# National Suicide Prevention Lifeline: Enhancing Mental Health Care for Suicidal Individuals and Other People in Crisis

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Linking at-risk callers to ongoing mental health care is a key goal of crisis hotline interventions that has not often been addressed in evaluations of hotlines' effectiveness. We conducted telephone interviews with 376 suicidal and 278 nonsuicidal crisis callers to the National Suicide Prevention Lifeline (Lifeline) to assess rates of mental health care utilization following Lifeline calls and to assess attitudinal and structural barriers to service utilization. Postcall utilization rates were approximately 50% for suicidal and crisis callers who received mental health care referrals. Lack of health insurance and callers' perceptions about mental health problems emerged as significant barriers to accessing continued help.

In the past decade, a national network of suicide prevention crisis lines—the National

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Suicide Prevention Lifeline (Lifeline; http://www.suicidepreventionlifeline.org)—has been established in recognition of strong theoretical and practical justification for telephone crisis services (Gould & Kalafat, 2009; Mishara & Daigle, 2000). The Lifeline has since emerged as a key component of a range of suicide prevention programs. For example, the Department of Veterans Affairs operates a national suicide prevention hotline for veterans, using the Lifeline telephone number, 1-800-273-TALK (www1.va.gov/opa/press-rel/pressrelease.cfm?id=1363). The Lifeline is also prominently referenced in public awareness messaging campaigns and on federal-, community-, and advocacy-level information and referral documents and Web sites, including the Army's suicide prevention Web site (http://www.armyg1.army.mil/HR/suicide/default.asp). Two major goals of Lifeline centers are to reduce callers' current crisis or suicidal states and to enhance access to ongoing help by providing referrals to formal mental health care. Given the key role of the Lifeline in national suicide prevention efforts, it is essential to know whether the Lifeline is meeting its goals.

Most research on crisis hotlines has focused on an assessment of caller feedback/satisfaction, helping processes, distal outcomes

consisting of changes in community suicide rates, and proximal outcomes consisting of changes in caller crisis or suicidal status (see Gould & Kalafat, 2009, for review). Studies examining the impact of crisis hotlines on mortality have largely employed ecological designs that compare the suicide rates in areas with and without crisis services or in areas before and after the introduction of crisis services, thus measuring the distal effect of the presence of crisis services (Barraclough, Jennings, & Moss, 1977; Bridge, Potkin, Zung, & Soldo, 1977; Jennings, Barraclough, & Moss, 1978; Lester, 1973, 1974; Riehl, Marchner, & Moller, 1988; Wiener, 1969). Lester (1997) conducted a meta-analysis of 14 studies of the relationship of suicide prevention centers to suicide rates. While the results of individual studies did not always reach statistical significance, Lester found a significant overall preventive effect. More proximal outcomes have been examined by King, Nurcombe, Bickman, Hides, and Reid (2003), who rated 100 taped suicide calls to Kids Help Line in Australia. Significant decreases in suicidality and significant improvements in the mental state of youth were observed during the course of the calls. Another assessment of proximal outcomes was conducted with callers expressing suicidal ($n = 1,085$) and nonsuicidal crises ($n = 1,617$) from eight crisis hotlines across the United States (Gould, Kalafat, Munfakh, & Kleinman, 2007; Kalafat, Gould, Munfakh, & Kleinman, 2007). The study employed callers' own ratings of their mental state and suicidality in response to a standardized set of inquiries by the crisis counselors at the beginning and end of the call, to assess the immediate proximal effect of the crisis intervention. The study found significant reductions in callers' self-reported crisis and suicide states from the beginning to the end of the calls; however, without a control group, these effects cannot be definitively attributed to the crisis intervention.

