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The Role of the Social Worker in the Adult Critical Care Unit: A Systematic Review of the Literature

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Social workers provide care to patients and families in the adult critical care unit. We conducted a systematic review of the literature to more clearly identify the role of the social worker practicing in the intensive care unit. We conducted a comprehensive search of the literature using the Pubmed, Embase, ISI, Scopus, and Social Work Abstracts databases using the terms "intensive care," "critical care," and "social work." Articles were selected for review if they met the following criteria: formal studies or opinion papers whose primary focus was the role or scope of practice of the social worker in the adult critical care unit. Articles were selected and reviewed independently by two social work investigators. Our search retrieved 550 potentially relevant articles. Twelve full-text articles were deemed eligible for abstracting. Three of the articles were studies that examined different aspects of social work practice including implementation of a family assistance program, social work response to anxiety levels of families in critical care and common activities of critical care social workers.

Nine articles were primarily opinion pieces. All of the opinion articles described psychosocial support and counseling as a primary role of critical care social work. Other frequently identified roles were crisis intervention, psychosocial assessment, facilitating communication, end-of-life care, and practical assistance. There is little empiric data describing the role of the critical care social worker. Consistent themes from the articles identified include the role of social workers as counseling professionals, facilitators of communication, and resource agents. Further research to identify formal assessment tools and outcome studies of specific counseling techniques will provide important information for best practice guidelines in this area.

KEYWORDS   social work, intensive care, critical care

INTRODUCTION

In the 50 years since the introduction of intensive care units (ICUs), the number and scope of ICUs across the United States has markedly increased (Halpern & Pastores, 2009). Social workers provide interventions in the ICU to enable patients, families, and staff to cope with the disequilibrium that accompanies the stress of critical illness. The work done by social workers practicing in this setting is different from that of those who practice on general medicine wards in that the focus is not primarily on patient throughput and discharge planning but rather upon reducing family stress and helping to facilitate communication. Despite this important difference, there seems to be limited information that best describes the role of the practicing social worker in the adult ICU. Over the past 50 years the practice of critical care medicine has substantially changed for both the critical care practitioner as well as for the patients and families who are exposed to critical care services. Novel therapies have allowed more patients to survive critical illness (Davydow, Gifford, Desai, Bienvenu, & Needham, 2009; Burns, Mello, Studdert, Puopolo, Truog, & Brennan, 2003). In addition, patients may be maintained on highly invasive medical technology for longer periods of time, often in the setting of chronic illness. Families are often faced with difficult decisions about whether to pursue ongoing aggressive care or to shift the focus to palliation for their loved ones. The critical care social worker is frequently involved with helping patients and their families during these crucial times. There is a large body of literature published by social workers in the area of pediatric and neonatal intensive care. We hypothesize that there is very little published material about social work practice in the adult ICU. We therefore sought to determine what information is available to describe the role of the social worker in the ICU. We hope to use this information as

a basis for future research to identify interventions that can be of measurable benefit in the care of this population.

METHODS

Selection Criteria

Articles deemed eligible for this article met the following inclusion criteria: Formal studies or opinion papers whose primary focus was the role or scope of practice of the social worker in the adult critical care unit. We Included both manuscripts that met the Quorum criteria for the reporting of systematic reviews of randomized controlled trials (RCTs) (Moher, Cook, Eastwood, Olklin, Rennie, & Stroup 1999), as well as opinion papers given the limited number of studies available (3). We chose to abstract and present the three study articles separately to assess whether the studies and opinion papers would provide similar information on the role of the social worker. We did not include publications regarding the role of social work in pediatric and neonatal ICUs. Articles that mentioned social work practice as a part of a larger multidisciplinary team were additionally excluded unless we were able to independently evaluate the role of the social worker within the group.

