Psychoeducation as Evidence-Based Practice: Considerations for Practice, Research, and Policy

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This paper describes psychoeducation and its applications for mental health and health professions across system levels and in different contexts by reviewing the range of applications that have appeared in the recent literature. The theoretical foundations of clinically based psychoeducation are reviewed and the common elements of practice are identified. Examples of well-defined psychoeducational interventions are presented that meet criteria for empirically supported psychological interventions. In conclusion, the broad applications of psychoeducation for health care and mental health practice and policy at both the clinical and community levels are discussed, and the need for further evaluation and research is considered. [Brief Treatment and Crisis Intervention 4:205–225 (2004)]

KEY WORDS: psychoeducation, group intervention, evidence-based practice, randomized trials, brief treatment.

Psychoeducation is among the most effective of the evidence-based practices that have emerged in both clinical trials and community settings. Because of the flexibility of the model, which incorporates both illness-specific information and tools for managing related circumstances, psychoeducation has broad potential for many forms of illnesses and varied life challenges.

the professions dealing with mental health, health care, and social service across system levels and in different contexts by reviewing the range of applications that have appeared in the recent literature. We identified the psychoeducational examples included in the review by following guidelines for evidence-based practices created by the American Psychological Association's (APA) Task Force on Promotion and Dissemination of Psychological Procedures (1995). In the Discussion section, the common

and unique themes and content across studies

and populations are identified.

This paper examines the research that supports

psychoeducation as evidence-based practice for

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Psychoeducation is a professionally delivered treatment modality that integrates and synergizes psychotherapeutic and educational interventions. Many forms of psychosocial intervention are based on traditional medical models designed to treat pathology, illness, liability, and dysfunction. In contrast, psychoeducation reflects a paradigm shift to a more holistic and competence-based approach, stressing health, collaboration, coping, and empowerment (Dixon, 1999; Marsh, 1992). It is based on strengths and focused on the present. The patient/client and/or family are considered partners with the provider in treatment, on the premise that the more knowledgeable the care recipients and informal caregivers are, the more positive health-related outcomes will be for all. To prepare participants for this partnership, psychoeducational techniques are used to help remove barriers to comprehending and digesting complex and emotionally loaded information and to develop strategies to use the information in a proactive fashion. The assumption is that when people confront major life challenges or illnesses, their functioning and focus is naturally disrupted (Mechanic, 1995).

Psychoeducation embraces several complementary theories and models of clinical practice. These include ecological systems theory, cognitive-behavioral theory, learning theory, group practice models, stress and coping models, social support models, and narrative approaches (Anderson, Reiss, & Hogarty, 1986; Lukens, Thorning, & Herman, 1999; McFarlane, Dixon, Lukens, & Lucksted, 2003). Ecological systems theory provides the framework for assessing and helping people understand their illness or experience in relation to other systems in their lives (i.e., partners, family, school, health care provider, and policymakers). Under this umbrella, psychoeducation can be adapted for individuals, families, groups, or multiple family groups. Although psychoeducation can be practiced one-on-one, group practice models set the stage for within-group dialogue, social learning, expansion of support and cooperation, the potential for group reinforcement of positive change, and network building (Penninx et al., 1999). They reduce isolation and serve as a forum for both recognizing and normalizing experience and response patterns among participants, as well as holding professionals accountable for high standards of service. Cognitive-behavioral techniques such as problem solving and role-play enhance the presentation of didactic material by allowing people to rehearse and review new information and skills in a safe setting. These can be amplified through specific attention to the development of stress management and other coping techniques (Anderson et al., 1986; McFarlane, 2002). Narrative models, in which people are encouraged to recount their stories as related to the circumstances at hand, are used to help them recognize personal strengths and resources and generate possibilities for action and growth (White, 1989).

Recent mandates at both the federal and international levels have pushed to include psychoeducation as a focal point in treatment for schizophrenia and other mental illnesses, and are backed by national policymakers (President's New Freedom Commission on Mental Health, 2003) as well as influential family self-help groups such as the National Alliance for the Mentally Ill (NAMI) (Lehman & Steinwachs, 1998; McEvoy, Scheifler, & Frances, 1999). Based on an exhaustive review of the evidence-based literature on schizophrenia, the Schizophrenia PORT (Patient Outcomes Research Team) study recommended that education, support, crisis intervention, and training in problem solving be offered to available family members over a period of at least 9 months (Lehman & Steinwachs, 1998). Bestpractice and expert panels corroborated these recommendations (American Psychiatric Association, 1997; Coursey, 2000; Coursey, Curtis, &