There has been less research focused on crisis hotlines' ability to link callers who report underlying mental health problems to clinical services that aim to ameliorate these problems. Gould et al. (2007) found that of the suicidal callers to crisis hotlines given a new mental health referral, only 35% had kept or made an appointment with a mental health service 2 to 4 weeks later. These findings indicate a need for heightened understanding of the referrals provided to callers and reasons for lack of follow-through. Models of health care service use (e.g., Andersen, 1995) highlight help-seeking attitudes and treatment beliefs as likely contributors to underutilization of mental health services, which is well documented both among suicidal individuals (Bruffaerts et al., 2011) and in the general population (Alonso & Lepine, 2007; Henderson, 2002; Kessler, et al., 2005). Of particular concern is the finding that negative help-seeking attitudes are greatest among individuals with the greatest mental health needs (Hoge, Castro, Messer, McGurk, Cottling, & Koffman, 2004; Mackenzie, Scott, Mather, & Sareen, 2008; Mojtabai, Olfson, & Mechanic, 2002). Much evidence indicates that suicidal individuals negate, refuse, or avoid available help ("help negation effect"; e.g., Clark & Fawcett, 1992; Dean, Wilson, & Ciarrochi, 2001; Rudd, Joiner, & Rajab, 1995). Furthermore, low perceived need of services has been reported as the most important reason that suicidal individuals do not seek help (Bruffaerts et al., 2011). The overall aims of the present study are to determine the extent to which suicidal and nonsuicidal crisis callers to the Lifeline are linked to longer-term mental health care services and to identify the attitudinal and structural factors impacting service utilization, critical information on the effectiveness of Lifeline interventions that is currently unknown.

## METHOD

### Sample

*Telephone Crisis Centers.* Sixteen centers in the Lifeline network from 14 states across the country participated in the study. The centers were selected on the

basis of organizational stability (in operation at least 5 years), sufficient call volume, quality assurance processes, use of internal call monitoring, and willingness to adopt agreed on standardization of call record keeping and research procedures. Although not a random sample of all centers in the Lifeline network, the recruited centers provide a sound "window" into the population of Lifeline network centers by virtue of their diversity in size, location, and operating procedures.

*Callers.* The 16 centers each targeted approximately 20 suicidal callers and 20 callers experiencing a nonsuicidal crisis ("crisis callers") to approach for permission for our evaluation contact from January 2006 through December 2007. To be eligible for a follow-up interview, a caller to the Lifeline network had to receive from the crisis counselor a mental or behavioral health care referral for his/her own use. The following types of callers were ineligible: non-English speaking callers, callers who lacked cognitive capacity or had communication problems, and minors.

Counselors were asked to keep a tally of eligible callers who were *not* approached for permission for our evaluation contact. This enabled us to estimate the percentage of all eligible callers who were approached and who participated. According to the counselors' tally, 996 (80.0%) of the total 1,245 eligible callers were approached by the counselors for our contact permission. We recognize that the counselors may have underestimated the number of eligible callers whom they did not approach for permission for our contact. Of the 996 who were approached, 203 (20.4%) refused contact. Of the 793 who gave permission for our contact, 71 (9.0%) refused to be interviewed when the research interviewers contacted them and 68 (8.6%) could not be located, yielding an 82.5% participation rate among callers who agreed to our contacting them (52.5% of all known eligible callers).

We considered callers to be suicidal if they informed the follow-up interviewers that they had thoughts of suicide or plans to kill themselves at the time of the crisis call or had taken actions to kill themselves right before calling the crisis hotline. We interviewed 376 suicidal callers and 278 crisis callers. The demographic characteristics of the eligible suicide and crisis callers were not significantly different: the characteristics for the total sample were 65.9% women; mean age of 38.4 years ($SD$ = 12.6); 10.1% Hispanic ethnicity, 76.2% White, 18.0% African American, 2.6% American Indian or Alaskan Native, 1.7% Asian, and 1.5% other.

Of the 376 suicide callers, 37.3% had a suicide plan when they called the crisis center and 7.2% had taken some action to harm or kill themselves immediately before calling the center. More than half (57.0%) had made prior suicide attempts, of whom 67.5% (141 callers) had made multiple attempts. The suicide risk profile of men and women was similar with the exception of a significantly higher rate of previous suicide attempts among the women (73.7% vs. 26.3%; $\chi^2$ = 16.7, $p$ < .001).

### Procedures

Counselors were directed not to approach callers for contact permission until the very end of the call, after the counselors considered the interventions to have been completed. At the time of contact by the evaluation team, on average 14 days after the initial call to the center ($SD$ = 10.0; range = 3–72 days), a standardized telephone consent script was used, incorporating the required elements of a written consent form.

To ensure independent follow-up assessments, the evaluation interviewers were project evaluation staff and not crisis center staff. The interviewers were required to have either telephone crisis counseling experience or equivalent clinical training and experience. The follow-up assessment included a protocol to ensure caller safety: any caller having made an actual attempt at self-injury since speaking with the center, having current suicide plans, or having serious intent to die at the time of the follow-up interview was

reconnected back to the center the caller had initially phoned.

