

# Suicidality Screening by Nephrology Social Workers: A Pilot Study

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*Current literature demonstrates that suicidality is more prevalent among people with end-stage renal disease (ESRD) than the general population; however, is not known how often patients with ESRD are screened for suicidality. This study examined suicidality screening practices among nephrology social workers using an online survey. Data suggest that about 71% of clinicians screen for suicidality across practice settings: 66% use the Patient Health Questionnaire-9 (PHQ-9); 40% use informal questioning techniques. Though this study found suicide risk to be relatively low among patients with ESRD (<10%), good clinical practice necessitates suicidality screening when conversation with a patient indicates depression or risk of self-harm. A standardized suicidality tool is recommended. Further study on suicidality with patients with ESRD is important for improving clinical care.*

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## INTRODUCTION

Suicide rates increased dramatically across the United States between 1999 and 2016, rising more than 30% in 25 states (Centers for Disease Control and Prevention [CDC], 2018). Suicide is the 10th leading cause of death in the United States (CDC, 2015). The percentage of adults with serious thoughts about suicide was highest among adults ages 18–25 (7.4%), followed by adults ages 26–49 (4.0%), then by adults aged 50 or older (2.7%). Suicide results in an estimated \$51 billion in combined medical and work-loss costs; nonfatal, self-inflicted injuries (including hospitalized and emergency department treated and released) results in an estimated \$10.4 billion in combined medical and work-loss costs (CDC, 2015). This suggests an enormous cost to the U.S. economy in lost work, wages, and related activities. While suicide is known to be associated with mental health concerns, more than half of the people who died by suicide did not have a known diagnosed mental health condition at time of death (CDC, 2018).

Suicidal ideation (SI), possibly with suicide attempts, increases as the severity of depression increases (Keskin & Engin, 2011). Depression in the general population has been reported at between 2% and 10% (Hedayati, Yalamanchili, & Finkelstein, 2012); however, among renal patients, depression has been documented at anywhere from about 20% to as high as 71%, sometimes depending on assessment methodology (Anees, Barki, Masood, Ibrahim, & Mumtaz, 2008; Chen et al., 2010; Chilcot, Wellsted, Da Silva-Gane, & Farrington, 2008; Goh & Griva, 2018; Kimmel, 2001; Lopes et al., 2004; Patel, Sachan, Nischal, & Surendra, 2012; Watnick, Kirwin, Mahnensmith, & Concato, 2003).

SI and chronic illness are associated (Marusic & Goodwin, 2006); those with chronic medical conditions are at increased risk of suicide (Karasouli, Latchford, & Owens, 2014;

National Institute of Mental Health [NIMH], 2017). SI also is thought to be more prevalent among adults with ESRD than in the general population (Kurella, Kimmel, Young, & Chertow, 2005; Chen et al., 2010). The risk of self-harm may be higher than expected in dialysis patients who have depression and anxiety (Pompili et al., 2013). Depression and SI increased with age as well as with lower education status in patients with chronic renal failure (Keskin & Engin, 2011), suggesting that ESRD acts to exacerbate a preexisting vulnerability or tendency toward suicidal behavior among certain high-risk groups (Kurella et al., 2005).

For adults with ESRD—the vast majority of those being on hemodialysis (US Renal Data System [USRDS], 2017)—those more likely to die by suicide were older (>75 years), male, White or Asian, with alcohol or drug dependence, and/or with a recent hospitalization for mental illness (Kurella et al., 2005). The risk of suicide was highest in the first 3 months after dialysis initiation and diminished steadily over time. No differences between dialysis patients or transplanted patients have been shown for hopelessness, SI, or depression (Andrade, Sesso, & de Madureira Pará Diniz, 2015). While it is estimated that suicide risk for dialysis patients is similar to that for transplant recipients and similar to those for patients with other chronic illnesses, the risk of and percentage with SI are not clear. Some report SI rates of hemodialysis patients as high as 28% and 37% (Patel et al., 2012; Macaron et al., 2014).