Marsh, 2000; Frances, Kahn, Carpenter, Docherty, & Donovan, 1998), given that remarkably positive outcomes have been observed in over 25 independent studies (Dixon, Adams, & Lucksted, 2000; Dixon et al., 2001; McFarlane et al., 2003). Several outcomes of psychoeducational interventions for schizophrenia are particularly noteworthy and have been demonstrated across studies (McFarlane et al., 2003). For persons receiving individual therapy and medication, or medication alone, the 1-year relapse rate ranges from 30% to 40%; for those participating in family psychoeducation of at least 9 months' duration, the rate is about 15% (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998). Other positive outcomes have been documented for patients and for families as well, suggesting that psychoeducation provides multiple benefits. These include decreased symptomatology and improved social functioning for the patient (Dyck, Hendryx, Short, Voss, & McFarlane, 2002; Dyck et al., 2000; McFarlane et al., 1995; Montero et al., 2001) and improved well-being and decreased levels of medical illness among family members (McFarlane, Dushay, Stastny, Deakins, & Link, 1996; Solomon, Draine, & Mannion, 1996; Solomon, Draine, Mannion, & Meisel, 1996).

In schizophrenia, any form of intervention is complicated by the symptoms of the illness, which include psychosis as well as functional and cognitive deficit or distortion, alogia, inertia, denial, and/or lack of awareness of illness (American Psychiatric Association, 1994). Patients, formal care providers, and informal caregivers are confronted not only by the severe burden of the illness, but by the distorted sense of reality by which it is characterized. To address this multifaceted set of challenges, the various psychoeducational models for schizophrenia build on a series of principles that exemplify the paradigm shift to a strengths-based approach to intervention. Key aspects of these approaches include service

coordination (i.e., easy access and clarity of expectation regarding service, medication management and adherence, and crisis planning), provision of relevant up-to-date information in a timely and flexible manner, attention to family conflict, communication, loss, problem solving, and attention to social as well as clinical needs for the person with illness, along with expanded social support for the family, through multiple family psychoeducation and family support groups (e.g., NAMI) (Dixon Adams, & Lucksted, 2000; McFarlane et al., 1995; McFarlane et al., 2003).

Psychoeducational approaches also are well established as adjunctive treatment for cancer, where patients and families are struggling with different forms of challenge. Although persons with cancer typically fall into the normal range in terms of psychological processes, they inevitably struggle with the anxiety and depression following the extraordinary stress associated with the diagnosis and treatment of the cancer (Cunningham, Wolbert, & Brockmeier, 2000). Numerous randomized studies over the last two decades have shown significantly increased quality of life and decreased levels of anxiety and distress for persons with cancer who participate in professionally led psychoeducational groups (Cunningham, 2000; Edmonds, Lockwood, & Cunningham, 1999; Meyer & Mark, 1995). There is increasing evidence that psychoeducational and other forms of professionally led support groups can have an impact on the longevity of cancer patients as well (Cunningham, 2000; Cunningham, Edmonds, et al., 2000; Fawzy, Fawzy, Arndt, & Pasnau, 1995; Richardson, Shelton, Krailo, & Levine, 1990; Richardson, Zarnegar, Bisno, & Levine, 1990; Spiegel, Bloom, Kraemer, & Gottheil, 1989). This reinforces the value and importance of emotional support and enhanced coping in the face of any form of severe illness.

Families and other informal caregivers of persons with cancer have been targeted as well.

In one recent study focusing solely on partners of women with early-stage breast cancer, participants in psychoeducational groups showed less mood disturbance 3 months posttreatment than controls, and the women whose partner participated reported less personal mood disturbance and more emotional support (Bultz, Speca, Brasher, Geggie, & Page, 2000). These women also described significantly more stable marital relationships over time, suggesting that the psychoeducational groups served a preventive function.

The number of well-documented evidence-based studies on psychoeducation as an intervention for illnesses as different as schizo-phrenia and cancer suggests the potential for the model. There is significant evidence that psychoeducational interventions are associated with improved functioning and quality of life, decreased symptomatology, and positive outcomes for both the person with illness and family members as well.

However, there has been little attempt to examine the breadth of applications in other psychiatric, medical, or clinical settings. The aim of this paper is to review and discuss the range of psychoeducational interventions for other settings and circumstances using accepted criteria for designating a practice intervention as evidence based.

Method

Our approach is twofold: first, to show the breadth of application for psychoeducational interventions, and second, to include studies that follow the criteria for empirically supported psychological interventions devised by the Task Force on Promotion and Dissemination of Psychological Procedures (1995). These guidelines have been supported and amplified by other investigators and reported on by Chambless and colleagues (Chambless & Hollon,

1998; Chambless & Ollendick, 2001). Broadly defined, these criteria are grouped as:

Category I: established, efficacious, specific interventions, including two rigorous randomized trials conducted by independent investigators;

Category II: probably or possibly efficacious intervention, treatment compared with wait-list control; and

Category III: experimental treatments that do not meet the above criteria for adequate methodology.

