# Hotline Evaluation and Linkage Project Category II

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## GOALS

The goals of this project were to:

1. Evaluate the *immediate outcomes* of calls to Telephone Crisis Services (TCS) by callers who are either suicidal or were experiencing other nonsuicidal crises.

   This involved an assessment of the impact of interventions with a caller during a given call. This is the *baseline* sample.
   In order to measure these changes, we employed 1) For nonsuicide crisis calls: a brief version of a validated instrument called the Profile of Mood States (POMS), which consists of a list of 12 words that capture the emotional and cognitive aspects of the crisis state; and, additional questions assessing helplessness, feeling overwhelmed, and hopelessness; 2) For suicide calls: a brief standard suicide risk assessment that is based on the most current research on factors that capture critical aspects of the suicidal state. Staff at participating centers were trained to obtain this data near the beginning (Time 1) and at the end (Time 2) of eligible calls.

2. Evaluate the *intermediate outcomes* for suicidal and nonsuicidal crisis calls.

   In addition to changes *during* the call, we assessed how callers were faring *after* the call. Follow up calls were made within 2-3 weeks on average of the call and re-assessed crisis and suicide status. Caller feedback on and satisfaction with the call, as well as whether the caller followed up on specific plans developed or referrals recommended in the call were also assessed. Independent evaluators who had crisis intervention training made the follow up calls.

3. Evaluate the *community context* of TCS.
   That is, to what extent are TCS familiar to and accepted by relevant agencies in their communities? This data was obtained through surveys of about 15 local community agencies provided by four participating TCS. The community context was also assessed by a survey of a group of people who were more likely to, or should know about the local TCS. Local psychiatric emergency services identified by two TCS included 4 questions on their intake assessment concerning familiarity with, use of, and satisfaction with the TCS by clients presenting to their agency.

## SAMPLE

The following tables present the characteristics of the participating centers, the caller sample at baseline, and at follow up. Not all calls were eligible for baseline assessments, including I & R calls; callers who could not be assessed due to their current mental state, intoxication, or belligerence; third party calls (not in crisis), frequent/chronic callers, non-English speaking callers, and minors. In addition, some eligible callers were not assessed due to high call volume (32%), phone problems (6.1%), caller refused/hung up (26.3%), high risk suicide (26.5%), and counselor did not think assessment was appropriate for this call (9.2%).

## Crisis Center Characteristics

(N=8)

- 6 States: Midwest (2); Northeast (4); South (1); West (1)
- Counselors: Paid Staff (4); Volunteers (3); Mixed (1)
  88 from Paid Staff; 136 from Volunteer Staff
- Annual Call Volume: 7,993 – 85,000
- Data Collection Period: 3/03 – 7/04

## Baseline Sample

| | CRISIS N=1617 | SUICIDE N=1085 | TOTAL N=2702† |
|---|---|---|---|
| Male | 25.9% (418) | 39.1% (424)*** | 31.2% |
| Female | 73.9% (1195) | 60.1% (652) | 68.4% |

†52.3% of all eligible callers
(Range per center = 20.9% - 74.4%)

***p< 001

## Follow-Up Sample

| | CRISIS (N = 801/1617) | SUICIDE (N = 380/1085) |
|---|---|---|
| Follow-Up Rate | 49.5% | 35.0%* |
| Male | 23.6% | 30.3%* |
| Female | 76.4% | 69.7% |
| Mean Age | 37.6 yrs | 36.1 yrs* |
| Age Range | 18-85 yrs | 18-72 yrs |

*p<.05

**RESULTS**

Crisis Calls

For the 1617 crisis calls on which baseline assessments were completed, there were significant reductions in callers' confusion, depression, anger, anxiety, helplessness, overwhelmed, and hopelessness from the beginning of the call (time 1) to the end of the call (time 2), indicating a significant immediate positive impact of the calls.

At follow up, there were further significant reductions in those same variables from the end of the call (time 2) to the follow up call (time 3).

The extent to which the crisis callers were given referrals and followed through with them is presented below. The majority of these callers were given a new referral (67.5%), of which 20.2% had completed at least one appointment within 2-3 weeks of the initial call. Another 12.2% had set up an appointment. Note that of the 541 callers who received new referrals, 392, nearly half of the callers in the follow up sample, received mental health referrals. Of these, 33.2% had followed up with the referral at the time of the follow up call by either completing an appointment or setting up an appointment.

