

Michelle Friedman-Yakoobian<sup>1,2</sup>, Emma M. Parrish<sup>1,2</sup>, Matthew Hagler,<sup>1,2,3</sup>, Anna Schwartz<sup>4</sup>, Michelle L. West<sup>1,2</sup>, Kim T. Mueser<sup>5</sup>

### **Background**

- Families of individuals with schizophrenia experience considerable burden.<sup>1</sup>
- Recent advances in earlier treatment for youth at clinical high risk (CHR) for psychosis may provide opportunities to prevent or reduce family burden.
- This study examined rates of burden among families of youth at CHR, as well as predictors of family burden.

## Methods

- Youth and family members completed standard clinical questionnaires when they attended a consultation at the Center for Early Detection, Assessment and Response to Risk (CEDAR) Clinic, a specialty CHR program in Boston.
- With approval by the BIDMC and DMH IRBs, these data were de-identified and analyzed.
- The family questionnaire assessed subjective and objective burden<sup>4</sup> and demographic information. Youth clinical and demographic factors were also examined, including age, gender, race/ethnicity, CHR symptoms<sup>5,</sup> and social and role functioning<sup>6</sup>.
- Hierarchical linear regressions were used to examine predictors of objective and subjective family burden among youth meeting CHR criteria on the SIPS. Predictors were progressively entered in four blocks: demographics, social role functioning, SIPS<sup>5</sup> positive symptoms, and SIPS negative symptoms. Missing data were imputed using the full information maximum likelihood function in MPlus.

Table 1: Demographics (n=59)								
Client Age (years)	Mean (SD);	17.9 (3.3)						
	Range	13-30						
Client Gender		41 Male						
		16 Female						
		2 Other						
<b>Client Racial</b>	White	34 (60.7%)						
Identification	Black/African American	6 (10.7%)						
(n=56)	Hispanic/ Latino	5 (8.9%)						
	Asian	3 (5.4%)						
	Interracial or other	5 (8.9%)						
<b>Client Highest Level</b>	Some grade school, not completed	33 (60%)						
of Education (n=55)	high school							
	Graduated high school	6 (10.9%)						
	Some college	14 (25.5%)						
	Graduated college	1 (1.8%)						
	Advanced degree	1 (1.8%)						
Family member	Parent	56 (94.9%)						
relationship to	Sibling	1 (1.7%)						
client	Grandparent	2 (3.4%)						
Family member	Completed part of high school	1 (1.8%)						
highest level of	Graduated high school	7 (12.7%)						
education (n=55)	Some college	10 (18.2%)						
	Graduated 4-year college	20 (36.4%)						
	Advanced degree	17 (30.9%)						

<sup>+</sup>Massachusetts Mental Health Center Public Psychiatry Division of the Beth Israel Deaconess Medical Center <sup>2</sup> Harvard Medical School Department of Psychiatry, Boston, Massachusetts, <sup>3</sup>University of Massachusetts Boston, <sup>4</sup>Brown University, <sup>5</sup>Boston University Center for Psychiatric Rehabilitation

# **Predictors of Family Burden and Critical Attitudes towards Youth Presenting at a Specialty Clinic for** Youth Clinical High Risk (CHR) for Psychosis