In addition, the task force determined that Category I interventions should follow a treatment manual or clearly prescribed outline for treatments and that the characteristics of the sample should be specified (Chambless & Hollon, 1998). Nathan and Gorman (1998) extend the characteristics for Category I studies to include blind assessment of research subjects by independent raters, specific inclusion and exclusion criteria, up-to-date diagnostic assessment, and adequate statistical power.

Studies selected for inclusion in this review were retrieved through a search of PubMed and PsychInfo from 1995 until the present. This time period was selected because of increased attention to selection criteria for evidence-based practice that has emerged since 1995 (Chambless & Hollon, 1998; Chambless & Ollendick, 2001; Rousanville, Carroll, & Onken, 2001). Key search words included *psychoeducation*, *psychoeducational groups*, *randomized trial*, *control group*, *clinical trial*, *controlled trial*, and *outcome*. The intent was to identify studies that would meet criteria for Category I, as described above.

For the purposes of this review, the following criteria were used for the selection of published studies described as using a psychoeducational intervention: The article focused on one or more interventions targeting a specific and clearly defined mental illness, medical illness, or other form of personal life challenge (e.g., partner abuse).

At least one of the interventions labeled as an active treatment was described as psychoeducational in nature, targeting either the family, the person challenged by the illness or life situation, or both.

The psychoeducational intervention was presented in person (as opposed to online or solely through written material).

The design of the study involved random assignment to the active psychoeducational treatment intervention and to a control group. (Note that in one instance, reports of randomized trials in process are included in the review as well, because they are based on a well-documented and randomized pilot study [Fristad, Gavazzi, & Mackinaw-Koons, 2003; Fristad, Goldberg-Arnold, & Gavazzi, 2003]).

The article provided enough information to assess the quality of the research design and methods and the applicability and relevance of outcome measures.

The article provided enough information to assess the nature and extent of the psychoeducational intervention, to determine whether psychotherapeutic and educational techniques were integrated. Intervention studies in which the authors referred to a seemingly straightforward educational intervention (i.e., with no psychotherapeutic component) as psychoeducational in nature were excluded.

One article was not reviewed because the term *psychoeducation* was referred to in the title and abstract but not in the text of the article

(Shelton et al., 2000). A second was excluded because a psychoeducational group was used as a minimally defined control intervention (Latimer, Winters, D'Zurilla, & Nichols, 2003), and a third because psychoeducation was referred to as a combination placebo/usual care control with no description as to form or content (Kaminer, Burleson, & Goldberger, 2002).

Applications for Mental Health Conditions Other Than Schizophrenia

Although reports of randomized trials of psychoeducation for adults coping with schizophrenia are well represented in the literature, adaptations for children and adolescents and for adults with other serious mental health conditions are just beginning to appear (see Table 1). Fristad and her colleagues piloted multiple family psychoeducational groups with breakout sessions for children aged 8 to 11 with mood disorders (including both bipolar disorder and major depressive disorder/dysthymia as compared with wait-list controls [Fristad, Gavazzi, & Soldano, 1998; Fristad, Goldberg-Arnold, & Gavazzi, 2002]). These groups focused on both parent and child outcomes, including caregiver knowledge, increased caregiver concordance regarding diagnosis and treatment, decreased expressed emotion in parents and environmental stress for the child, and reduced symptom severity and duration for the child. The curriculum particularly attended to information dissemination, the building of advocacy and communication skills, both within the family and across systems, and strategies for social problem solving and symptom management. Outcomes were positive, with families engaged in the psychoeducational groups showing significantly more knowledge about mood symptoms, increased use of support services, and increased reports of parental support by children, both immediately after and 4 months

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TABLE 1. Mental Health Conditions

Study	Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	Comment ^a
Colom et al., 2003	Outpatients diagnosed with bipolar I & II disorder. Conducted in Spain	Randomized trial: PE groups vs. nonstructured group meetings	Symptoms, course, communication, & coping skills	21 sessions	Reduced # total relapse & # relapses/person. Increased time to recurrence; fewer & shorter hospitalizations	Category II. Well-designed study
Dowrick et al., 2000	Adults with depression in community	Randomized trial; group PE vs. individual problem solving vs. controls. N = 452	Relaxation, positive thinking; social skills	12 two-hour sessions over 8 weeks w/class reunions	Both active interventions reduced caseness & improved subjective function. Problem solving more well received	Category II. Separates PE & problem solving
Fristad et al., 1998, 2002	Children with mood disorders	Pilot study; randomized trial in process	Decrease in symptoms; improve coping & communication; stress management; expanded social supports	Multiple family groups with break-out groups for children/adolescents. Late afternoon & evening	Improved family climate	Category II
Honey et al., 2003	Women diagnosed with postnatal depression	Randomized trial: PE groups for women vs. standard tx. $N = 45$	Coping strategies related to child care & obtaining social support; cognitive-behavioral techniques & relaxation	8 sessions	Tx group less depressed at posttest & 6-month fu, controlling for antidepressants	Category II

Study	Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	Comment ^a
					No differences re social support, strength of marriage, or coping	
Miklowitz et al., 2003	Persons with bipolar disorder &	Randomized trial; individual PE for	PE, with focus on communication &	21 individual sessions w/ family	Patients showed fewer relapses.	Category II. Well-designed study

problem-solving

training

families vs. crisis intervention for

families.