## Crisis Callers at Follow Up: Rate of Referrals

New referral:

Any = 67.5% (541/801)

Mental health = 48.9% (392/801)

Referral back to:

Crisis center = 10.4% (83/801)

Current therapist/ongoing services = 13.5% (108/801)

*Total Referrals* = 78.4% (628/801)

## Crisis Callers at Follow Up: Follow Through with *New* Referrals

- Completed Any Appt = 20.2% (110/541)
- Completed MH Appt* = 17.6% (69/392)

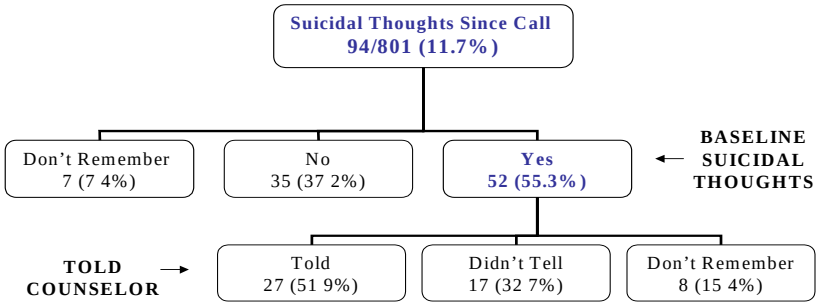
- Set up Any Appt = 12.2% (66/541)
- Set up MH Appt* = 15.6% (61/392)

➢ 13.7% of all crisis callers (110/801) are completing at least one appointment with *new* service within 1 month of call

* Mutually exclusive categories

The following table indicates that 11.7% of the crisis callers had suicidal thoughts since their call and that more than half of them were feeling suicidal at baseline (6.5% of the 801 follow-up callers). Seventeen of them did not tell the counselor. Compared to the 706 who did not endorse suicide at follow up, these 94 were significantly more distressed and hopeless at baseline. We don't know how many of the baseline crisis callers who did not consent to a follow up might have been feeling suicidal. This indicates that it may be useful to inquire about suicidal feelings of all crisis callers.

## Crisis Callers → Suicidal at Follow Up (I)




Suicide Calls

The following table depicts the baseline sample of suicide callers. Over half of the suicide callers had a plan when they called the center and 8% had taken some action to harm or kill him/herself immediately before the call. Also, 57.5% had made some prior attempt. These data do not include the higher risk callers, who were not assessed at baseline. However, they clearly represent an at-risk population, indicating that TCS are receiving calls from at risk callers.

## Suicide Callers: Risk Profile at Baseline

(N=1085)

| | N | % |
|---|---|---|
| Plans (current) | 585 | 53.9% |
| Action (current) | 88 | 8.1% |
| Attempts (ever): | 624 | 57.5% |
| Single | 275 | 44.1% of attempts |
| Multiple | 332 | 53.2% of attempts |
| (Missing information | 17 | 2.7% of attempts) |

Of the 1085 suicidal callers assessed at baseline, 380 consented to a follow up call. For these callers, there were significant reductions in suicide status from the beginning of calls to the end of the calls (time 1 to time 2) and at follow up (time 2 to time 3), as measured by intent to die, psychological pain, and hopelessness. Of these 380 callers, 43.2% had suicidal thoughts, 7.4% had made plans, and 2.9% had made attempts since their call to the TCS.

The following tables present the extent to which the suicide callers were given referrals and followed through with them. The majority of these callers were given a new referral (58.2%), of which 28.5% had completed at least one appointment within 2-3 weeks of the initial call. Another 8.6% had set up an

appointment. 35.1% of those who had been given a mental health referral had followed up with that referral by either completing an appointment or setting up an appointment.