Search Strategy

We searched five major data bases (Scopus, Embase, PubMed, ISI, and Social Work Abstracts) using the following specific headings. We searched PubMed, ISI, and Scopus from January 1965 through February 2009. Embase was searched from January 1975 through February 2009. Social Work Abstracts was searched from January 1965 through April 2010. The Scopus search used "intensive care unit" or "intensive care," and "social work." Embase was searched using "intensive care unit" or "intensive care" with explosion and "social work." The PubMed search used the MESH terms "intensive care unit" or "critical care" and "social work." The ISI search used the terms "social work" or "social services" or "social worker" and "critical care" or "critical care unit" or "intensive care" or "intensive care unit." The Social Work Abstracts search used the terms "social work" or "social worker" or "social services" and "intensive care" or "intensive care unit" or "critical care unit."

Selection Methods

Our search yielded 550 potentially relevant articles. Two social work investigators (KS, AH) independently reviewed these articles using the selection criteria. Articles were reviewed first by title, abstract, and then by full text. Disagreements regarding eligibility were resolved by a third party physician

reviewer (GC). A third social work investigator (JK) conducted a review of the bibliographies of all of the articles that met criteria for inclusion after review of the full text.

Data Abstraction and Study Quality Review

Twelve full text articles were deemed eligible for abstracting (see Figure 1). Three of the articles were formal studies done with either patients or social workers in the critical care unit. The remaining nine were non-study opinion articles. For each article in the study group, two authors abstracted for publication date, type of study, study size, study design, outcomes, and social work role. For the nine non-study articles two authors abstracted first for the descriptions of social work role in critical care and then for the number of articles that mentioned this particular role. This was done by independent review of each article to identify role descriptions in any of the nine opinion pieces. Once these role descriptions were identified, the articles were reviewed again for the number of articles that mentioned each particular role.

RESULTS

We identified 550 citations from our search of which 66 abstracts and 28 full text articles were selected for review. Of the full text articles, 17 did not meet selection criteria guidelines. One additional article was included after reviewing the bibliographies of the 11 articles that met selection criteria. In total, 12 articles met our eligibility criteria (see Table 1).

Three of the 12 selected papers were clinical investigations. Study quality of these three articles was reviewed separately by two independent social work investigators using criteria by Jadad and colleagues (1996). The Jadad scale is a standard tool to evaluate the quality of a RCT. Since none of these studies were RCTs, all three yielded a score of 0 on the Jadad scale.