Screening for suicidality is a necessary component of clinical practice when significant depression is identified. The first step in evaluating at-risk patients is to ascertain both current suicidal behavior and history of past suicide attempts (Pompili et al., 2013). While the Centers for Medicare & Medicaid Services (CMS) requires social workers in dialysis settings to screen for depression at least annually (End-Stage

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Renal Disease Prospective Payment System..., 2014), there is no such mandate to follow up and screen for SI and suicidal behaviors. Thus, it is not known how often renal social workers perform screenings for suicidality in this population or what the prevalence and incidence are for these patients. The purpose of this study was to survey dialysis and transplant social workers about their clinical practice in screening for and identifying suicidality in their patient populations.

## METHODS

### Sample

As this study was exploratory, the authors designed a survey, *Suicidality Screening for CNSW*, to gather data on nephrology social workers screening for and identifying suicidality in dialysis and transplant patients. The authors, with feedback from colleagues who practice in nephrology social work, formed the survey questions. Suicidality in this context was used as an all-inclusive term to describe any suicidal thinking and/or behavior, and included SI, self-injurious behavior, suicide attempts, and suicide (Meyer et al., 2010). SI was limited to the thoughts, consideration, and plans about suicide prior to any attempt (Crosby, Ortega, & Melanson, 2011). While preferred terms now are SI, *suicidal behavior*, and *suicide* (Meyer et al., 2010; CDC, 2018), the term *suicidality* was used in this study to cover all circumstances (Crosby et al., 2011).

Survey responses on an electronic platform, Survey Monkey, were solicited from the listserv of the Council of Nephrology Social Workers (CNSW), a professional member group of the National Kidney Foundation (NKF). Using “word of email” and networking, additional responses were sought from dialysis and transplant social workers who were not members of CNSW. The survey link was distributed by email to about 700 social workers in October 2017. The authors are not able to estimate a response rate for either CNSW listserv participants or other nephrology social workers because that issue was not addressed in the survey. It also is important to note that not all of those responding to the survey responded to every question. Therefore, in reporting each survey item in **Tables 1** and **2**, a sample size was included for clarity.

### Data Analysis

Data analysis consisted of descriptive statistics Survey Monkey gathered. The automatically retrieved analysis included means and percentages for each quantitative item. Also available were listings of individual narrative responses for each qualitative item. The authors reviewed and discussed these data and summarized themes. The data also were analyzed using SAS v9.4. To understand the overall distribution and nuances of the dataset, an analysis of descriptive statistics using the PROC MEANS and PROC FREQ functions was completed. To identify correlations among key variables, the PROC CORR function was used. With this, correlations among social workers’ suicidality screening practices and other professional factors were examined.

## Results

**Table 1** provides the demographic data for those responding to the online survey. One hundred sixty-seven (approximately 24% of those of listserv recipients) social workers responded to the survey. Thirty percent of them had been working 1–5 years, while 40% had worked more than 10 years. More than half (59%) worked in for-profit organizations at mostly in-center (83%), home dialysis (35%), and transplant (13%) units. There was overlap for settings; that is, some social workers worked in both in-center and home units though, the specific question (Item 10, Appendix A) of multiple modality sites worked was not asked.

Sixty percent of the responding social workers reported that their most recent training on managing suicidality had occurred within 3 years. The social workers who responded to the survey provided services to an average of 112 patients each (ranging from as few as 16, to as many as 280 patients per social worker). Most social workers (about 90%) reported serving adult patients, age 36 years to over 65 years. In contrast, only 9% reported serving patients age 16 or younger.

**Table 2** summarizes social workers’ responses on screening for suicidality. About 71% of the social workers responding to the survey did screen for suicidality or SI. Screening most likely was completed when either the results of depression screening were positive for depression or when a patient, in conversation with the social worker, displayed some suicidal ideation or intent for self-harm. About 66% of social workers used the Physicians Health Questionnaire Version 9 (PHQ-9) depression screening survey that has a question about self-harm. About 40% used informal questioning for suicidality or SI screening in lieu of or in addition to the PHQ-9.

Questions from social workers to patients include: Do you have any thoughts of harming yourself? What would you do, and do you have any plans? Have you ever tried to hurt yourself? How long have you had these thoughts? Do you feel safe at home? Do you have access to lethal medications or weapons? Sixty-one percent of the social workers responded that only 1–10% of their patients were at risk for suicide; another 13% of the social workers reported a rate of 11–20%; and 13% reported no suicidality with their patients.