A confidentiality certificate was obtained from the Department of Health and Human Services/SAMHSA. The project's protocol was approved by the institutional review boards of the New York State Psychiatric Institute/Columbia University.

### Measures

A telephone interview was conducted to collect information on demographic variables, caller feedback on the call, suicide risk status at the time of and since the call, current depressive symptomatology, follow-through with referrals made by the crisis counselor, utilization of services, and barriers to service use. A detailed description of the components of the follow-up interview relevant to the current analyses follows.

*Demographics.* Age, gender, ethnicity, and racial background were assessed.

*Suicide Risk Status.* A modified version of the suicide risk assessment implemented in the evaluation team's earlier hotline evaluation projects (Gould & Kalafat, 2009; Kalafat et al., 2007) was used to assess suicide risk at the time of the interview and retrospectively at the time of the hotline call. The assessment includes questions about suicidal ideation, suicide plans, actions taken, prior attempts, and intent to die.

*Beck Depression Inventory (BDI-II).* The BDI-II (Beck, Steer, & Brown, 1996) assesses 21 depressive symptoms consistent with the *DSM-IV*. A series of four statements is provided for each symptom, describing severity along an ordinal continuum from 0 (*absent or mild*) to 3 (*severe*). The BDI-II shows high internal consistency in clinical and non-clinicalpopulations (Arnau, Meagher, Norris, & Bramson, 2001; Beck et al., 1996), good external validity (Beck et al., 1996), and has excellent clinical utility as demonstrated by its use to assess severity of depressive symptoms in patients with previously diagnosed depression and to screen patients who may have depressive illness (Sharp & Lipsky, 2002). The suggested cut-off point of >19

reflecting moderate to severe depression was employed.

*Referrals, Service Utilization, and Barriers to Utilization.* This assessment identified the referral given, whether the caller followed through with the referral, and the types of services received. Types of referrals included emergency services (not including rescues initiated by the center), mental health services, counseling services provided by nonmental health professionals (e.g., primary care physicians, self-help groups, and clergy), social services, and telephone services. In addition to the information obtained from the caller at the time of the follow-up assessment, we obtained baseline information on referral recommendations directly from the counselors, with the permission of the callers. The information on referral recommendations provided by the counselors was employed in our analyses.

Based on the work of Flisher et al. (1997), Hoagwood et al. (2000), Owens et al. (2002), Pavuluri, Luk, and McGee (1996), and Stiffman et al. (2000), the types of barriers assessed included financial barriers (inability to pay for services, lack of insurance, or inadequate insurance coverage), other structural barriers (lack of availability of providers, long waiting lists, transportation problems, inconvenient services), personal barriers (lost the number, too busy, personal circumstances made it too difficult), barriers related to perceptions about mental health problems (denial of the severity of mental health problem—e.g., thought the problem would get better by itself, no longer felt I needed help; belief that the problem can be handled without treatment—e.g., thought I could handle it myself, decided to use personal or other resources to help myself), and barriers related to perceptions about mental health services (lack of trust or past negative experience with mental health providers, stigma related to receiving help).

### Data Analysis

We identified the types of referrals provided to the callers who participated in

our evaluation and the extent to which callers either followed through with specific referrals or used comparable services after the call. A series of regression analyses were conducted to examine whether the types of referrals or rates of follow-through for each type of referral differed for suicide and crisis callers. For the regression analyses, the primary sampling unit of the study was crisis center and the secondary sampling unit was call, which was nested within center. We employed PROC GLIMMIX in SAS version 9.2 (SAS Institute Inc., Cary, NC, USA), which performs estimation and statistical inference for generalized linear mixed models. The procedure allows for nonnormal data and random effects, as well as for correlation among responses.

We conducted a series of regression analyses *within* caller type (i.e., suicidal or nonsuicidal crisis caller) to determine whether the caller's profile (i.e., suicide risk, depression, and demographic characteristics) was related to receiving a referral to a mental health service. We also examined whether utilization of a mental health service was related to the callers' demographic characteristics (gender, age, ethnicity, health insurance status), severity of depression symptoms, and suicide risk (i.e., plans, actions, prior attempts for suicidal callers) at baseline. Given the limited variability in the race distribution, it was not possible to include this demographic characteristic in the analyses.