Although none of the study articles focused exclusively on the role of the critical care social worker, all three provided useful information to describe activities of social workers practicing in this area (see Table 2). Dowling and Wang (2005) evaluated family satisfaction after the implementation of the Critical Care Family Assistance Program (CCFAP). Social Work interventions that were reviewed as part of the program centered on provision of support and facilitating communication. Dowling et al. administered a questionnaire to families of ICU patients 6 months prior to the introduction of the CCFAP at two medical centers to provide a base for comparison and again after the implementation of the CCFAP. This study identified important aspects of social work practice in critical care, including supportive intervention, facilitating communication about care decisions, practical information,
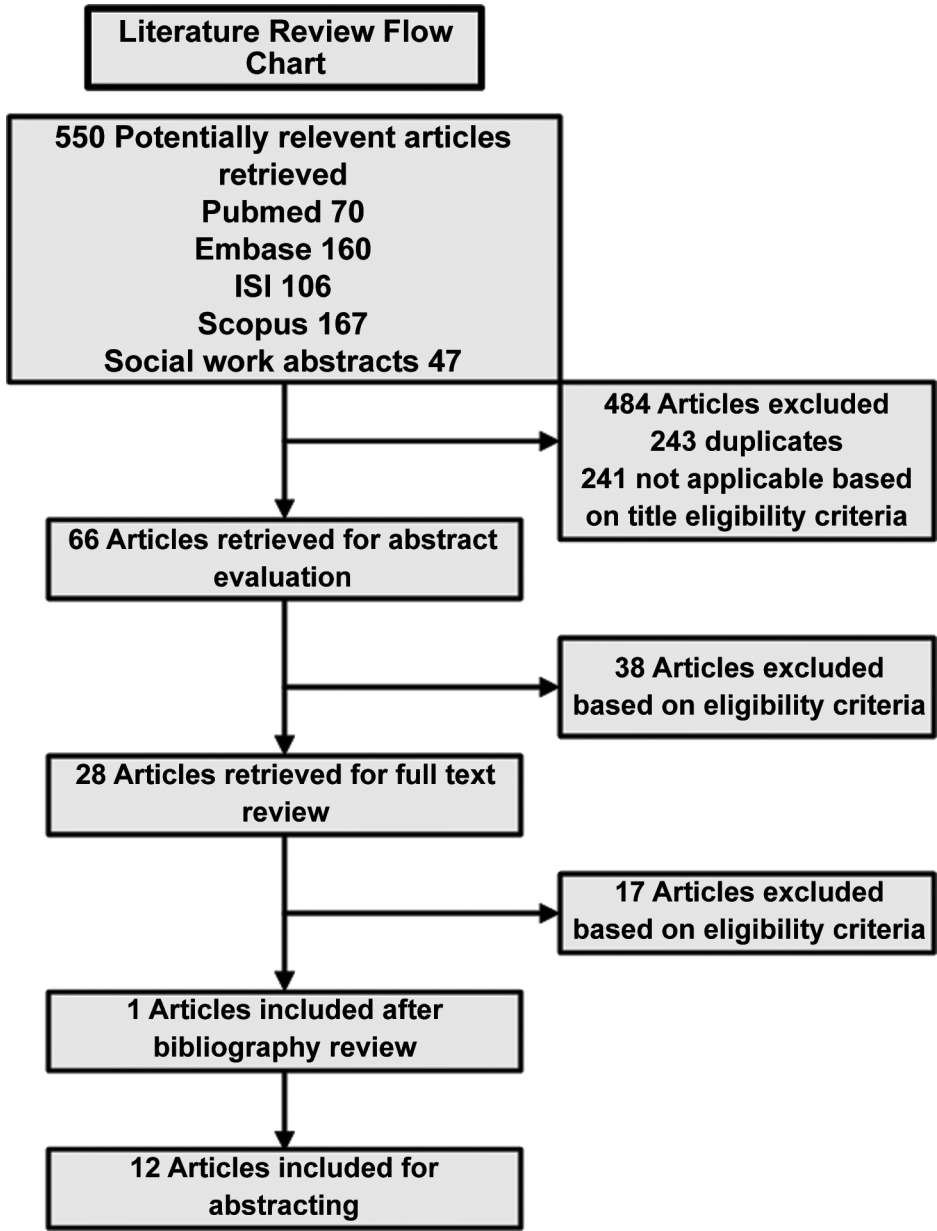
Literature Review Flow Chart

550 Potentially relevent articles retrieved
Pubmed 70
Embase 160
ISI 106
Scopus 167
Social work abstracts 47

484 Articles excluded
243 duplicates
241 not applicable based on title eligibility criteria

66 Articles retrieved for abstract evaluation

38 Articles excluded based on eligibility criteria

28 Articles retrieved for full text review

17 Articles excluded based on eligibility criteria

1 Articles included after bibliography review

12 Articles included for abstracting

FIGURE 1 Flow chart describing each step of the search process for the systematic review.

and hospitality. They found that implementation of a practice model for the critical care team and improved visibility of the social worker had positive outcomes for patients and families.

