

# Changing end-users' perceptions of telepsychiatry in the emergency department

Ligat Shalev <sup>1,2</sup>, Gadi Lubin <sup>3</sup>, Yuval Melamed <sup>4</sup>, Sergey Raskin <sup>5</sup>, Daniel Raz <sup>6</sup>, Renana Eitan <sup>3</sup>, & Adam J. Rose <sup>1</sup>

<sup>1</sup> School of Public Health, Hebrew University, Jerusalem, Israel; <sup>2</sup> Tel-Hai Academic College, Kiryat Shmona, Israel; <sup>3</sup> Jerusalem Mental Health Center, Jerusalem, Israel; <sup>4</sup> Abarbanel Mental Health Center, Bat Yam & Faculty of Medical & Health Sciences, Tel-Aviv University, Tel Aviv-Yafo, Israel; <sup>5</sup> Ministry of Health, Jerusalem, Israel; <sup>6</sup> Ministry of Justice, Jerusalem, Israel

 [Ligat.Shalev@gmail.com](mailto:Ligat.Shalev@gmail.com)

## Introduction

- Implementing organizational innovations and change can be challenging, with success often tied to implementers' perceptions of the innovation
- While research has examined these perceptions, few studies track how they evolve over time

## Aim

- To assess changes in nurses and psychiatrists' perceptions about using telepsychiatry (video-link evaluation) to evaluate patients for possible involuntary hospitalization in emergency departments (ED)

## Methods

- Using a mixed-methods approach, nurses and psychiatrists from eight Israeli EDs completed questionnaires before (usual care) and after telepsychiatry implementation
- The questionnaire included:
  - 1) Personal characteristics (e.g. role and seniority)
  - 2) SHEMESH questionnaire ("Organizational Readiness to Change Assessment")- 11 statements on a 5-point Likert scale. Assesses attitudes about the innovation and favorability of local environment to implementing change ("Evidence and Context")
  - 3) Two open-ended questions about likely fit of telepsychiatry and challenges with its use
- Quantitative data were analyzed through descriptive statistics, t-tests, and regression models, while qualitative data were analyzed thematically
- To increase the trustworthiness of the thematic analysis two researchers analyzed the data independently

## Results

- 60% (204/344) do not hold a managerial role at the hospital and work at the ED as psychiatrists or nurses
- While the Evidence score was relatively high during the usual care phase (m=3.8/5, sd=0.9), it was higher afterwards (m=4.2, sd=1.0; p<0.001)
- Context scores were similarly high in both phases (4.0, 0.7 vs. 4.1, 0.17; p=0.10)
- In regression analyses, Evidence and Context scores were higher in the telepsychiatry phase, higher among psychiatrists, and higher among managers (all p<0.01)

Table 1: Multiple regression with Robust Standard Errors to predict overall perceptions of overall Evidence and Context construct

Evidence	B	Robust SE (B)	β
Research phase (Usual care/ telepsychiatry)	0.5	0.1	0.2***
Profession (psychiatry/ nursing)	-0.7	0.2	-0.3***
Management role (no/ yes)	0.5	0.2	0.2**
Seniority (years of experience working at the ED)	-0.006	0.007	-0.1
F		22.51	
R <sup>2</sup>		0.23	
Adjusted R <sup>2</sup>		0.22	
Context	B	Robust SE (B)	β
Research phase (Usual care/ telepsychiatry)	0.2	0.1	0.1*
Profession (psychiatry/ nursing)	-0.3	0.1	-0.2*
Management role (no/ yes)	0.4	0.1	0.3**
Seniority (years of experience working at the ED)	-0.008	0.006	-0.1
F		11.18	
R <sup>2</sup>		0.14	
Adjusted R <sup>2</sup>		0.12	

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

## Results

- 344 participants completed the questionnaire
- Of these, 185 (54%) were from the usual care phase and 159 (46%) were from telepsychiatry phase
- 257 (75%) of the respondents were attending or resident psychiatrists, and 87 (25%) were nurses
- Comments in the usual care phase focused on concerns about feasibility, while comments in the telepsychiatry phase focused on patient cooperation
- Issues about professionalism arose in both phases
- Fewer of the comments had a negative valence during the telepsychiatry phase (49% vs. 30%; p<0.01)

## Conclusions:

- Perceptions of telepsychiatry improved over time with sustained use, emphasizing the critical role of ongoing organizational support and engagement in the success of implementation efforts
- End users may eventually adapt to and embrace telepsychiatry, but consistent organizational support and proactive engagement are essential to facilitate this transition
- Policies should prioritize providing resources, training, and ongoing encouragement to ensure the successful integration and sustained use of telepsychiatry