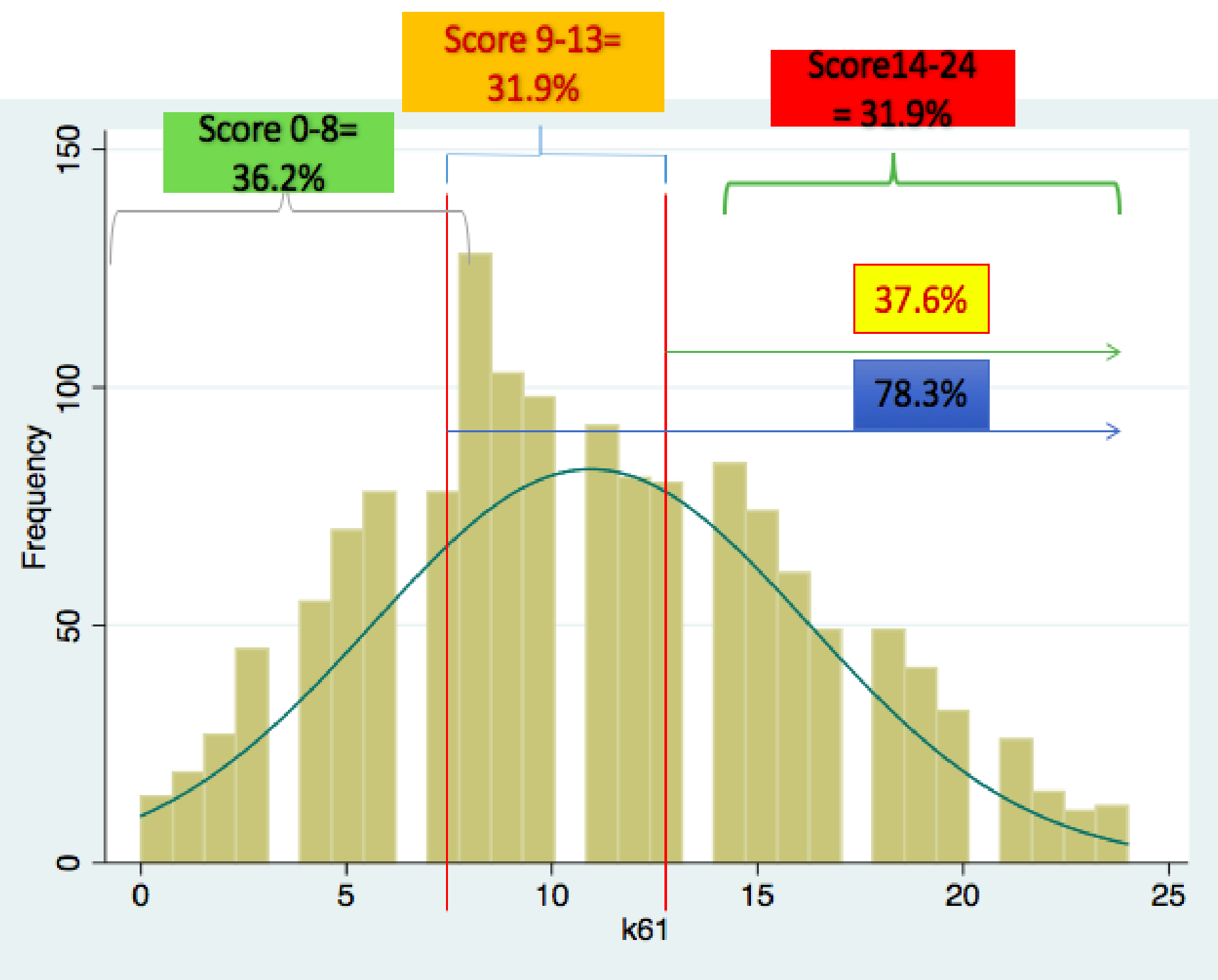
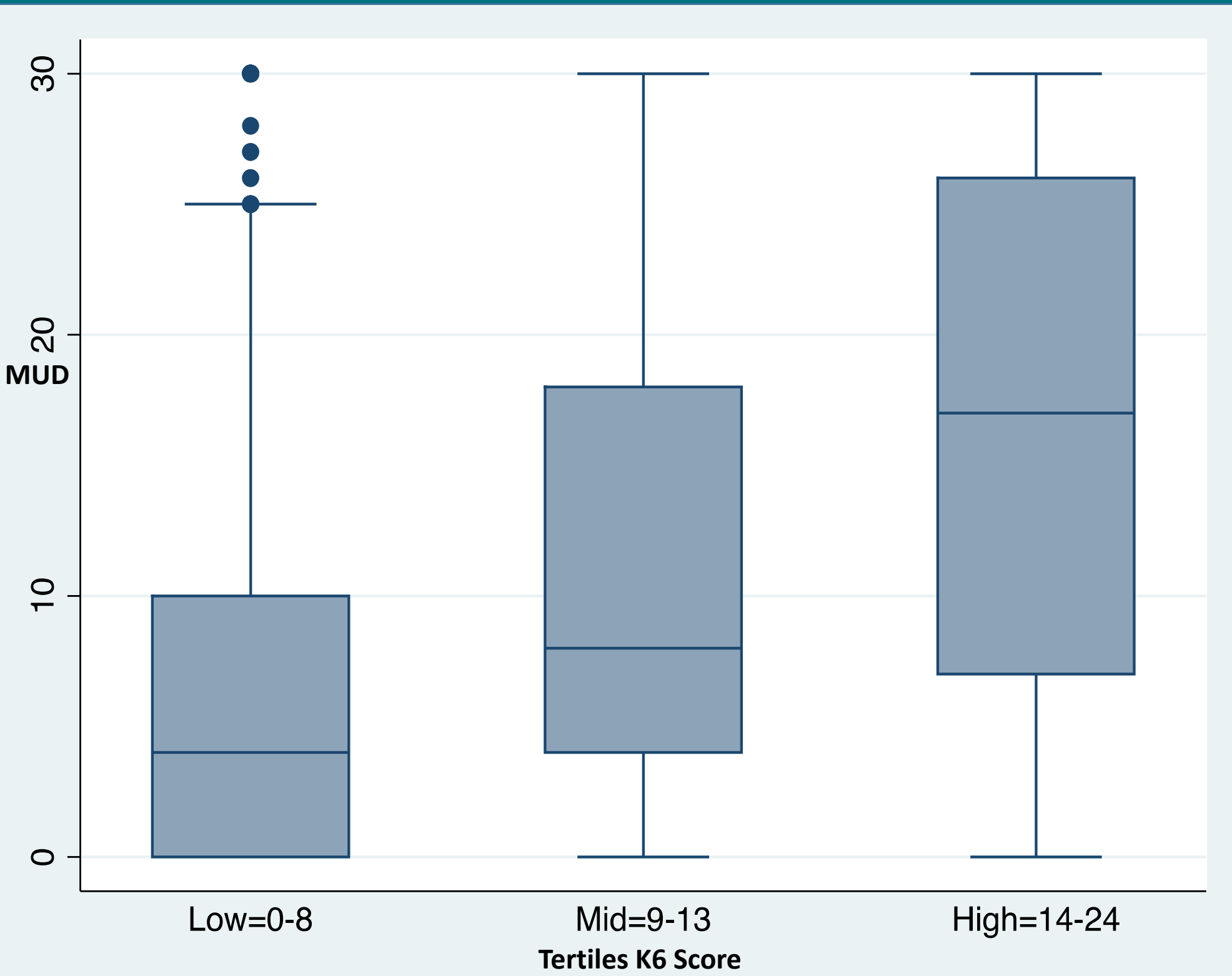


Figure 1- Distribution of Psychological Distress in Sample



Kessler 6-item Psychological Distress Scale : Mean=10.9 , SD=5.3, N=1422

Figure 2 - Mentally Unhealthy Days (MUD)



Acknowledgment

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