McCormick, Engelberg, and Curtis (2007) in a single center study, surveyed critical care social workers who worked with families of patients

TABLE 1 Final Articles Included in Systematic Review

Authors	Title	Year
McCormick et al.	Social workers in palliative care: Assessing activities and barriers in the intensive care unit	2007
Rose and Shelton	The role of social work in the ICU: Reducing family distress and facilitating end-of-life decision-making	2006
Dowling and Wang	Impact on family satisfaction: The critical care family assistance program	2005
Black	Life and death in the ICU	2005
Robillard et al.	Support services perspective: The critical care family assistance program	2005
Delva et al.	Needs and feelings of anxiety of relatives of patients hospitalized in intensive care units: Implications for social workers	2002
Holmes	The crisis of the forgotten family: A single session group in the ICU waiting room	1990
Young and Iverson	Intensive care: The social worker's role	1984
Burford	Social work: Why it's needed in intensive care units	1981
Williams and Rice	Intensive care unit: Social work intervention with families of critically ill patients	1977
Mann, Durgin, and Atwood	The social worker on the critical care team	1977
Epperson	Families in sudden crisis: Process and intervention in a critical care center	1977

who died in the ICU. They assessed which were the most frequent social work activities, barriers to care for social workers and factors that cause social worker's satisfaction in meeting family needs. Seventy-four percent of social workers ($n = 133$) listed talking about family members' feelings as the most frequent activity with counseling and provision of communication (50%) as the second most common. The primary barrier to care was reported to be that the patient was too sick to allow interaction with the social worker (22%). In multivariable analysis, the completion of activities by social workers was positively associated with social work satisfaction.

Delva, Vanoost, Bijttebier, Lauwers, and Wilmer (2002) surveyed 200 relatives of 120 different critical care patients over a 5-month period to examine the needs and anxiety levels of family members using the Critical Care Family Needs Inventory (CCFNI), the State-Trait Anxiety Inventory (STAI-S), and a 10-point scale assessing patient illness. The authors analyzed this information to discuss the implications for social work practice in the ICU. The study found that family members of patients in the ICU have levels of anxiety that are much higher than the general population. Interestingly, they also discovered that families reported a statistically significant difference in the degree of vital threat to their loved one than did nurses caring for the patient. They used this information to describe four social work interventions that should occur within the first 72 hours of admission: assessment, provision of information, emotional support, and practical assistance (see Table 2).

TABLE 2 Study Characteristics of Trials Included in Systematic Review

Lead author	Type of study	Study size	Study design	Outcomes	Social work role
J. Dowling, *Chest* 2005	Multi year, multi center outcome evaluation study	$n = 394$	Implementation of CCFAP, a 3 year before and after study.	Quality of communication improved (4.07–4.41) Quality of care improved (4.03–4.36) Mean family stress level decreased (5.51–3.57)	Facilitating communication about plan of care decisions Supportive interventions Hospitality Social worker as part of treatment team Provision of information Use of a practice model to improve visibility and availability Communication, support, and hospitality were cited as reasons for reduction in stress
A. McCormick *Journal of Palliative Medicine* 2007	Single center survey	$n = 133$	Social workers were surveyed for each death in ICU using the SWACF, Social Worker Identified Barriers to Care and the Social Work Satisfaction with Meeting Family Needs tools.	Most frequent social work activities were talking about feelings (74). Supporting family's decisions (61), talking about the patient's values (54), and reminiscing with family (52). Barriers to providing care were severity of illness (22), understaffed (21), family availability (10), and poor team communication (10)	Social workers provided communication and counseling interventions most frequently

(*Continued*)

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TABLE 2 (Continued)

Lead author	Type of study	Study size	Study design	Outcomes	Social work role
D. Delva *Social Work in Health Care* 2002	Single center survey	*n* = 200	Families were surveyed using a 10-point scale measuring the perception of vital threat, the STAI-S, and the CCFNI.	Family members perceived more vital threat than nurses 6.32-4.33. Family members were more anxious than the general population (54.35 on STAI-S). Most frequent family needs were honesty (3.98), assurance of best possible care (3.90), to know expected outcomes (3.87), understandable explanations (3.86)	Assessment within the first 72 hours of ICU admission Assessment Provision of information Provision of emotional support Solving practical problems