## Suicide Callers at Follow Up: Rate of Referrals

New referral:

Any = 58.2% (221/380)

Mental health referral = 39.7% (151/380)

Referral back to:

Crisis center = 29.2% (111/380)

Current therapist/ongoing services = 19.2% (73/380)

*Total Referrals* = 77.9% (296/380)

## Suicide Callers at Follow Up: Follow Through with New Referrals

- Any Completed Appt = 28.5% (63/221)
- MH Completed Appt* = 22.5% (34/151)

- Any Set up Appt = 8.6% (19/221)
- MH Set up Appt* = 12.6% (19/151)

➢ 16.6% of all suicide callers (63/380) are completing at least one appointment with *new* service within 1 month of call

*Mutually exclusive categories

Caller Feedback

During the follow up call, callers were asked to provide feedback on their call to the crisis centers. The first two questions in this segment of the follow up interview consisted of open-ended questions:

1. Thinking back to the call you placed to the crisis line, can you tell me how the call was helpful to you? (total of 2017 responses provided)
2. Can you tell me what was not helpful about the call? (total of 212 responses provided).

Their responses were reliably coded into categories by two raters and the following table depicts their most common responses to the first question. Many categories accounted for a small percent of the responses. However, the top six categories of responses to open-ended questions for both suicide and crisis calls support the logic of telephone crisis services. The most frequent comments describe empathic helpers who listened and allowed the callers to talk about their concerns, helped them to calm down and think more clearly, and provided options for dealing with their concerns. The services were described as readily available and the helpers willing to stay on the line as long as needed (i.e., patient). In addition 14% of suicide callers said that the call prevented them from harming or killing themselves.

## Caller Qualitative Feedback

| | % of Suicide Callers Who Made Response | % of Crisis Callers Who Made Response |
|---|---|---|
| Listen & let talk | 38.68 | 39.20 |
| Think more clearly/ New perspective | 12.89 | 11.36 |
| Options for dealing with concerns | 13.16 | 25.84 |
| Calm down | 12.37 | 15.36 |
| Warm, caring, compassionate, empathic, comfortable to talk to, soothing, supportive, reassuring | 15.79 | 13.11 |
| Available, patient | 12.63 | 11.23 |
| Prevented suicide | 13.94 | 1.12 |

Selected Community Outcomes

Four centers provided an average of 15 local community agencies each, yielding a total of 60 agencies. A representative from each agency was surveyed by an independent evaluator as to their familiarity and interactions (i.e. provide/receive referrals, training, or consultation) with the crisis centers, and the quality of services provided by the crisis center to the local community. The following table provides a summary of their feedback as to the quality of the crisis, prevention, referrals, information, and training/consultation services provided by centers. Community agencies were most familiar with crisis, referrals, and information services provided by centers; and, least familiar with training/consultation services. When asked to rate the importance of the crisis center to the community, agency representatives responded as follows: essential (74.6%), nice to have (20.3%), problematic (5%; 3 responses: not well trained, mobile crisis response too long, not doing what supposed to do).

## Community Feedback on Service Quality[1]

| | Crisis Intervention | Prevention Programs | Referrals | Information | Training/Consultation |
|---|---|---|---|---|---|
| Excellent | 32.2 | 11.7 | 15.0 | 13.3 | 13.3 |
| Good | 30.5 | 20.0 | 38.3 | 41.7 | 14.2 |
| Fair | 8.5 | 8.3 | 8.3 | 6.7 | 5.0 |
| Poor | 5.1 | 1.7 | 1.7 | 1.7 | .83 |
| Don't Know | 23.7 | 58.3 | 36.7 | 36.7 | 66.7 |

[1] Percent of respondents

**CONCLUSIONS**

The study had some limitations, the most important of which was the fact that it was not possible to employ a control group design. Thus the effects cannot necessarily be contributed to the crisis interventions. Also some selection biases exist in regard to the centers that agreed to participate, the staff who agreed to conduct assessments, and the callers who consented to receive follow up calls. In regard to the latter, suicide callers who were assessed at follow up, as compared to those who were not followed were at less suicide risk, while crisis callers who were assessed at follow up, as compared to those who were not, were not significantly different with regard to baseline distress measures.

With these caveats in mind, the following conclusions may be in drawn from this evaluation study:

- Among crisis callers, distress decreases during and after calls.
- Crisis hotlines are reaching seriously suicidal callers.
- Suicidality decreases during and after calls.
- Caller feedback supports the logic of crisis centers.
- Suicide risk assessments need to be done routinely on all crisis calls…otherwise, “crisis” callers’ suicidality can be missed.