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January 2010

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Caregiving Heuristics:

Valuable Practitioner Knowledge in the Context of Managing Residential Care¹

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Forthcoming in *Qualitative Social Work, September 2010*Please do not cite or reproduce without permission

¹ We appreciate the assistance of Ms. Emily Carroll and Ms. Carrie Shonk in this research, and also are very grateful to anonymous reviewers of previous versions of this manuscript.

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in the Context of Managing Residential Care

Abstract

Improving practice depends on accurate understandings of practitioner knowledge, which are not easily attained, partly because practitioners unevenly apply formal theory and also rely on reflective processes and power bases that are significantly different from those of researchers. Focusing on residential care managers' subjective experience of their own knowledge and clinical decisions, this study examines their application of theories, their beliefs and practices, challenges they faced, and factors managers described as related with good and poor client outcomes. Uninterested in formal theory and evidence-based practice models, the managers demonstrated a patterned, action-oriented, value-based "knowledge-in-action" (per Floersch) we termed caregiving heuristics. Managers combined multiple interventions from diverse models to attain the best possible outcomes, using a strategy defined by Brandstatter, Hutchinson, and Gigerenzer as the priority heuristic. They creatively developed guidelines (at various levels of explication) for their decision-making. Unique to each practitioner, caregiving heuristics could be compared; elements were commonly held by managers. From these managers's caregiving heuristics, guidelines for residential care management were distilled and included emphasizing compassion, providing supportive relationships so clients experience themselves as partners in their change process, developing clients' strengths, and creating a community that restores clients' dignity and provides psychological and material resources.

Keywords: management in residential care; reflective practice; tacit knowledge; clinical decision-making; heuristics

Introduction

Purpose

How can developing theories or providing better evidence of good practices improve practice if practitioners are not interested in using those efforts? Researchers and practitioners report that practitioners' use of theories and evidence is uneven, and practitioners' knowledge needs further understanding, especially using "an epistemology of the situated" (Floersch, 2000, p. 189) from the point of view of the "experience of the experiencers" (Fook, 2002, p. 93; Floersch, 2004). Practitioner knowledge is complex in that it incorporates:

- different power bases (individual, agency, community, etc.),
- the impact of available and lacking resources,
- available theories and consultation,
- the active creation of meaning based on practitioners' past experiences and
- the effort to experience constructive agency in their clinical decisions
 (Baldwin, 1998; Longhofer & Floersch, 2004; Hoshmond & Polkinghorne,
 1992).

This study examined practitioner knowledge through the lens of residential care managers' self-reports about their knowledge and clinical decision-making. Our specific research questions were: 1) How do managers in the very challenging context of residential treatment centers for severely mentally ill clients understand their knowledge

and make clinical decisions? 2) What beliefs, values, and practices characterize their decision-making processes?

Residential care is an extremely valuable resource for ensuring citizenry diagnosed with a severe mental illness have maximal opportunities to flourish. Managers seek to maximize positive client outcomes for arguably the most disadvantaged and troubled clients social workers serve, drawing from years of experience with social policies influencing funding for programs and clients, and their clinical abilities to diagnose clients, evaluate staff-client relationships, and negotiate interactions between complex systems.

Despite their expertise, a residential treatment environment is highly stressful for managers: at any moment lives are at stake, decisions have to be made in contexts of high uncertainty about outcomes, institutional support may be unstable, and theoretical guidelines for practice are not well-explicated. Understanding managers' clinical decision-making sheds light on clinical judgment under conditions of high stress and uncertainty. In addition, the managers provided guidelines that contribute to a knowledge base for managing residential care.

Our findings stimulated reflection about the broader issue of practitioner knowledge, as we found that residential treatment program managers did not apply theories or evidence systematically, but demonstrated a patterned decision-making process that fits within the reflective practice tradition's concept of practitioner knowledge (Harrison, 1987; Ruch, 2002; Schon, 1983), and what studies of scientific and practical problem-solving have called "tacit" knowledge (Collins, 2001; Polanyi, 1967), and heuristics (Gigerenzer, 1991; Kahneman, Slovic and Tversky, 1982; Wimsatt, 1986). This exploratory, qualitative

study is grounded in postpositivist beliefs about research (Tyson, 1995; Witkin and Saleebey, 2007), leaning towards the critical realist position that knowledge and action reflect interpenetrating yet distinct layers of reality (Bhaskar, 1989; Lewis, 2000; Sayer, 1992), and with the contemporary pragmatist emphasis that social work knowledge is not about a "spectator" painting reality, but is a reflective, highly interactive activity (Baert, 2005). The recognition that oral narratives about practice need to complement written records in order to adequately understand practitioner knowledge (Floersch 2000, 2002 f), concern that practitioner knowledge has had an 'invisible' status in social work research (Floersch, 2004; Fook, 2002; Hartman, 1990; Weick, 1999), and a commitment to building on the reflectiveness of practitioners to improve practice are important cornerstones for this study.