## RESULTS

### Prior Service Use

Based on the follow-up assessments, 82.9% of callers (86.7% of suicidal callers and 77.7% of crisis callers) reported *ever* having received mental health treatment and 46.0% (48.9% of suicidal callers and 42.1% of crisis callers) were in such treatment at the time of their hotline call.

### Referrals

The most prevalent type of referral for both suicidal and crisis callers was to a mental health service, particularly a new resource (Table 1). With the exception of referrals to emergency services, which were significantly more prevalent among suicide callers, the rates of referrals did not significantly differ by service type between suicidal and crisis callers.

Among suicidal callers, neither demographic characteristics nor suicide risk profiles (plans, actions, prior attempts) were related to the type of referral received, with the exception of women being slightly more likely than men to receive a mental health referral (66.7% and 54.9% for women and men, respectively, OR = 1.72, 95% CI: 1.11–2.68, $p < .05$). Crisis callers' demographic characteristics were not related to type of referral received.

**TABLE 1**

*Referral Sources Provided by Crisis Counselors, by Caller Type*

|  | Suicide callers N = 376 n (%) | Crisis callers N = 278 n (%) | Total N = 654 n (%) | OR (95% CI) | p |
|---|---|---|---|---|---|
| Emergency services | 50 (13.3) | 20 (7.2) | 70 (10.7) | 1.77 (1.05–2.96) | <.05 |
| Mental health (MH) service | 235 (62.5) | 168 (60.4) | 403 (61.6) | 1.14 (0.82–1.58) | ns |
| New | 154 (41.0) | 119 (42.8) | 273 (41.6) | 0.95 (0.69–1.32) | ns |
| Current/Prior | 91 (24.2) | 56 (20.1) | 147 (22.5) | 1.27 (0.87–1.84) | ns |
| Counseling by non-MH professional | 48 (12.8) | 50 (18.0) | 98 (15.0) | 0.66 (0.43–1.01) | ns |
| Social services | 51 (13.6) | 48 (17.3) | 99 (15.1) | 0.75 (0.49–1.15) | ns |
| Phone services | 132 (35.1) | 107 (38.5) | 239 (36.5) | 0.85 (0.61–1.19) | ns |

## Referral Follow-Through and Service Utilization

In total, 43.9% of suicidal callers and 39.2% of crisis callers (41.9% overall) followed through with a referral provided during the hotline call (Table 2). The highest rate of follow-through was to a current or prior mental health provider; 68.1% of suicide callers and 64.3% of crisis callers (66.7% overall) given this referral followed through. In contrast, the lowest rate of follow-through was to a new mental health resource (14.3% of suicide callers and 17.6% of crisis callers; 15.8% overall).

However, of the 151 suicidal callers and 111 crisis callers who did not follow-through with the mental health referral provided during their hotline call, 38 suicidal callers (25.2%) and 29 crisis callers (26.1%) reported that they had accessed another comparable mental health resource following the call. Thus, a total of 51.9% of suicidal callers and 51.2% of crisis callers given mental health referrals utilized mental health services after their hotline call (51.6% overall). Of all callers who utilized a mental health resource after receiving a mental health care referral, almost a third (31.1% of suicidal callers and 33.7% of crisis callers; 32.2% overall) utilized a resource other than the one to which the crisis counselor referred them. In light of this finding, the remainder of this article will focus on overall rates of mental health service utilization after the hotline call, rather than rates of follow-through with counselor-provided referrals.

Utilizing a mental health resource after the call was not related to demographic characteristics, severity of depression, or (for suicidal callers) suicide risk profile (Table 3). The utilization rate was higher among those with health insurance. This difference was statistically significant for crisis callers and for the total sample, and present but not significant for suicidal callers. Among crisis callers who received a mental health care referral during their Lifeline call, postcall utilization rates were 59.6% for those with health insur-

ance and 35.6% for the uninsured. Not surprisingly, the utilization rate was also significantly higher among those who were already in treatment at the time of their hotline call. Overall, postcall utilization rates were 76.7% for those in treatment at the time of the call (77.9% of suicidal callers and 75.0% of crisis callers) and 26.1% for those not in treatment (24.1% of suicidal callers and 28.7% of crisis callers). Notably, of those callers who were in treatment at the time of the call and who utilized a mental health service after the call, 32.9 (32.6% of suicidal callers and 33.3% of crisis callers) utilized a new provider.