All patients

Longer survival,

greater reduction

in mood disorder

symptoms & better

& patient over

9 months

received medication. medication N = 101compliance Peterson 14 one-hour All active tx Women Randomized trial; Review of PE Category II. Small sample et al., 1998 showed decrease with binge therapist-led PE vs. information, stress group sessions size per cell; eating disorder partial self-help vs. management, over 8 weeks in binge eating structured self-help vs. homework at posttest group randomization. wait-list control. Manual based N = 61Outpatients Randomized trial; PE about bipolar 21 one-hour Category II. Rea et al., 2003 Patients less Well-designed study. diagnosed individual family disorder, communication likely to be sessions with bipolar I PE vs. individual tx enhancement, problem hospitalized; Manual based fewer relapses disorder & for patient. N = 53solving. over 2 years their families As-needed crisis intervention

Note: Dx = diagnosis; PE = psychoeducation; tx = treatment; fu = follow-up.

TABLE 1 continued. Mental Health Conditions

family

^aChambless criteria for evidence-based practice (Chambless & Hollon, 1998).

posttreatment. Interestingly, parents reported increased positive family interactions, but not decreased negative family interaction.

The authors successfully included children with two different diagnoses (bipolar disorder and major depression/dysthymia) in each group. This represented an accommodation to practicality (i.e., ease of scheduling), and families appeared to benefit from learning about both disorders. Fristad and colleagues recently reported on two randomized trials to test two variations on the pilot; one that serves families through eight multiple family psychoeducational groups, and a second parallel model that includes 16 individual family psychoeducation sessions (parent-only meetings alternating with child sessions in which parents join at the beginning and end of the session) (Fristad, Gavazzi, et al., 2003; Fristad, Goldberg-Arnold, et al., 2003).

Honey, Bennett, and Morgan (2003) tested a brief psychoeducational group intervention for postnatal depression, randomly assigning 45 Welsh women scoring above 12 on the Edinburgh Postnatal Depression Scale to an eight-session psychoeducational group or to routine treatment. The partner was not involved. Although not manual based, the intervention followed a prescribed curriculum and included coping strategies related to child care and obtaining social supports, cognitivebehavioral techniques, and relaxation. At posttest and 6 months posttreatment, women in the psychoeducational groups showed significantly decreased scores on the depression measure, controlling for antidepressant use. However, no differences occurred in terms of improved social support, marital relationship, or coping in analyses of effects for time, group, or Time \times Group interaction.

Several studies addressed the needs of persons diagnosed with depression or bipolar disorder living in the community. In a three-armed study, Dowrick and colleagues (2000)

compared group psychoeducation (12 two-hour sessions over 8 weeks), 6 individual problemsolving sessions conducted at home and controls. The authors found that the two active interventions reduced symptoms and improved subjective functioning. The patients particularly liked the individual problem-solving sessions. Interestingly, the authors utilized problem solving as a treatment independent of psychoeducation. This is in contrast to most of the studies reviewed, which specifically incorporated problem-solving techniques within the definition of psychoeducation.

In a study conducted in Spain of outpatients diagnosed with bipolar disorder type I and II, Colom and colleagues (2003) compared the impact of 21 psychoeducational group sessions with nonstructured group meetings. Participants in the active treatment were less likely to relapse overall, had fewer relapses per person, increased their time to recurrence of symptoms, and had both fewer and shorter hospitalizations. In a relatively small study (N = 53), Rea and colleagues (2003) compared outcomes for patients involved in 21 individual family psychoeducation sessions with standard individual treatment. Participants in the family psychoeducation sessions were less likely to relapse or be hospitalized over the 2-year study. In a separate, larger study, Miklowitz, George, Richards, Simoneau, and Suddath (2003) randomized 101 individuals with bipolar disorder to either 21 individual psychoeducational family sessions management (2 educational sessions plus crisis sessions as needed). The patients in the psychoeducational treatment showed fewer relapses overall, longer symptom-free periods, fewer symptoms, and better medication compliance. Both of these studies were manual based, with similar design, method, approach, and outcome. However, the studies together cannot be labeled as meeting criteria for a Category I evidence-based practice because

they share an investigator (Chambless & Hollon, 1998).