Practitioner knowledge in residential care

As a context it is important to look at the relationship between theory and practice in social work and residential care. A *social work theory* (or *practice model*) can be defined as a logically coherent combination of concepts, principles, and assumptions that provides guidance to a social worker in deciding how to understand and relate with a client so as to bring about constructive change. Theories determine what counts and what does not count as data, and incorporate standards about what is scientific and what is not (Tyson McCrea 2006; see also Fook, 2002). Today there are more than 30 different models of social work practice (Brandell, 1997; Ho, Rasheed, and Rasheed, 2003; Turner, 1996), but few have been applied recently to the management level of residential care for clients with severe mental illness.

However, there is a long history of clinical approaches to inpatient and residential care. Psychoanalytic theorists such as Frieda Fromm-Reichman (1947), Fritz Redl, David Wineman (1957), and Ping Nie-Pao (1979) developed inpatient care models for youth and adults suffering from severe mental illness. Behavioral researchers applied their principles to residential care for clients with severe mental illness (Corrigan, McCracken, and Mehr, 1995).

In addition, ethnographers have contributed to understanding mental health care, especially illuminating tensions between staff that, as Stanton and Schwartz noted in their famous 1949 study, exacerbate patients' symptoms. Differences in core beliefs can result in disagreements between staff about understanding patient communications, and then disagreements about how to respond to patients (Aare, 1998; Baldwin, 1998). The importance of understanding practitioner beliefs for improving care for clients is underscored by their findings.

The challenges residential care managers encounter often require that managers innovate beyond existing theory, as has often been the case for social work practitioners (Dean 2007; Solomon 2007). Considering theory application by practitioners in many fields yields consistent findings that practitioners apply theory without knowing they are doing so (Ward, 1996), or unevenly if at all (Guntrip, 1975; Munro, 2002; Osmond and O'Connor 2006; Upton, 1999). Evidence-based practice models developed by researchers have "had few tangible results in social work," as practitioners could state an evidence-based rationale for only 67% of their practice decisions (Rosen, 2003, citing his 1993 and 1994 studies). Rather than "shouting into the wind" by exhorting social workers to adopt theories and

evidence-practice models, existing findings about social workers' use of theory underscore that studying what practitioners actually do is critical for developing applicable knowledge.

However, the methodological challenges in studying practice are not easily resolved (Fook, 2002; Wilks, 2004). Practitioner knowledge is influenced by all the factors noted in the introduction above, and those factors vary profoundly by practice context (degree of available theory and the extent to which the theory is manualized, the nature of bureaucratic influences on practitioners, quality of supervision available, experience level of the practitioner, the degree of stress and uncertainty involved, etc.). "The relationship between TR [technical-rational knowledge] and KIA [knowledge in action] cannot be deductively determined; each practice setting must be empirically studied" (Floersch, 2004, p. 186). Investigators have proposed studying practice knowledge via contrasting written and oral narratives (Floersch, 2000), semiotic analysis in relation to institutional cultures in evaluating practice (Carr, 2006), and the use of vignettes to facilitate analysis of social workers' values in action (Wilks, 2004).

For this study, a preliminary consideration is the perspective from which understanding practitioner knowledge is generated. Practitioner perspectives on their work constitute one of four possible perspectives for generating social work knowledge (perspectives being points of view that are necessarily related to one's position in the system under study [Wimsatt, 1994], see Table 1 below). Perspectives can be divided into those that view the client-worker relationship as though one were speaking in the third person (about "them"), and those that take a first-person or "I" point of view on the client-worker relationship (McCran, Ross et al. 1999; Wimsatt, teaching notes).