## Barriers to Mental Health Service Utilization

The most prevalent barrier to utilizing a mental health resource related to callers' perceptions about mental health problems, including denial of the severity of a mental health problem and belief that the problem could be handled without treatment (Table 4). Over half of callers reported this as a reason they did not access a mental health resource after receiving a referral for one. This barrier was endorsed significantly more often than any other barrier.

Overall, a third of the callers who did not utilize mental health services reported financial barriers, such as inability to pay for services, not having health insurance, or having insurance that does not pay for mental health services. This was perceived as a barrier significantly more often by suicidal callers (41.2%) than crisis callers (23.2%; $p < .05$), despite the significant association between health insurance status and mental health service utilization found for crisis callers, previously noted, and the similar rates of health insurance for suicidal and crisis callers who received a mental health referral (67.7% and 64.9%, respectively, were insured).

Approximately one third of callers reported barriers related to perceptions about mental health services. Similar proportions of callers cited the two remaining types of barriers: structural and personal.

**TABLE 2**
*Utilization^a of Services Following the Crisis Call, by Caller Type*

| | Suicide callers | | | Crisis callers | | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Followed through with counselor's specific referral n/N (%) | Accessed a comparable service n/N (%) | Total utilization^a n/N (%) | Followed through with counselors' specific referral n/N (%) | Accessed a comparable service n/N (%) | Total utilization^a n/N (%) | Utilization^a n/N (%) | Suicide vs. crisis callers OR (95% CI) |
| Emergency services | 23/50 (46.0) | 3/50 (6.0) | 26/50 (52.0) | 7/20 (35.0) | 0/20 (0) | 7/20 (35.0) | 33/70 (47.1) | 2.01 (0.68–5.98) |
| Mental health service | 84/235 (35.7) | 38/235 (16.2) | 122/235 (51.9) | 57/168 (33.9) | 29/168 (17.3) | 86/168 (51.2) | 208/403 (51.6) | 1.00 (0.67–1.49) |
| Counseling service by non–MH professional | 14/48 (29.2) | 3/48 (6.3) | 17/48 (35.4) | 11/50 (22.0) | 2/50 (4.0) | 13/50 (26.0) | 30/98 (30.6) | 1.56 (0.65–3.74) |
| Social services^b | 10/50 (20.0) | 3/50 (6.0) | 13/50 (26.0) | 14/48 (29.2) | 4/48 (8.3) | 18/48 (37.5) | 31/98 (31.6) | 0.59 (0.25–1.40) |
| Phone services^c | 39/130 (30.0) | 2/130 (1.5) | 41/130 (31.5) | 28/107 (26.2) | 2/107 (1.9) | 30/107 (28.0) | 71/237 (30.0) | 1.18 (0.67–2.07) |
| Any referral | 165/376 (43.9) | 42/376 (11.2) | 207/376 (55.1) | 109/278 (39.2) | 31/278 (11.2) | 140/278 (50.4) | 347/654 (53.1) | 1.21 (0.88–1.65) |
| Any referral (not including phone service) | 130/314 (41.4) | 44/314 (14.0) | 174/314 (55.4) | 83/228 (36.4) | 33/228 (14.5) | 115/228 (50.4) | 289/542 (53.3) | 1.22 (0.87–1.72) |

non–MH professional: non–mental health professional
^aUtilization reflects those who either followed through with the crisis counselors' specific referral or accessed a comparable service obtained by other means.
^bThere is one person for whom follow–through with a social service is unknown.
^cThere are two people for whom follow–through with a phone service is unknown.

**TABLE 3**

*Mental Health Services Utilization Rates by Demographic and Clinical Characteristics of Suicide and Crisis Callers Who Received a Mental Health Service Referral*