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The nine non-study articles were abstracted by two independent reviewers (KS, AH) who identified 24 interventions that were specific to the role of the social worker practicing in critical care (see Figure 2). Eight of the nine articles identified psychosocial counseling and support as an important social work role (Black, 2005; Burford, 1981; Epperson, 1977; Rose and Shelton, 2006; Robillard et al., 2005; Mann, Durgin, & Atwood, 1977; Williams & Rice, 1977; Young & Iverson, 1984). Seven of the nine articles identified crisis intervention (Black, 2005; Buford, 1981; Epperson, 1977; Holmes, 1989; Mann et al., 1977; Williams & Rice, 1977; Young & Iverson,
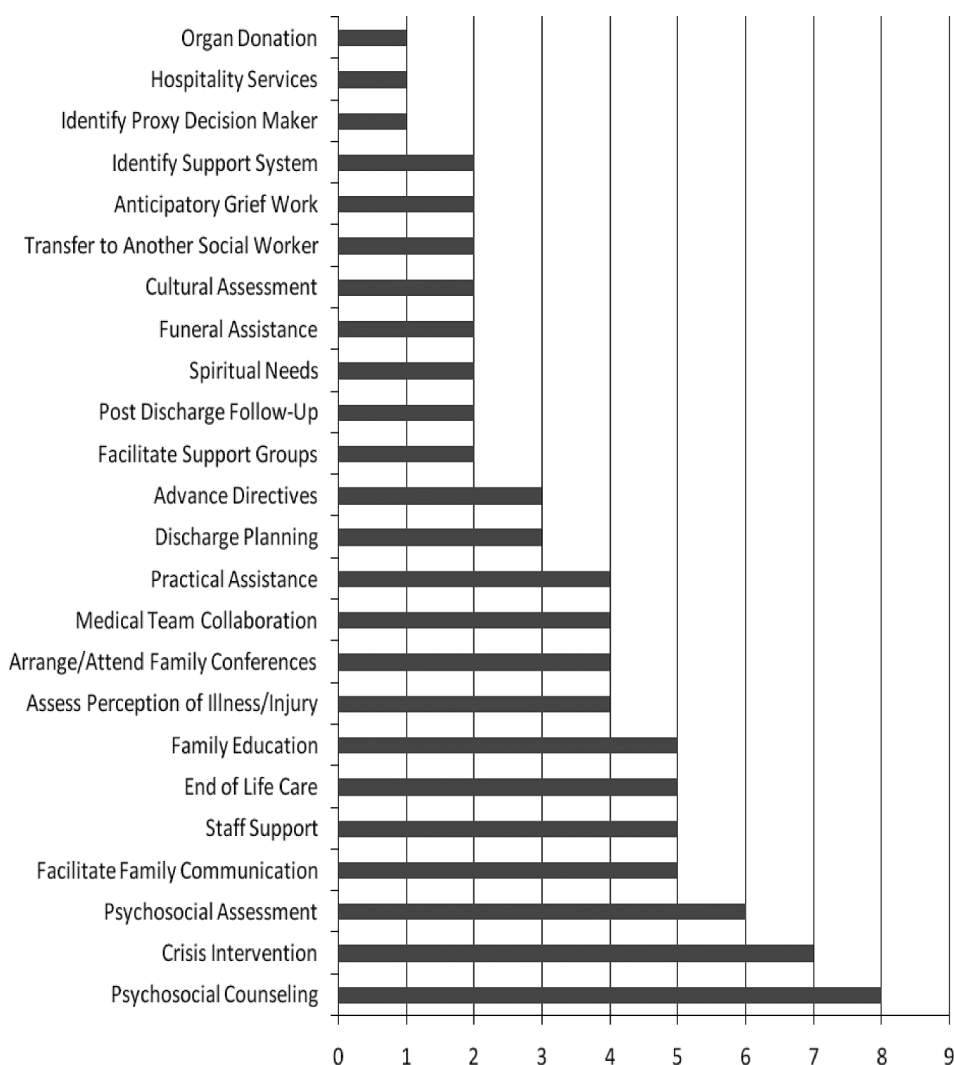

FIGURE 2 Bar graph depicting the number of opinion articles in which specific social work interventions were described.