About 56% of the social workers responding to the survey offered comments with their answers about how they screen and, then, follow up with patients with positive SI. For those patients whose scores show a mild risk of suicidality, most responses by social workers noted that they discuss the situation with the nephrologist and/or primary care physician, monitor the patient, identify a safety plan/support system, and refer to community crisis programs and/or counseling programs. For those patients with a moderate-severe risk, referrals by social workers were immediate and included attempts to stabilize the patient, calling in support systems/family, having the patient call a phone crisis line with the social worker present, sending or taking the patient to the

**Table 1. Descriptive Statistics of Sample Characteristics, Suicidality Screening Survey***n* = 167

	<i>N</i>	%	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Years of practice experience	134					
Less than 1 year	9	6.72				
1–5 years	44	32.84				
6–10 years	27	20.15				
More than 10 years	54	40.30				
Work setting (choose all that apply)	133					
In-center hemodialysis	111	82.84				
Home hemodialysis/peritoneal dialysis	47	35.07				
Transplant	18	13.43				
Other	11	8.20				
Type of employer (choose all that apply)	132					
For-profit dialysis center	79	59.40				
Private, nonprofit hospital	24	18.05				
Government/Public	12	9.02				
Nonprofit dialysis center	12	9.02				
Private, for-profit hospital	5	3.76				
Other	5	3.76				
Most recent suicidality training	133					
Never received training	16	11.94				
Past 12 months	43	32.09				
1–3 years ago	40	29.85				
3–5 years ago	12	8.96				
More than 5 years ago	23	17.16				
Age range of clients (choose all that apply)	133					
16 or younger	12	8.96				
17–35 years old	98	73.68				
36–64 years old	122	91.04				
65 years or older	120	90.23				
Caseload	134		107.52	65.41	0	500

**Table 2. Suicidality Screening Practices Among Nephrology Social Workers***n* = 167

<b>Do you screen patients for suicidality?</b>	119 (yes)	71.26
<i>(n</i> = 167)		
<b>When are patients screened?</b>		
<i>(n</i> = 93)		
When dialogue with a patient suggests risk	78	82.98
Based on the outcome of a depression screening	66	70.21
Annually	30	31.91
Upon intake	30	31.91
At every appointment	1	1.06
Other	15	16.10
<b>Screening method</b>		
<i>(n</i> = 93)		
No formal screener used	37	39.36
PHQ-9 (Patient Health Questionnaire-9)	52	55.32
SAFE-T (Suicide Assessment Five-step Evaluation and Triage)	7	7.45
C-SSRS (Columbia-Suicide Severity Rating Scale)	5	5.32
Other	15	16.10
<b>Estimated percentage of patients at risk for suicide</b>		
<i>(n</i> = 92)		
0%	12	12.90
1–10%	57	61.29
11–20%	12	12.90
21–30%	3	3.23
31–40%	0	0
41–50%	1	1.08
51–60%	0	0
61–70%	0	0
71–80%	0	0
81–90%	0	0
91–100%	1	1.08
Unsure	7	7.53

**Table 3. Inter-correlations for Screening, Caseload, & SW Experiences**

	1	2	3	4
1. Screen patients for SI	–			
2. Caseload	.07	–		
	$p = .40$			
3. Time since last SI training	-.08	-.15	–	
	$p = .34$	$p = .09$		
4. Years of experience	.10	.11	.12	–
	$p = .24$	$p = .21$	$p = .17$	

Note: No correlations are significant at  $p < .05$ .

**Table 4**

*Inter-correlations for Screening and Modality*

	1	2	3	4
1. Screen patients for SI	–			
2. In-center hemodialysis	-.11	–		
	$p = .22$			
3. Home dialysis (HHD, PD)	<b>.18</b>	.13	–	
	$p = .04$	$p = .14$		
4. Transplant	.09	<b>-.46</b>	.03	–
	$p = .31$	$p < .0001$	$p = .72$	

Note: Correlations significant at  $p < .05$  are listed in **bold**.

emergency room, and/or calling 911, often having patient sign a consent to release information for immediate care. The follow-up with patient is an integral part of the referrals.