Peterson and colleagues (1998) used a psychoeducational intervention for women with binge eating disorder, comparing it with three other treatment conditions (partial self-help, structured self-help, and a wait-list control). This was the only study reviewed in which participants in the psychoeducational intervention did not show superior outcomes over time. Rather, participants in all active treatments showed a decrease in binge eating immediately posttreatment. The authors noted several threats to the validity of their study: randomization that targeted groups rather than individuals, small sample size (N=61), and lack of follow-up data.

Applications for Caregivers of Persons With Mental Health Conditions

Two studies particularly addressed the needs of caregivers (see Table 2). Hebert and colleagues (2003) tested the efficacy of a 15-session series of psychoeducational groups for informal caregivers of persons with dementia in comparison with traditional support groups. Randomization involved 158 individuals stratified by sex and kinship status at several different sites. The psychoeducational content in the curriculum was focused on stress appraisal and coping. Primary outcome measures were blindly assessed and included frequency and response to behavioral problems among care receivers; secondary measures included patient burden, distress and anxiety, perceived social support, and self-efficacy. Immediately following the intervention, those assigned to the psychoeducational groups reported significantly less reaction to behaviors and a trend toward less frequency of reported behavior problems among the family members with dementia. The interaction between behavior frequency

and reaction also showed a significant decrease for caregivers who received psychoeducation. However, there were no significant differences between groups for the secondary patientoutcome measures.

In a small study conducted in southern India, Russell, al John, and Lakshmanan (1999) randomly assigned 57 parents of children with intellectual impairment to either an active psychoeducational group intervention or an untreated control group. Participants in the 10-session groups showed significantly improved parental attitude regarding child rearing and management of the disability immediately posttest.

Applications for Medical Illness

Psychoeducational programs have also been devised for medical illnesses, including acute and life-threatening illnesses other than cancer, as well as more chronic conditions. These programs aim to help both the persons affected and their caregivers or partner weather both the physical and the psychological impact of chronic and acute illness (see Table 3).

In one of the cross-national studies identified through this review, researchers in Hong Kong (Cheung, Callaghan, & Chang, 2003) randomly assigned 96 women aged 30 to 55 preparing for elective hysterectomy to either individual psychoeducational sessions (information booklet plus cognitive interventions focusing on distraction and reappraisal) or a control group (information booklet without additional information). Number of sessions, duration, and intensity for the experimental group were not specified and it was difficult to tell how well integrated the educational component was with the cognitive techniques in the psychoeducational intervention. However, women receiving the active treatment reported significantly lower anxiety and pain and higher treatment

TABLE 2. Caregivers of Persons With Mental Health Conditions

Study	Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	C omment ^a
Hebert et al., 2003	Informal caregivers of persons with dementia	Multisite randomized trial; PE groups vs. traditional support groups. <i>N</i> = 158 stratified by sex & kinship status	Stress appraisal and coping	15 sessions	Tx group shows less reaction to behavior of patient, less frequency of reported problem behaviors. No difference in burden, distress & anxiety, perceived social support, or self-efficacy	Category II
Russell et al., 1999	Parents of children with intellectual disability. Conducted in southern India	Randomized trial; PE groups for parents vs. control group. <i>N</i> = 57	Interactive group PE	10 sessions	Tx group showed improved parental attitude re child rearing & management of disability	Category II. Small total sample size

Note: Dx = diagnosis; PE = psychoeducation; tx = treatment.

^aChambless criteria for evidence-based practice (Chambless & Hollon, 1998).

satisfaction than those in the control group in the days immediately postoperative. There was no difference between the two groups in requests for painkillers postsurgery.

Two additional models addressed chronic medical problems, specifically obesity and generalized pain. Ciliska (1998) randomly assigned 78 women with obesity to a smallgroup psychoeducational intervention (6 to 8 people per group), to an education-alone group using a classroom format (16-20 people), or to an untreated control group. The model emphasized problem solving and assertiveness training, with attention to etiology, risks and benefits; and the relationship between body image and self-esteem. Immediately posttreatment, the psychoeducational subjects showed significantly increased self-esteem, body satisfaction, and more restrained eating patterns compared with participants in either of the two other groups. Outcomes for participants in the education-alone intervention did not differ from those in the control group.

Unremitting physical pain is associated with depressive symptoms such as distress, hopelessness, and despair and contributes to disruption in both individual and family functioning. To address this set of problems, LeFort, Gray-Donald, Rowat, and Jeans (1998) devised a 12-hour psychoeducational model adapted from the Arthritis Self-Management Program (Lorig, 1986) for persons confronted with chronic pain. Curriculum was focused on facts and myths regarding pain, medication, depression, and nutrition in the context of problem solving, communication skills, and mutual support. The authors randomly assigned 110 individuals diagnosed with chronic pain (mean duration of pain, 6 years) to either the psychoeducational groups or a 3-month wait-list control. Immediately posttreatment, the group participants showed significantly reduced indicators of pain and dependency, improved physical functioning, vitality, general life satisfaction, and self-efficacy, and a trend toward improved mental health and social functioning. No differences emerged between the groups either in terms of depression and uncertainty regarding future functioning or on measures from the Medical Outcomes Short Form (Ware & Sherbourne, 1992) on physical functioning and general health. It is noteworthy that those who dropped out or refused the active treatment (8%) appeared to be more affected by pain (i.e., unable to sustain employment) than those who enrolled and participated (LeFort & Steinwachs, 1998). This suggests that the experience of severe pain may interfere with willingness or ability to participate in a group intervention.