1984) and six articles identified psychosocial assessment (Black, 2005; Mann et al., 1977; Robillard et al., 2005; Rose & Shelton, 2006; Williams & Rice, 1977; Young & Iverson, 1984). Facilitating family communication (Black, 2005; Burford, 1981; Epperson, 1977; Rose & Shelton, 2006; Williams & Rice, 1977), staff support (Burford, 1981; Mann et al., 1977; Robillard et al., 2005; Rose & Shelton, 2006; Young & Iverson, 1984), end of life care (Black, 2005; Burford, 1981; Mann et al., 1977; Robillard et al., 2005; Rose & Shelton, 2006), and family education (Burford, 1981; Epperson, 1977; Rose & Shelton, 2006; Williams & Rice, 1977; Young & Iverson, 1984) were mentioned in five of the nine articles. Medical team collaboration (Black, 2005; Robillard et al., 2005; Rose & Shelton, 2006; Williams & Rice, 1977), arranging family conferences (Black, 2005; Robillard et al., 2005; Rose & Shelton, 2006; Williams & Rice, 1977), assessment of the family's perception of the illness (Mann et al., 1977; Rose & Shelton, 2006; Williams & Rice, 1977; Young & Iverson, 1984), and practical assistance (Robillard et al., 2005; Rose & Shelton, 2006; Williams & Rice, 1977; Young & Iverson, 1984) were described in four of the articles.

DISCUSSION

This systematic review had several major findings. Our hypothesis that there was scant literature on the subject of social work in adult critical care was correct. We retrieved only 12 articles that met the inclusion criteria, of which only 3 were clinical studies. We also found that while there was a range of social work intervention cited in these works, specific interventions were cited more frequently. These interventions may be identified as aspects of social work practice that can be measured in the future to determine empiric benefit to patients and families in the ICU.

Despite the small number of articles and the span in which they were written (see Table 1), there were several consistent themes that were found in many of the articles. Central themes identified the social worker as a counseling professional, facilitator of communication, and resource agent. Psychosocial counseling and support was not only found to be one of the most frequent social work activities (McCormick et al., 2007)) but it was also found to have an impact on family satisfaction and reduction of anxiety (Dowling & Wang, 2005). Psychosocial counseling was reported as a primary role in all but one of the non-study articles and this was supported by findings in the three study articles. A second major finding in our review was the mention of specialized social work assessment. Assessment of the family's response to crisis and understanding their communication patterns can guide the team in a more compassionate and effective approach to sharing information (Rose & Shelton, 2006; Young & Iverson, 1984). Also several of the articles showed that anxiety levels were significantly higher for families of critical care patients as compared to the general population (Delva et al.,

2002; Dowling & Wang, 2005). Articles in our review cited crisis intervention, strengths perspective, cognitive restructuring, and individual and family therapy as some of the counseling techniques that may be useful in working with critical care patients and families to reduce anxiety and increase coping ability (Delva et al., 2002; Epperson, 1977; Holmes, 1989; Mann et al., 1977; Rose & Shelton, 2006; Williams & Rice, 1977). A third major finding was that social workers were found to have high levels of activity in the area of facilitating communication in all three studies (Delva et al., 2002; Dowling & Wang, 2005; McCormick et al., 2007). In addition, communication-based interventions such as collaborating with team, arranging family meetings and facilitating family communication were primary roles in the non-study articles; again this was supported by data from the studies.