Table 1: Perspectives Informing Social Work Practice Models

Perspectives Entailed in	From a more 3 rd person	From a more 1 st person	
Practice Model-Building	perspective	perspective	
Explanations of how and why	Formal Theory:	Perspectives of practitioners:	
interventions are made	Concepts	1) About specific services	
	Principles	2) "Practice wisdom" shared	
	Assumptions	in supervision/consultation	
Data about the process and	Outcome studies	Consumer evaluations:	
impact of interventions	Process studies	1) In service provision:	
		Adults, youth, children	
		2) In policy development,	
		community members	

Perhaps because starting in the 1950s social workers adopted the positivistic view that subjectivity was epistemologically treacherous and could be avoided (Tyson, 1995), studying 1st person experiences such as practitioners' views of their clinical decision-making (upper right hand quadrant) has had low priority. But, there is increasing recognition of the importance of more accurate understandings of what practitioners know in order to understand how practitioners develop theories (Chan & Chan 2004; Fook, 2002), and to address the interplay between practitioner activities and their values, beliefs, and goals (Baldwin, 1998; Floersch, 2000, 2002; Fook, 2002; Weick, 1999; Wilks, 2004).

Perspectives are not equivalent to research methods, as for instance a qualitative, ethnographic method can be used to gather *etic* (3rd person) rather than *emic* (1st person) data. With regard to the study of practitioner knowledge, the reflective practice tradition strives to stay within the subjective experience of practitioners (an *emic* perspective) and regards one aim of research as developing the reflective capacity of practitioners (Hoshmond, 2004; Wilks, 2004). Ethnography also has been used to develop *etic*

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categories, as Ware et al.'s (1999) ethnographic study of mental health care providers yielded indicators for continuity of care based in practice experience.

Another important methodological consideration in studying practitioners is fidelity to their experience of their work. One of ethnography's potential pitfalls was revealed by an ethnographer who 'hung out' with severely mentally ill clients, Susan Estroff (1989). In her pathbreakingly authentic yet sad essay (1995), she described how betrayed a former informant felt — to have been befriended for research purposes, written about in one point in time, then no longer actively involved with the researcher and unable, when she changed later, to revise what had been written about her. Practitioners, like clients, likely hope that their experience would be accurately rendered by researchers, but even more, that the power differential between researcher and practitioner would not be exploited in a way that oversimplifies the (at times soul-searing) challenges and small but meaningful victories practitioners experience everyday. In our study, the effort was to analyze managers' self-report data to describe their knowledge utilization and clinical decision-making in ways the managers would regard as faithful to their experience.

Methodology

Sample selection, data collection, and analysis

Starting within a 20 mile radius of the center of a large Midwestern city, we compiled all 81 residential care programs treating clients suffering from severe mental illness (including those with substance abuse, AIDS, homelessness, or domestic violence). Every program manager was contacted and asked if s/he would participate in an hour-long in-

person interview about her/his experience providing residential care. A total of 18 managers agreed, which comprised the sample for this study.

Of the facilities whose managers we interviewed, the primary criterion for client admission was an Axis-I diagnosis, most commonly schizophrenia. Some programs treated clients who also suffered from disease (e.g., HIV/AIDS), mild mental retardation, domestic violence, substance abuse and homelessness. Client lengths of stay ranged from 4 months to indefinite. We investigated whether staff-client ratios, policies about lengths of stay, and the clinical focus of the program were related to the managers' decision-making approaches, but found no consistent patterns emerged.

Interviews were semi-structured: While there were 15 questions to be asked (interview protocol is available from the authors), the interviewer followed the interviewee's pace and train of thought, probing frequently to clarify meanings (Patton, 2002; Spradley, 1979). To begin, interviewers asked managers about the most important characteristics of a good program manager. Questions about examples of good and poor client outcomes were used in order to ensure there would be clinical case examples for understanding the relationship between managers' beliefs and their accounts of their interventions.

Managers' responses to questions were analyzed qualitatively in three waves. In the first wave, we compiled common themes across managers in response to specific questions, such as the theories they used, the challenges they faced, and examples of good and poor client outcomes, and then quantified the frequency of those themes using content analysis. The second wave of analysis examined specific components of supervisors' beliefs about caring for clients and staff, also examining 1) the relationship

between their beliefs and published, formal theories, and 2) how these beliefs were manifested in managers' descriptions of good and poor client outcomes. In the third wave, we examined specific themes in detail. Negative case analysis was used to understand manager responses that did not fit within the most prevalent themes (Lincoln and Guba, 1985; Patton, 2002). The resulting data were coded by at least two of the researchers and inter-rater reliability (agreements with regard to final coding decisions) was 100% (made possible because the coders worked together so closely in developing the study and the coding manual).