**Table 3** displays the correlations between social workers' screening practices and caseload size, time since most recent SI training, and years of experience as a CNSW participant; none were found to be significant. However, **Table 4** shows a positive correlation for suicide screening and home dialysis (home hemodialysis [HHD] and peritoneal dialysis [PD]) services; that is, social workers who work with home dialysis patients screened more often. **Table 4** also shows a strong negative correlation for suicidality screening and the transplant environment.

## DISCUSSION

Nephrology social workers working primarily with ESRD patients who are on dialysis find that depression, anxiety, SI, and related emotions and behaviors are often complex and difficult to define, recognize, assess, and manage. While Medicare mandates depression screening by nephrology social workers, there is no mandate for screening for SI and/or related behaviors.

Once screening is implemented, however, social workers need to follow up routinely, either by providing relevant psychosocial support and/or crisis intervention and/or by providing referrals for appropriate evaluation and treatment by other mental health professionals. Follow-up is critical when screening is positive and/or when aberrant behaviors are reported or suspected by family and/or other nephrology professionals.

It is not clear why home dialysis patients are screened more often than in-center or transplant patients. Social workers may have more time to spend with home patients during training and/or at monthly clinic visits. On the other hand, in-center patients are seen more often (3 days/week) and staff might be able to recognize aberrant behaviors or thoughts more readily, resulting in more immediate referral for medical and/or medication follow-up. For transplant patients, the data suggest that social workers do not think there is a need to screen for suicidality, either because of the positive nature of potentially receiving a transplant or because other staff members (e.g., a staff psychologist) are handling that type of assessment.

Though the risk of suicide appears to be relatively low for dialysis patients in this small, North American study, good clinical social work practice necessitates screening for suicidal thoughts and behaviors when depression is identified or patient conversation with any member of the interdisciplinary team (IDT) suggests patient self-harm. Although a positive depression screening should lead social workers to assess for suicide risk, because suicide is not always associated with mental health conditions (CDC, 2018), it also may be important for social workers to screen for SI and behaviors regardless the outcome of depression screening.

This preliminary, exploratory study had several limitations. First, the term *suicidality* was used in this study for all related behaviors—SI, planning, attempts, and suicides. It might have been more useful to not assume social workers' knowledge of definitions for this study but to provide currently accepted terms and definitions on the survey. In addition, screening for SI and screening for behaviors may differ. Thus, defining what is being screened might have been more useful to the study as a means of parsing percentages of SI and behaviors.

Social workers in this study volunteered (self-selected) to participate in the survey. While the CNSW listserv seems large, it represents only those nephrology social workers willing to join the NKF/CNSW and pay an annual fee for services, including participation in the listserv. The 167 social workers responding to this survey represent a small minority of those practicing nephrology social work, in the United States at least. It is estimated that in 2015, the most recent year of such data collection, there were about 4,200 full-time and 3,300 part-time nephrology social workers nationally (USRDS, 2017). Finally, because the nature of this study was simply to explore the behaviors of nephrology social workers and screening for suicidality, our analysis was limited to descriptive statistics and basic correlation data. Repeating or extending this survey to include more social workers, refining the questions, defining terms for the survey, and adding additional analyses might provide a better indicator of nephrology practice for such screening.

The following conclusions seem justified: (1) Screening for SI and related behaviors is necessary when depression is identified by either the social worker or other professionals. (2) Given that an active mental health diagnosis (including depression) is not always present with SI or related behaviors, screening routinely each time one screens for depression may be most useful in identifying risk. (3) Establishment of standardized SI and related behavior tools for use by all renal social workers is recommended for tracking results as well as reporting like data. (4) Further study to better define such thinking and behaviors in both in-center and home dialysis populations would be useful for improved clinical care and patient safety. (5) Strategies to alleviate SI and related behaviors with better coping by patients need to be identified and implemented for this population.