Burden Assessmer	nt Scale for Familie	es of the Seriously Menta	ally III <sup>4</sup> (BAS )	Table 4. Hierarchical Linear Regres	ssion, : Sub Beta	jective B S.E.	p-value	
					Deta	J.L.	p-value	
19 Items assessing burden of caring for a relative with mental health			health	Age	24	.15	.12	
challenges:				Male	03	.16	.86	
1	2	3	4	White	21	.25	.39	
Not At All	A Little	Some	A Lot	College-educated parent(s)	33	.13	<.05	
		Joine		Social functioning	01	.23	.96	
				Role functioning	14	.18	.41	
able 2: BAS (n=	59)			*Unusual thought	.46	.16	<.01	
Burden				content/delusional ideas *Suspiciousness/persecutory	10	.13	.44	
	Mean (SD)			ideas	10	.15	.44	
imension				*Grandiose ideas	.11	.18	.53	
Verall Burden	2.15 (0.61)			*Perceptual	21	.16	.19	
			abnormalities/hallucinations			120		
Subjective Durde	n 2 10 (0.72)		*Disorganized communication	29	.18	.12		
Subjective Burden	2.19 (0.72)			**Social anhedonia	36	.22	.09	
				<b>**Avolition</b>	04	.20	.84	
bjective Burder	n 2.10 (0.69)			<b>**Expression of emotion</b>	11	.18	.56	
			_	<b>**Experience of emotions/self</b>	.45	.19	<.05	
				**Ideational richness	10	.16	.54	
able 3: Most End	orsed BAS Items (	n=59)		Family attitudes	36	.22	.09	
BIC S. MOST LIIU				Cumulative R <sup>2</sup> = .41 (p < .001)				
bjective Burden		Subjective Burden		*SIPS Positive Symptoms **SIPS Negative Symptoms				
Daily practical challenges such as Personal or subjective suffering time/ financial costs such as worry		Table 5. Hierarchical Linear Regre	ession, : Ob	jective B	urden (n=			
			suncing		Beta	S.E.	p-value	
em	Mean (SD)	ltem	Mean (SD)	Age	05	.15	.73	
				Male	07	.15	.63	
ound the househo		Worried about the	3.38 (1.02)	White	39	.21	.07	
outine was upset.		future of your relative.		College-educated parent(s)	22	.13	.08	
ound it difficult to	2.52 (.96)	Worried about how	2.46 (1.00)	Social functioning	.21	.19	.25	
oncentrate on you	Jr	your behavior might		Role functioning	.14	.16	.38	
vn activities.		make your relative's		*Unusual thought	02	.15	.92	
		problem worse.		content/delusional ideas				
				*Suspiciousness/persecutory	.04	.13	.78	
nd to change you		Felt guilty because you	· · ·	ideas *Crandiaca ideac	00	17	70	
ersonal plans like		were not doing enough		*Grandiose ideas *Porcontual	06	.17	.72	
king a new job, o		to help.		*Perceptual abnormalities/hallucinations	.00	.14	1.00	
ing on vacation.				*Disorganized communication	11	.16	.48	
ut down on leisur	e 2.25 (1.08)	Found the stigma	2.26 (1.18)	**Social anhedonia	11 55	.10	.40 <.01	
ne	(1.00)	related to your	()	**Social annedonia **Avolition	- <b>.</b> 55 .09	.18	< <b>.01</b> .62	
		relative's		**Expression of emotion	.09 .48	.10	.02 <.01	
		emotional/thinking		**Experience of emotions/self	.00	.18	1.00	
		difficulties upsetting		**Ideational richness	02	.15	.90	
		Juniculies upsetting		Family attitudes	13	.19	.50	
Predictors of Burden			Cumulative $R^2 = .48$ (p < .001)		•			
				*SIPS Positive Symptoms **SI	PS Negativ	ve Symp	otoms	
Subjective Burden: Family members of clients who were more			Conclusion & Discussion					
•	•	5) reported lower subject						
	•	delusional ideas (B=.46)		of burden.		стрене		
0	Ŭ	of emotions/self ( $B = .45$					, <b>.</b> .	

higher impairment in experience of emotions/self (B = .45, p = .<.05) were associated with higher subjective burden. The regression model accounted for 41% of the variance in subjective burden.

**Objective Burden:** Family members of clients who had higher levels of social anhedonia (B = -.55, p < .01) reported less objective burden. Family members of clients who had higher levels of difficulty expressing emotion (B=.48, p<.01) reported higher objective burden. Overall, the regression model accounted for 48% of the variance in objective burden. Positive symptoms did not predict objective burden.

See handout for footnotes and references





- More highly educated family members reported less subjective burden. Greater unusual thought content and difficulty with experiencing emotions were associated with greater subjective burden.
- Surprisingly, greater social anhedonia was associated with less objective burden – perhaps suggesting that individuals at CHR with less social interaction seemed to generate fewer practical concerns for caregivers.
- In this sample, social and role functioning of youth did not predict burden. Also rejecting family attitudes did not predict burden.







# Information in Handout