Olmsted, Daneman, Rydall, Lawson, & Rodin (2002) assigned 85 adolescent girls diagnosed with type I diabetes and comorbid disturbed eating patterns and their parents to either a series of six psychoeducational group sessions or a treatment-as-usual control group. The girls and parents participated in separate but parallel sessions. At 6-month follow-up, the girls in the active treatment continued to show significantly reduced eating disturbance compared with the controls.

Applications for Other Clinical Settings and Prevention

Programs designed for other life concerns familiar to social service agencies, exclusive of those directly related to either psychiatry or medicine, have also begun to appear in the literature (see Table 4). Gibbs, Potter, Goldstein, and Brendtro (1996) created a manual-based psychoeducational program for adolescents incarcerated in a medium security youth correctional facility. The psychoeducational groups met daily and focused on mediation, skills and values enhancement, and peer support. Adolescents were taught to recognize negative

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TABLE 3. Medical Illness

Study	Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	Comment ^a
Cheung et al., 2003	Women age 30 to 35 preparing for elective hysterectomy	Randomized trial; individual PE sessions vs. control group (info booklet only). <i>N</i> = 96	Information plus cognitive intervention with attention to distraction & reappraisal of circumstance	Not specified	Tx group lower anxiety & pain; higher tx satisfaction. No difference in request for pain medicine postsurgery	Category II. Extent and nature of PE not defined
Ciliska, 1998	Women with obesity	Randomized trial comparing PE group, education alone, & control. N = 78	Education about obesity; problem solving, assertiveness training; body image work; group support	12 sessions over 12 weeks; 2-hour sessions; 6–8 women	Tx group increased self-esteem & restrained eating; increased body satisfaction	Category II
LeFort et al., 1998	People with chronic physical pain	Randomized trial comparing PE group w/ 3-month wait-list control. N = 110	Definitions of pain, myth busting; cognitive-behavioral techniques; pain management; group problem solving; communication skills & mutual support	6 weeks, 12 hours	Short-term improvement of pain severity & impact, role functioning & involvement, life satisfaction, self-efficacy, resourcefulness; decreased dependency. No difference re depression, uncertainty, general health, or physical functioning	Category II. Well-defined study

TABLE 3 contin	TABLE 3 continued. Medical Illness Study Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	Comment
Olmsted et al., 2002	Adolescent girls with type I diabetes & disturbed eating attitudes & behavior, and parents	Randomized trial comparing PE group w/tx as usual. $N=85$	PE content, sociocultural influences, strategies to control symptoms	6 weekly 90-minute group sessions. Separate group sessions for girls and parents	Reduction in eating disturbance; maintained at 6-month fu	Category II. Manual based

Note: Dx = diagnosis; PE = psychoeducation; tx = treatment; fu = follow-up. Chambless criteria for evidence-based practice (Chambless & Hollon, 1998)

social behavior both in themselves and among their peers and to replace these behaviors with more constructive and affirmative responses and actions. In a randomized pilot study, participants in the psychoeducational groups were described as dramatically easier to manage, with significantly improved social skills and adjustment and decreased antisocial behavior. However, sample size, duration of treatment, and time to follow-up were not specified.

In a small randomized trial conducted in Hawaii, Kubany, Hill, and Owens (2003) assigned 37 ethnically diverse women with both a history of partner abuse and a diagnosis of posttraumatic stress disorder (PTSD) to either an individually based psychoeducational program or a wait-list group. Most of the women (32) eventually completed the program. The active intervention incorporated 8 to 11 individual one-and-a-half-hour sessions, focusing on explorations of trauma history, stress management, monitoring of negative self-talk, assertiveness, managing contact with the abuser, and strategies for self-advocacy and avoiding revictimization. At posttreatment and 3month follow-up, 94% of the women no longer met criteria for PTSD. Moreover, they showed significantly reduced depression, guilt, and shame, and increased self-esteem. In contrast, those women assigned to the wait-list group showed no changes in scores for any measure at the second pretest. Although the sample size was extremely small, the authors documented positive results across ethnic groups, suggesting that the themes addressed in the psychoeducational groups (i.e., male dominance and the status of women relative to men) were universal issues.