Several temporal trends were revealed. While seven of the nine opinion articles described crisis intervention as a primary role, five of these articles were published in or before 1984 (Burford, 1981; Epperson, 1977; Mann et al., 1977; Williams & Rice, 1977; Young & Iverson, 1984). Medical team collaboration and end-of-life care were mentioned in at least half of the articles but more heavily cited in the ones published in 2005 or thereafter (Black, 2005; Robillard et al., 2005; Rose & Shelton, 2006). This trend could indicate that the role of critical care social work has changed slightly in the past two decades to encompass more palliative care interventions (Field & Cassel, 1997; Csikai & Raymer, 2005). Advancements in critical care medicine have made it such that patients can be maintained for longer periods with highly invasive medical interventions. In addition, the largest subset of patients who die in ICUs do so as a result of withdrawal of care (Keenan et al., 1997; Prendergast & Luce, 1997).

Studies have shown that patients who remain in ICU for longer than 3 days are at risk for prolonged stays in the unit (Corwin et al., 2002). Early social work assessment provides important information for the team about how the family communicates, their understanding of the critical illness, practical concerns and any indication for ongoing counseling and support (Nelson, Mulkerin, Adams, & Pronovost, 2006). Recent studies have also looked at post-traumatic stress symptoms in both patients and family members following an ICU admission (Davydow, Gifford, Desai, Needham, & Bienvenu, 2008; Gries et al., 2009; Herridge et al., 2003). Family members have indicated that access to a counselor during the hospitalization may have been of benefit. More research is needed to look at outcomes of these counseling interventions and to determine whether increased staffing levels will provide improved patient and family care. Reduction of family stress and improved communication may correlate with better decision-making ability, earlier clarification of goals for patients, and easing of family burden (Lautrette, Ciroldi, Ksibi, & Azoulay, 2006). Many of the frequently cited activities of critical care social workers involved communication and teamwork. Data on the effectiveness of the social work role will be helpful to

promote team understanding of the discipline and more effective teamwork. Studies show that access to information is one of the most highly cited needs of family members (Azoulay et al., 2005; Stricker et al., 2009). This is one of the core concepts of crisis intervention (Epperson, 1977). It is also a skill that takes on primary importance during the transition from rescue to palliation as families seek information in order to make end-of-life decisions.

Our results have several important limitations. First, this review is limited by the small number of articles that met inclusion criteria. The lack of empiric data and the remote publication dates of nearly half of the retrieved articles limit our ability to draw definite conclusions (see Table 1). In addition, we did not include articles that only referred in part to social work practice in critical care. It is possible that a multidisciplinary- or team-focused article could provide important information about how the social worker functions as part of the team.

There are several implications of this research. We believe that social workers are uniquely qualified to provide counseling and support in critical care. Upon admission the ICU patients and families are asked to understand complex information in an unfamiliar environment, and are often required to make difficult choices in short time frames. Our own clinical experience suggests that the social worker's evaluation of patient's values, wishes, and desires is important in overall team management of care. Given the increased workload and responsibilities in the ICU, we believe that development of critical care social work may require increased knowledge of the interventions necessary for this subspecialty work. Our review suggests that social work interventions may be able to increase patient family satisfaction, reduce anxiety, improve communication, and possibly help to avoid unwanted interventions in the ICU. We suggest that the information found in this systematic review may provide a basis for future empirical research in this area with specific regard to whether there is measurable benefit from the most frequently provided social work interventions identified herein. We plan to use this information as a starting point for additional research on the role of the social worker in the adult ICU. This additional research on the practice of the social worker in the adult ICU will assist with the development of best practice guidelines for field instruction as well as guiding practice for established hospital social work departments.

CONCLUSIONS

This systematic review has demonstrated that few studies provide empiric data on the effectiveness of social work intervention in critical care. Critical care social work requires an understanding of family dynamics, team functioning, crisis response, and end-of-life care. Identification of formal assessment tools and outcome studies of specific counseling techniques will

provide important information for the care of this population. We believe that critical care social work requires training and experience in the specific techniques commonly used in the care of critically ill patients and their families. We feel strongly that social workers will have important contributions to the advancement of care in this area including the creation of efficiencies that may limit the financial and emotional costs attendant to the critical care stay.

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