The relatively small sample size and qualitative analysis have well-known limitations in terms of applicability; yet these same design elements also allow for more in-depth examination of patterns of meaning within and across subjects, and are optimal for the exploratory nature of this study (Lincoln and Guba, 1985; Patton, 2002). So as not to overstep our data, we focused our analysis on findings that held up across almost all managers.

Results

Use of practice models

We used two different questions to ask managers how they drew upon theoretical knowledge. First, we asked if they used a theory or philosophy (without the interviewer naming a model), and then whether they used specific models (that the interviewer named). In response to the first question, most managers (12/18) either described their own model, or said they did not use a theory. Six of the 18 managers used the term

theory (self psychology, for instance) or model ("the medical model" and the "primary worker model," for instance). The great majority (17 managers) answered the question by describing 1) values, such as client self-determination, 2) their personal orientations towards compassion and staff development, and 3) specific interventions or actions, such as patient governed community meetings and policies about handling substance abuse.

They answered the question about what approach they used in sentences that combined values, attitudes, and actions into what we call a *practice guideline* (Ward, 1996). Following are examples of the managers' practice guidelines: "Meet people where they are at, have different expectations for different people" and "create a caring and non-institutional family like atmosphere." Most managers explicated several guidelines. Some guidelines were connected to a practice model, such as the manager who strove to "look at the systems that the clients come in with," or the manager who believed, "everyone has the ability of (*sic*) learning. It is a matter of figuring out how they best learn." The managers differed in the number and quality of guidelines they presented, reflecting a continuum from a more implicit approach to practice (Ruch, 2002, p. 203) to a more explicated approach:

Table 2: Practice Guidelines Reflect the Degree of Managers' Implicit v. Explicated Practice Models

Implicit: Manager provided a practice guideline or two, not explicitly	4 managers
related to a specific practice model	
Mid-range: Manager provided 3-5 guidelines, often explicitly linked to	10 managers
a specific practice model	
Explicated: Manager provided several guidelines that were developed	4 managers
and based on beliefs about clients' needs and the nature of the	
community the manager sought to establish as well as linked to a	

specific practice model

When the interviewer named the specific models listed in Table 3, managers said they used interventions from several models. All the managers used a functional model (defined as helping clients develop basic skills of living) and the strengths perspective (Rapp and Wintersteen, 1989; Saleebey, 1997; Sullivan, 1997). The managers' eyes often lit up when they talked about the strengths perspective — clearly they wanted to build on client strengths, although it seemed many of them did not know the strengths perspective in depth.

Table 3: Practice Models Managers Said They Use

Practice Model	Managers who used the model	Managers who said they did not
Patient government	17	0
Functional – teaching living skills	18	0
Strengths perspective	18	0
Behavior modification (rewards)*	13	4
Multisystemic (ecological) therapy	8	9
Psychodynamic	5	12
Token economy with negative consequences	5	12
Dialectical behavior therapy	4	13
Other mentioned by manager:		
Harm reduction	2	
Cognitive	1	
Holistic interdisciplinary services	1	
Motivational interviewing	1	

^{*}Note: Since the applications of behaviorism varied considerably, we asked specifically about whether managers used a token economy. The models in the "other" category were spontaneously volunteered by the managers without prompting by the interviewer.

Managers' beliefs about the treatment process

Aspects of practice that managers found most challenging

All the managers recognized the problems, fears, and discrimination against people with severe mental illness produce (see also Mansouri and Dowell, 1989; Marley and Buila, 1999, 2001; Susser, Struening and Conover, 1987), and sustained their programs despite a lack of community support and even outright rejection by the surrounding community. All the program managers were concerned about the persistent gap between the actual needs of the clients and the resources available to respond to their needs (Adinoff et al., 1999). In addition, the managers' indicated that four client symptom clusters were especially problematic: refusing to take prescribed medications, refusing to follow program rules, maintaining poor hygiene, and substance abuse.