| | Suicide callers N = 235 | | | Crisis callers N = 168 | | | Total N = 403 | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | MH service utilization rate N = 122 n/N (%)[a] | OR (95% CI) | p | MH service utilization rate N = 86 n/N (%)[a] | OR (95% CI) | p | MH service utilization rate N = 208 n/N (%)[a] | OR (95% CI) | p |
| Gender | | | | | | | | | |
| Male | 35/73 (47.9) | 1.30 (0.75–2.28) | ns | 29/59 (49.2) | 1.13 (0.60–2.15) | ns | 64/132 (48.5) | 1.23 (0.81–1.88) | ns |
| Female | 87/162 (53.7) | | | 57/109 (52.3) | | | 144/271 (53.1) | | |
| Age[b] | | | | | | | | | |
| 18–24 | 23/49 (46.9) | 0.79 (0.47–1.34) | ns | 9/29 (31.0) | 1.32 (0.71–2.47) | ns | 32/78 (41.0) | 0.99 (0.66–1.47) | ns |
| 25–34 | 34/56 (60.7) | | | 22/37 (59.5) | | | 56/93 (60.2) | | |
| 35–54 | 54/104 (51.9) | | | 47/89 (52.8) | | | 101/193 (52.3) | | |
| 55–74 | 10/25 (40.0) | | | 8/13 (61.5) | | | 18/38 (47.4) | | |
| 75 | 0 | | | 0 | | | | | |
| Ethnicity | | | | | | | | | |
| Hispanic | 9/17 (52.9) | 0.78 (0.28–2.16) | ns | 8/20 (40.0) | 1.67 (0.64–4.35) | ns | 17/37 (45.9) | 1.15 (0.58–2.30) | ns |
| Not Hispanic | 111/216 (51.4) | | | 78/148 (52.7) | | | 189/364 (51.9) | | |
| No health insurance | 33/76 (43.4) | 0.60 (0.35–1.05) | ns | 21/59 (35.6) | 0.37 (0.19–0.72) | p < .01 | 54/135 (40.0) | 0.49 (0.32–0.75) | p < .001 |
| Has health insurance | 89/159 (56.0) | | | 65/109 (59.6) | | | 154/268 (57.4) | | |

**TABLE 3**
*(Continued)*

| | Suicide callers N = 235 | | | Crisis callers N = 168 | | | Total N = 403 | | |
|---|---|---|---|---|---|---|---|---|---|
| | MH service utilization rate N = 122 n/N (%)[a] | OR (95% CI) | p | MH service utilization rate N = 86 n/N (%)[a] | OR (95% CI) | p | MH service utilization rate N = 208 n/N (%)[a] | OR (95% CI) | p |
| Depression | | | | | | | | | |
| Yes | 95/176 (54.0) | 1.42 (0.78–2.59) | ns | 50/95 (52.6) | 1.14 (0.62–2.11) | ns | 145/271 (53.5) | 1.27 (0.83–1.93) | ns |
| No | 26/58 (44.8) | | | 36/73 (49.3) | | | 62/131 (47.3) | | |
| Suicide plans[c] | | | | | | | | | |
| Yes | 48/87 (55.2) | 1.22 (0.71–2.08) | ns | NA | NA | | NA | NA | |
| No | 74/148 (50.0) | | | NA | | | NA | | |
| Suicide actions[c] | | | | | | | | | |
| Yes | 9/15 (60.0) | 1.39 (0.47–4.07) | ns | NA | NA | | NA | NA | |
| No | 113/220 (51.4) | | | NA | | | NA | | |
| Prior suicide attempts | | | | | | | | | |
| Yes | 65/124 (52.4) | 1.05 (0.62–1.76) | ns | 24/42 (57.1) | 1.42 (0.70–2.89) | ns | 89/166 (53.6) | 1.18 (0.79–1.76) | ns |
| No | 55/109 (50.5) | | | 60/124 (48.4) | | | 115/233 (49.4) | | |
| In MH treatment at time of call | | | | | | | | | |
| Yes | 95/122 (77.9) | 11.08 (6.01–20.41) | p < .0001 | 60/80 (75.0) | 7.44 (3.73–13.85) | p < .0001 | 155/202 (76.7) | 9.32 (5.91–14.70) | p < .0001 |
| No | 27/112 (24.1) | | | 25/87 (28.7) | | | 52/199 (26.1) | | |

MH = mental health
[a]Row percent.
[b]Age was dichotomized (18–34 vs. 35+) for the analyses.
[c]Suicide callers only.