## AUTHOR NOTE

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## REFERENCES

- Andrade, S. V., Sesso, R., & de Madureira Pará Diniz, D. H. (2015). Hopelessness, suicide ideation, and depression in chronic kidney disease patients on hemodialysis or transplant recipients. *Brazilian Journal of Nephrology*, *37*(1), 55–63. doi:10.5935/0101-2800.20150009
- Anees, M., Barki, H., Masood, M., Ibrahim, M., & Mumtaz, A. (2008). Depression in hemodialysis patients. *Pakistan Journal of Medical Sciences Quarterly*, *24*(4), 560–565.
- Centers for Disease Control and Prevention. (2015). Suicide – Facts at a glance. Retrieved from <https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf>
- Centers for Disease Control and Prevention. (2018). Suicide rates rising across the US. Press release retrieved from <https://www.cdc.gov/vitalsigns/suicide/> and <https://www.cdc.gov/media/releases/2018/p0607-suicide-prevention.html>
- Chen, C-K., Tsai, Y-C., Hsu, H-J., Wu, I-W., Sun, C-Y., Chou, C-C., Wang, L-J.. (2010). Depression and suicide risk in hemodialysis patients with chronic renal failure. *Psychosomatics*, *51*(6), 528. doi:10.1016/S0033-3182(10)70747-7
- Chilcot, J., Wellsted, D., Da Silva-Gane, M., & Farrington, K. (2008). Depression on dialysis. *Nephron Clinical Practice*, *108*(4). doi:10.1159/000124749
- Crosby AE, Ortega L, & Melanson C (2011) *Self-directed Violence Surveillance: Uniform Definitions and Recommended Data Elements*, Version 1.0. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Goh, Z. S. & Griva, K. (2018) Anxiety and depression in patients with end-stage renal disease: Impact and management challenges – a narrative review. *International Journal of Nephrology and Renovascular Disease*. *11*: 93–102.
- Heydari, S. S., Yalamanchili, V., & Finkelstein, F. O. (2012). A practical approach to the treatment of depression in patients with chronic kidney disease and end-stage renal disease. *Kidney International*, *81*(3), 247–255. doi:10.1038/ki.2011.358
- Karasouli, E., Latchford, G. J., & Owens, D. (2014). The impact of chronic illness in suicidality: A qualitative exploration. *Health Psychology and Behavioral Medicine*, *2*(1). doi:10.1080/21642850.2014.940954
- Keskin, G., & Engin, E. (2011). The evaluation of depression, suicidal ideation and coping strategies in haemodialysis patients with renal failure. *Journal of Clinical Nursing*, *20*(19-20), 2721–2732. doi:10.1111/j.1365-2702.2010.03669.x
- Kimmel, P. L. (2001). Psychosocial factors in dialysis patients. *Kidney International*, *59*(4), 1599–1613. doi:10.1046/j.1523-1755.2001.0590041599.x
- Kurella, M., Kimmel, P. L., Young, B. S., & Chertow, G. M. (2005). Suicide in the United States end-stage renal disease program. *Journal of the American Society of Nephrology*, *16*(3), 774–781. doi:10.1681/ASN.2004070550
- Lopes, A. A., Albert, J. M., Young, E. W., Satayathum, S., Pisoni, R. L., Andreucci, V. E., ... Port, F. K. (2004). Screening for depression in hemodialysis patients: Associations with diagnosis, treatment, and outcomes in the DOPPS. *Kidney International*, *66*(5), 2047–2053. doi:10.1111/j.1523-1755.2004.00977.x
- Macaron, G., Fahed, M., Matar, D., Bou-Khalil, R., Kazour, F., Nahme-Chlela, D., & Richa, S. (2014). Anxiety, depression and suicidal ideation in Lebanese patients undergoing hemodialysis. *Community Mental Health Journal*, *50*(2), 235–238. doi:10.1007/s10597-013-9669-4
- Marusic, A., & Goodwin, R. D. (2006). Suicidal and deliberate self-harm ideation among patients with physical illness: The role of coping styles. *Suicide and Life-Threatening Behavior*, *36*(3), 323–328. doi:10.1521/suli.2006.36.3.323
- Medicare Program; End-Stage Renal Disease Prospective Payment System, Quality Incentive Program, and Durable Medical Equipment, Prosthetics, Orthotics, and Supplies, Fed. Reg. 79(215) 66120(November 6, 2014) (to be codified at 42 C.F.R. pts. 405, 411, 413, and 414). Retrieved from <https://www.gpo.gov/fdsys/pkg/FR-2014-11-06/pdf/2014-26182.pdf>
- Meyer, R. E., Salzman, C., Youngstrom, E. A., Clayton, P. J., Goodwin, F. K., Mann, J. J., ... Beautrais, A. L., 2010. Suicidality and risk of suicide—definition, drug safety concerns, and a necessary target for drug development: A brief report. *Journal of Clinical Psychiatry*, *71*(8), 1040–1046.
- National Institute of Mental Health. *Suicide* (2017, November). Retrieved November 2017 from <https://www.nimh.nih.gov/health/statistics/suicide/index.shtml>
- Patel, M. I., Sachan R., Nischal, A. & Surendra, A. (2012). Anxiety and depression – A suicidal risk in patients with chronic renal failure on maintenance dialysis. *International Journal of Scientific and Research Publications*, *2*(3).