Another study involved groups of participants from the general population and was designed to promote health attitudes and behaviors regarding nutrition and as a preventive technique for the development of 218

TABLE 4. Other Clinical Settings and Prevention

Study	Sample/Dx	Design	Active (PE) Treatment Protocol	Structure and Duration	Significant Outcomes for PE	Comment ^a
Gibbs et al., 1996	Antisocial youth/ medium-security youth correctional facility	Randomized PE group vs. control. Pilot data; <i>N</i> not reported	Strengths-based; peer group mediation, skills training, anger management, moral education	Daily meetings, 60–90 minutes; 7–9 youth. Duration & leadership not described	Pilot data: Active tx: 15% recidivism at 6 mos. & 1 year. Controls: 30% at 6 mos.; 41% at 1 year	Clear summary of theory & conceptual model
Kubany et al., 2003	Women with hx of partner abuse plus PTSD	Randomized individual PE sessions vs. wait-list control. $N=37$	Exploration of trauma hx, stress management, assertiveness, managing contact with batterer, strategies for self-advocacy & avoiding victimization	8 to 11 hour-&-half sessions	At posttx, 94% did not meet PTSD criteria; reduced depression, guilt, shame, increased self-esteem. Wait-list controls showed no change at second pretest	Category II. Small sample
Rocco et al., 2001	Adolescent girls in affluent high school in Italy; prevention of eating disorders	Random assignment to PE groups vs. no-group controls	Focus on normal developmental transitions, risk factors for eating disorders, social challenge, body shape, & weight	9 monthly sessions	Tx group showed reduced bulimic attitudes, tendency to asceticism, ineffectiveness, anxiety, & fears about maturity	Prevention-oriented study; nonclinical sample

Note: Dx = diagnosis; PE = psychoeducation; tx = treatment; hx = history; PTSD = posttraumatic stress disorder.

^aChambless criteria for evidence-based practice (Chambless & Hollon, 1998).

eating disorders (see Table 4). Rocco, Ciano, and Balestrieri (2001) randomly assigned adolescent girls from an affluent high school in Italy to receive either nine monthly sessions in intensive psychoeducational groups or no intervention. The program targeted normal developmental transitions as well as known risk factors for eating disorders, with attention to body shape and weight, social challenges, and academic achievement. Compared with the controls, participants showed reductions in bulimic attitudes, in tendency to asceticism, and in feelings of ineffectiveness, as well as lowered anxiety and fears about maturity.

Discussion

In reviewing this relatively small number of studies, it is clear that all fall into Category II in terms of the APA criteria for evidence-based practice (Chambless & Hollon, 1998; Chambless & Ollendick, 2001; Task Force on Promotion and Dissemination of Psychological Procedures, 1995). None of the studies reviewed would meet the criteria for Category I, because they either are not sufficiently rigorous, have not been replicated by independent investigators, or both. However, reviewing the limitations and strengths of these studies is instructive so that potential investigators can anticipate the challenges involved in designing and conducting effective psychoeducational interventions across diagnostic groups and settings.

Limitations and Strengths of the Studies

The assessment tools and methods that are common across the studies identified in this paper extend our understanding of how psychoeducational interventions can be consistently evaluated. Several recurring parameters of measurement for assessing the impact of psychoeducation on participants and signifi-

cant others can be identified from this group of studies (see Tables I through IV) and are consistent with those used in the work on schizophrenia and cancer. These include changes in symptoms (i.e., symptom reduction specific to the targeted illness or situation), decreased anxiety and depression (regardless of problem and setting), and less time between acute episodes of illness. They also include increased adherence to and overall satisfaction with medication and treatment, knowledge, self-esteem and resources, family/marital climate or adjustment, and quality of life.

However, measures of process—including attendance, dropout, turnover, training of facilitators, and fidelity of treatment—cannot be so clearly identified. Although these are more characteristic of evaluation studies than randomized trials, such data would help to inform future studies. In addition, assessment of resilience and competence, designated as integral to the strengths-based psychoeducational process, would contribute knowledge regarding the unique and irreducible aspects of the approach (Anderson et al., 1986; Cunningham, 2000; McFarlane et al., 2003). These include measures of the ability to act and change, willingness to initiate change, application to self-help work, and quality of relationships with others and everyday experience.

Other limitations can be identified in the studies reviewed in terms of both conceptual approach and research design. These include issues regarding sampling strategies, sample size, and statistical power; measurement (both process and outcome); analysis; and clinical definition. As regards sampling, several problems appear. There is almost no variability in ethnicity within the studies reviewed, with the exception of Kubany et al.'s (2003) work on women who have been battered and suffer from PTSD. In addition, only two of the studies provide information on independence and blindedness among assessment staff and de-

scribe inclusion/exclusion criteria for study participants (LeFort et al., 1998; Russell et al., 1999).