**TABLE 4**

*Callers' Perceived Reasons for Lack of Utilization of Mental Health Resource Following the Call*

| | Suicide callers $N = 85$ $n$ (%) | Crisis callers $N = 56$ $n$ (%) | Total $N = 141$ $n$ (%) | Suicide vs. Crisis callers OR (95% CI) | $p$ |
|---|---|---|---|---|---|
| Barriers related to perceptions about mental health problems | 43 (50.6)[a] | 32 (57.1)[b] | 75 (53.2)[c] | 0.78 (0.48–1.55) | ns |
| Financial barriers | 35 (41.2)[d] | 13 (23.2) | 48 (34.0) | 2.28 (1.08–4.84) | <.05 |
| Personal barriers | 25 (29.4) | 19 (33.9) | 44 (31.2) | 0.81 (0.39–1.67) | ns |
| Barriers related to perceptions about mental health services | 27 (31.8) | 16 (28.6) | 43 (30.5) | 1.16 (0.55–2.43) | ns |
| Other structural barriers | 20 (23.5) | 17 (30.4) | 37 (26.2) | 0.71 (0.33–1.52) | ns |

[a]Significantly more prevalent than personal barriers (McNemar's $\chi^2 = 6.57$, $p = .01$), barriers related to mental health services (McNemar's $\chi^2 = 4.89$, $p = .026$), and other structural barriers (McNemar's $\chi^2 = 8.80$, $p = .003$).

[b]Significantly more prevalent than financial barriers (McNemar's $\chi^2 = 11.17$, $p = .001$), personal barriers (McNemar's $\chi^2 = 3.69$, $p = .053$), barriers related to mental health services (McNemar's $\chi^2 = 6.62$, $p = .009$), and other structural barriers (McNemar's $\chi^2 = 5.94$, $p = .014$).

[c]Significantly more prevalent than financial barriers (McNemar's $\chi^2 = 8.35$, $p = .004$), personal barriers (McNemar's $\chi^2 = 10.84$, $p = .001$), barriers related to mental health services (McNemar's $\chi^2 = 12.01$, $p = .0001$), and other structural barriers (McNemar's $\chi^2 = 15.56$, $p = .0001$).

[d]Significantly more prevalent than other structural barriers (McNemar's $\chi^2 = 5.03$, $p < .05$).

Rates of barriers to mental health care utilization did not significantly differ by the callers' demographic characteristics, depressive symptoms, suicide risk profile, or treatment status at the time of their calls.

Of the total number of suicidal callers ($N = 113$) and crisis callers ($N = 82$) who did not utilize a mental health service, 22 suicidal callers and 21 crisis callers did not remember the referral, and 6 suicidal callers and 5 crisis callers had made contact with a service and were waiting for a call back. As such the barrier questions were not asked of them. There were no significant differences between those who were asked (85 suicidal callers and 56 crisis callers) and those not asked the barrier questions (28 suicidal callers and 26 crisis callers) with regard to their demographic characteristics, health insurance status, severity of depression, or suicide risk profile; thus, the subset reporting on barriers to mental health service utilization were representative of all suicidal callers and crisis callers who did not utilize a mental health service.

## DISCUSSION

The vast majority of Lifeline callers reported having utilized a mental health resource at some time in their lives. Thus, this is a population that is familiar with mental health treatment. Studies report that individuals who have previously received mental health treatment are more likely to respond to treatment referrals and access mental health care (Bruffaerts et al., 2011) than those with no previous treatment who have never "overcome treatment inhibitions" (Mechanic, 2007); yet, in the present study, only 35.0% of callers referred to a mental health resource followed through with these referrals and only another 16.6% accessed a comparable mental health service despite their familiarity with such treatment. It is particularly alarming that a third of callers reported a lack of trust or negative experience with mental health providers as their reason for not accessing mental health care after the call. The rate of follow-through with a specific mental health referral provided by crisis counselors was nearly identical to

that found in our earlier study of callers to crisis centers (Gould et al., 2007), but in the earlier study we did not assess whether callers who did not follow-through utilized other, comparable resources. The overall mental health utilization rate (51.6%) following the call was consistent with rates reported by other studies of mental health service utilization associated with suicide prevention programs. For example, rates of follow-through with recommendations generated by depression and suicide screening programs range from 56.7% (Greenfield et al., 1997) to 70% (Gould et al., 2009b). However, we do not know the extent to which the crisis intervention influenced the callers to access mental health resources that were not specifically identified by the counselors.