They reported substance abuse as problematic in the context of describing 'difficult cases' and also when asked about what was most challenging (see also Alverson, Alverson & Drake, 2000; Bachrach, 1987; Drake, Teague, and Warren, 1990; Drake and Wallach, 1989; Fischer and Breakey, 1991). Managers said clients' substance abuse problems jeopardized not just their own safety, but the safety of all of the residents. One manager was afraid his client would die if she did not stop her substance abuse, while another manager was concerned that a client's drug abuse could trigger other clients to relapse. Managers who found it difficult to engage clients in treatment saw their clients' resistance as partly caused by substance abuse. Some managers handled the dilemma through permissive policies, but then were concerned for the safety of clients and staff. For

instance, one manager was concerned that a resident in his program was drinking himself to death, but there was no other facility that would accept the client, and the manager feared he would die on the streets. Some managers handled client substance abuse through highly structured program policies and supplemental educational and support resources (see also Galanter, 1988; Hellerstein and Meehan, 1987), such as requiring new clients to stay in the facility for the first seven days, in order to foster client participation in treatment groups and help clients forego drug abuse.

Beliefs about what helps clients to change

When asked "How do you help the clients grow and develop?" the great majority of managers focused on staff-client relationships (group therapies 7/18, individual counseling 8/18, caring relationships between staff and clients 7/18, and hands-on assistance with skills of daily living 6/18), consistent with the significant literature about the importance of the relationship in promoting client change (Frank, 1982), and with client statements (Everett and Nelson, 1992). They commented, "when people feel cared for, it is a cycle which keeps growing, promoting ongoing respect," "our philosophy is mostly on engaging the client," "our goal is to create a caring and non-institutional family-like atmosphere," and "we work to empower the women using staff relationships."

Almost all of the managers emphasized that residential care offers clients a roundthe clock supportive community in which the clients can experience dignity and stability. All the managers except one emphasized that their values for guiding community life were recognizing and nurturing clients' strengths, optimism about the clients' potential for

change, and respecting the clients' dignity and autonomy (see also Nelson, Hall and Walsh-Bowers, 1999, p. 388). All the managers organized the milieu utilizing some form of patient government, including community meetings. For instance, when Tina became a manager of an extended-care residential program, she initiated weekly community meetings led by residents.

Only two managers mentioned behavioral reinforcement (rewards) as a way to bring about client change, and none mentioned consequences or punishment in this regard. However, in response to other questions in the survey, thirteen of 18 managers described using concepts derived from behavior modification, in four distinct ways. The systematic approach, which was only described by one manager, involved the development of a formal token economy that was implemented with all clients. The structured consequences approach involved administering set consequences when a client displayed behavior staff deemed 'inappropriate,' often in the context of individual behavior plans. In the six facilities using a structured consequences approach, the rules and consequences were applicable to all residents, and all residents were informed that "If you do/don't do x, y will be the consequence." One program had a progressive set of consequences administered each time a client was late in asking for medication. Another program had consequences such as "if the client swore at the staff, the client's monthly individual outing with staff would be taken away." The sporadic approach, described by 1 out of the 13 program managers using behavior modification, involved randomly giving rewards to reinforce behavior. Punishment was not used, and there was no consistent way clients could obtain rewards.

Finally, there was the *last resort approach* to behavior modification (used by 7/13): Where staff preferred not to use individualized behavior modification and thought counseling had not resulted in change, they resorted to rewards and punishments. One manager said staff tried to encourage a client to take daily showers and, eventually, implemented a program where the client received a soda for each shower she took. Some consequences given were harsh and ethically problematic, as in one program where staff deprived a client of her desserts for a month in an (unsuccessful) effort to reduce her swearing. Another manager required that clients improve behavior to prevent discharge. The contract approach seemed to be used primarily when managers felt there was no other way to prevent serious rule violations.

Several managers discussed their reservations about using behavior modification, saying for example, that "it was not helpful," or that clients invariably acted out to confirm the negative view of themselves implied by threatening consequences (see also Kohn, 1995). Some managers indicated that instituting a program of rewards and punishments accelerated staffs' punitive responses to clients. Another manager described how relaxing tight behavioral controls resulted in more client cooperation: "When the staff tried to control the TV too closely, it got out of hand. When the staff said 'you have to handle it yourselves,' the problem seemed to be alleviated." Other managers questioned the legality and ethics of behavior modification, saying, "It is against the rights of the clients to keep their money, [make them] stay in, make them go to treatment, or [make them] comply with their medications." Despite the managers' reservations, all but five used behavior

modification to some degree, especially when client symptoms were refractory (similar to what Little [1995] found in a UK children's residential care center).