Both specificity as to follow-up and efforts to assess sustained impact of the interventions over time are lacking in some of the studies reviewed as well. Work is also needed to assess when and for whom psychoeducational interventions do not work. Addressing these limiwould involve identifying multideterminant and "optimal" measures for each illness or set of circumstances for the individual, family unit, individual family members, and the community. Attending to the profiles of those who reject or drop out of this form of intervention is also critical. Qualitative approaches may be needed to assess subjective response to intervention, motivation, emotional availability, and readiness to process information or participate in a group intervention (Cunningham, 2000; McFarlane et al., 2003).

Another factor that interferes with the ability to replicate studies has to do with how the investigators understand and present the clinical determinants of psychoeducation in each study. Given the breadth of applications cited in this paper, it is inevitable that the documented interventions would vary greatly in intensity, duration, and content. However, the term *psychoeducation* is used inconsistently as well, and at least one study referred to the intervention as atheoretical (Bultz et al., 2000).

To address these inconsistencies, efforts are needed to further articulate the common and situation-specific aspects of psychoeducational curriculum where possible, as well as structure, duration, and organization of content (Cunningham, 2000; McFarlane et al., 2003). As specified in the APA task force on empirically supported practice (Task Force on Promotion and Dissemination of Psychological Procedures, 1995), access to a well-defined treatment manual is essential as a precursor to measuring

fidelity of treatment and to ensure potential for efficacy and replication. Some established investigators have addressed this by providing access to their materials through the public domain. For example, Sherman's (2003) psychoeducational curriculum for families of persons with mental illness is available on the Internet, and McFarlane's work on psychoeducational multiple family groups for schizophrenia is available through the evidence-based practices project sponsored by the Substance Abuse and Mental Health Services Administration and the Robert Wood Johnson Foundation (Steering Committee, 2003).

Summary and Conclusions

In summary, this review indicates that psychoeducational interventions have been applied in a wide range of settings across system levels, although to date only those addressing schizophrenia and cancer can be considered evidence based. A breadth of programs using this flexible modality have emerged, as professional health care workers have become increasingly aware of the critical role that familial and other informal sources of support play in health outcome, successful functioning, and quality of life in several illnesses. As medical and psychiatric care have become less contiguous and all aspects of medical care have become more specialized and fragmented, continuity of care and knowledge regarding individual situations has become increasingly difficult to maintain and coordinate among professional providers (Lasker, 1997). This has been worsened by policy changes in the health care environment involving managed care and increasingly consolidated or truncated services (House, Landis, & Umberson, 1988; McDonald, Stetz, & Compton, 1996; Mechanic, 2002; Pescosolido, Wright, & Sullivan, 1995).

Psychoeducational interventions appear to be sufficiently flexible to circumvent some of the dangers. To date, they have been used successfully either as primary or adjunctive treatment, as part of a strategic program for prevention, or as an experiential training tool for patients and their families in a range of settings (Cunningham, Wolbert, et al., 2000; Lukens, Thorning, & Herman, 1999; McFarlane et al., 2003; Thase, 1997). However, additional efforts are needed to fully define psychoeducation at the clinical, community, and professional levels as applied to various settings and populations, and to further identify how emerging and stateof-the-art professional knowledge can be integrated into such programs. Existing programs that show preliminary success for conditions other than schizophrenia or cancer must be successfully replicated under rigorous conditions before they meet the stringent criteria for evidence-based practice laid out by the APA (Chambless & Hollon, 1998; Task Force on Promotion and Dissemination of Psychological Procedures, 1995).

To better establish efficacy and effectiveness, research designed to evaluate the impact of the interventions on outcomes over time and in a range of settings is critical. To conduct such studies, clear and readily available treatment goals and principles, carefully defined process and outcome measures, and curriculum and training manuals are needed to facilitate implementation and replication by mental health and health professionals, educators, and researchers. At the individual and family level, measures of outcome should include knowledge, attitudes, social and vocational function, self-efficacy and self-esteem, and other indicators of quality of life and health. At the service and community level, indicators should include knowledge and attitudes among providers, and documentation of health behaviors, service access and use, and cost-effectiveness (Dixon et al., 2000; Dixon et al., 2001; Lukens & Thorning, 1998). At the policy level there are two challenges: first, to assess readiness for implementation, and second, to determine acceptance and broad-based integration of the approach at the service level (Cunningham, 2000; Dixon, Goldman, & Hirad, 1999; McFarlane et al., 2003).

Psychoeducation has the potential to extend the impact of care provision well beyond the immediate situation by activating and reinforcing both formal and informal support systems (Caplan & Caplan, 2000; Lundwall, 1996; Pescosolido, Wright, & Sullivan, 1995) and teaching individuals and communities how to anticipate and manage periods of transition and crisis. If developed and implemented carefully, following specified guidelines for delivering and documenting evidence-based practices (Task Force on Promotion and Dissemination of Psychological Procedures, 1995), psychoeducational interventions have far-reaching application for acute and chronic illness and other life challenges across levels of the public health, social and civic services, and/or educational systems.

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