The caller's perception about mental health problems was the most prevalent barrier to utilizing a mental health service and was cited significantly more often than stigma, structural, or financial barriers, which are conventionally considered to be the major barriers to accessing mental health care (Pitman & Osborn, 2011). Individuals denied the severity of a mental health problem, believed that the problem could be handled without treatment, and wanted to handle the problem on their own. This was the case for men and women, all age groups, individuals of Hispanic and non-Hispanic ethnicity, and those with different levels of severity of depressive symptomatology and suicidal ideation/behavior. This is a ubiquitous barrier, which has been identified in many previous studies of diverse age groups and populations (Bruffaerts et al., 2011; Eisenberg, Hunt, Speer, & Zivin, 2011; Gould et al., 2009b; Greenfield et al., 1997; Kessler et al., 2001; Mechanic, 2002; Mojtabai et al., 2002). Consistently, research indicates that individuals who are in need of treatment but do not receive it "felt that they did not have an emotional problem requiring treatment" (Kessler et al., 2001) and that they "wish to manage the symptoms on their own" (Greenfield et al., 1997). Thus, a key factor in enhancing access to mental health services is the individuals' recognition of the

seriousness of a problem and their need for help.

The second most prevalent barrier to seeking help from a mental health provider, reported by a third of callers, was financial problems. Moreover, while not necessarily perceived as a barrier by the majority of callers who had not sought mental health care services, not having health insurance was the only caller characteristic that was significantly related to mental health service utilization in our study. This was also the second most frequent reason cited for nonadherence with treatment recommendations from a depression screening program (Greenfield et al., 1997). Thus, our findings support the conclusion that insurance is an important "enabling factor and central to initiatives to improve treatment effectiveness" (Mechanic, 2007). Our finding also reinforces the importance of the availability of a resource such as the network of Lifeline crisis centers that provides services free of charge.

There were no significant differences between suicidal and nonsuicidal crisis callers in rates of mental health service utilization following a referral from the Lifeline, consistent with what we found in our earlier study of callers to crisis centers (Gould et al., 2007; Kalafat et al., 2007). This finding is inconsistent with research that suggests that suicidal individuals are more likely than those without suicidal behavior to use services (e.g., Brook, Klap, Liao, & Wells, 2006). Nor do our findings support the opposite notion that suicidal individuals negate, refuse, or avoid help more than other vulnerable individuals (Dean et al., 2001). We also found that the rates of perceived barriers to services were similar for suicidal and nonsuicidal crisis callers. This finding of similar attitudinal barriers to utilization related to perceptions of mental health problems and mental health services indicates that preference for self-reliance and fear of stigma are neither greater nor less among suicidal individuals.

A limitation of the present study was the short follow-up period (on average 2 weeks after the crisis call) that we employed. Thus, the follow-through rate

and the barriers to help-seeking that we identified were specific to this relatively short time period. A longer follow-up might have yielded a higher utilization rate. For example, in our study examining help-seeking after a school-based suicide screening program (Gould & Kalafat, 2009), only a quarter of students who sought treatment did so within a month of the screen, whereas 70% had followed through at the time of a 2-year follow-up. Nevertheless, the callers in the present study were experiencing crises that mandated quicker access to care.

In conclusion, our findings emphasize the necessity of respecting and targeting individuals' strong need for self-efficacy in order to optimize their receipt of help. Self-care and informal care, resources consistent with this attitude, have been identified as meeting a "key proportion of healthcare need in all societies" (Pitman & Osborn, 2011). The strategy of enhancing and promoting self-care and informal care has long been employed by crisis counselors (Farberow, Heilig, & Litman, 1968), and our findings suggest that this should continue to be a key component of crisis interventions. A further function of hotline counseling may be to address callers' attitudinal and perceptual barriers to formal service use and to help callers to overcome them. Our current study did not assess the extent to which crisis coun-

selors may use motivational interviewing or related techniques to increase callers' receptivity to formal mental health care. However, the fact that nearly a third of callers who utilized mental health services after their hotline call reported using services other than the ones to which they were referred could suggest crisis centers are doing something more to link callers to services than simply providing specific referrals. This "something more" may include using the opportunity provided by the crisis call to mitigate negative attitudes toward help-seeking and to encourage callers to continue to access care.

While half of the Lifeline callers deemed to be in need of mental health services accessed such services after the crisis call, the apparent unmet need of the remaining half is still of concern. The Substance Abuse and Mental Health Services Administration is trying to address this by funding a follow-up initiative, whereby crisis counselors continue to engage callers for a period of a few days to several months following their crisis calls to assist them in accessing appropriate longer-term care, including both formal and informal treatment resources, as well as in developing a tool kit of self-care strategies (Gould & Lake, 2011). This model of care may have far-reaching implications for the delivery of mental health care to suicidal individuals and others in crisis.

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