Pompili, M., Venturini, P., Montebovi, F., Forte, A., Palermo, M., Lamis, D. A., ... Girardi, P. (2013). Suicide risk in dialysis: Review of current literature. *International Journal of Psychiatry in Medicine*, 46(1), 85–108. doi:10.2190/PM.46.1.f

U. S. Renal Data System (2017). *2017 ADR reference tables*. Retrieved from <https://www.usrds.org/reference.aspx>

Watnick, S., Kirwin, P., Mahnensmith, R., & Concato, J. (2003). The prevalence and treatment of depression among patients starting dialysis. *American Journal of Kidney Diseases*, 41(1), 105–110. doi:10.1053/ajkd.2003.50029

## APPENDIX A: SUICIDALITY SCREENING SURVEY

1. Do you screen patients for suicidality?
2. When do you screen patients for suicidality? (choose all that apply)
  - Upon intake
  - At every appointment
  - Annually
  - Based on the outcome of a depression screening
  - When dialogue with a patient suggests risk
  - Other (please specify)
3. Which formalized suicide screening instrument do you use, if any?
  - I do not use a formalized screening instrument
  - C-SSRS (Columbia-Suicide Severity Rating Scale)
  - SAFE-T (Suicide Assessment Five-Step Evaluation and Triage)
  - PHQ-9 (Patient Health Questionnaire-9)
  - Other (please specify)
4. If you do not use a formalized suicide screening instrument, how do you assess for suicidality? (i.e., what questions do you ask?)
5. How do you respond to patients whose score or responses indicate a mild risk of suicidality? (include follow-up and/or referral procedures)
6. How do you respond to patients whose score or responses indicate a moderate/severe risk of suicidality? (include follow-up and/or referral procedures)
7. Approximately what percent of your patients are at risk for suicide?
  - 0%
  - 1–10%
  - ...
  - 91–100%
  - Unsure
8. For how many years have you been a nephrology social worker?
  - Less than 1 year
  - 1–5 years
  - 6–10 years
  - More than 10 years
9. When is the last time that you received training on suicide screening? (e.g. academic coursework, webinar, conference session)
  - I have never received training on suicide screening.
  - Within the past 12 months
  - 1–3 years ago
  - 3–5 years ago
  - More than 5 years ago
10. How would you identify your work setting? (choose all that apply)
  - In-center hemodialysis (including 3x/week, nocturnal, extended)
  - Home hemodialysis (including short daily hemodialysis, 3x/week hemodialysis, nocturnal home dialysis) and/or Peritoneal Dialysis (CAPD, CCPD)
  - Transplant
  - Other (please specify)
11. How would you identify your employer? (choose all that apply)
  - Government/public
  - Private nonprofit hospital
  - Private for profit hospital
  - Nonprofit dialysis center
  - For-profit dialysis center
  - Other (please specify)
12. What is the total number of patients in your caseload for all of your sites?
13. Please indicate the age range of clients that you serve.
  - 16 or younger
  - 17–35 years old
  - 36–64 years old
  - 65 years or older