Looking at managers' responses to the question, "How do you set goals with clients?" the managers' responses could be analyzed using a four-point scale, from complete client-determination to no client-determination in the goal-setting process. Two managers said that treatment plans were entirely client-determined. Six managers said treatment goals were client-determined with some input from staff, e.g. "We may have goals for them that they may not necessarily see the need for. But, goal-setting overall is an open discussion." Six managers said that the program had mandated goals, and if the client did not identify one of those goals, the staff worked on getting the client to work towards that goal. Four managers said external controls such as Medicaid and HUD policies dictated clients' treatment goals. For example, one manager said, "Medicaid requires certain modalities of treatment and it is hard to be collaborative with clients because funding sources dictate how the treatment plan is carried out. The treatment plan has to be more symptom-focused." In sum, while managers were almost equally divided about the degree to which clients had say-so in setting treatment goals, the majority (ten) of the managers believed that clients had little to no say in setting treatment goals.

Thus managers most often utilized interventions from several practice models, and their beliefs did not necessarily fit with the interventions they reported using. Analysis of the cases cited as good and poor outcomes sheds more light on the patterns in managers' application of practice models.

Descriptions of good and poor client outcomes

In order to look at the relationship between practitioner conceptualizations and their self-reported interventions, we asked managers about good and poor client outcomes. Every manager except one was able to describe a case in which clients attained significant regulation of their symptoms, and 10/18 of the managers described clients who were able to live, symptom-free and autonomously, in the community. Of the eight managers who did not describe a client who became able to live independently, seven reported clients in residential care who attained stable control over serious symptoms and had productive alliances with staff. The managers reported positive outcomes even though they had different beliefs about practice and differed in the specific interventions they used.

Because one study found that outcome is related to client diagnosis (Walsh, 1986), and another that staff's interpretations of clients' behavior was strongly influenced by the client's diagnosis (Baldwin, 1998), we evaluated whether the managers included client diagnosis and history in their narratives of good and poor outcomes. The managers did not consistently relate diagnosis and presenting symptom severity to outcome. Prior gang involvement and drug abuse was associated with a good outcome in one manager's report, and a poor outcome in another. One manager described a client with a self-destructive, impulsive personality disorder who had to be discharged, but another manager described a client with a similar diagnosis who was able to regulate her self-destructiveness and eventually form stable relationships and go on to independent living.

There were common treatment process factors in the residential care managers' descriptions of good outcomes, most notably *an unrestricted length of stay*: All of those

clients described by the managers as making profound changes stayed more than a year, and 50% stayed more than 3 years. A negative case example further supports the importance the managers attributed to length of stay. The only manager who could **not** describe a single positive case clearly was opposed to clients' needs to stay for several years, commenting, "too many clients have regressed and stayed too long," and "some residents have had to be forced out of the house when their time is up." Her solution to refractory client symptoms was to refuse to admit such clients.

Another factor managers consistently associated with good outcomes was *effective medication management*. Two managers said when clients' overmedication was reduced, the clients improved significantly. Nine of the managers mentioned that clients' taking medications regularly was related to their improvement.

Supporting clients' autonomy and choices (*respecting client's self-determination*) was also consistently associated with good outcomes. This emphasis on respecting the client's goals and pace fits with what researchers have called the supported housing model (Martin, 1990; Ridgway and Zipple, 1990).

The clients managers saw as having poor outcomes were described as profoundly withdrawn ("she refused to talk with any staff member or anyone else for months"), "manipulative," uncooperative with program policies, verbally abusive, and in three instances, physically violent with staff and/or other clients. The majority of managers did not describe any strengths in the clients they perceived as problematic. Instead, their statements about the clients with poor outcomes focused on the clients' negative behaviors. In summary, when the managers were puzzled and distressed by the challenges

presented by a client, their descriptions of clients lacked the empathic understanding of the client's perspective that characterized their descriptions of clients with good outcomes and focused instead on refractory behaviors.

Discussion: Managers' caregiving heuristics

The managers we studied employed multiple interventions from diverse theoretical frameworks, by contrast with several studies that describe practitioner knowledge as univocal (Aare, 1998; Baldwin, 1998; Carr, 2006). Perhaps our informants present a more complex picture of practitioner knowledge because they are more advanced practitioners; alternatively, our different methods and perspectives (individual interviews focusing on managers' subjective experience of their knowledge) may be responsible.

The managers' knowledge, while distinct individually in many ways, also had common dimensions across individuals. We term a manager's patterned, organized "knowledge-in-action" a "caregiving heuristic." Caregiving heuristics are a specific form of knowledge-in-action (Floersch, 2004), not as explicated as formal theory yet more completely explicated than a 'shoot from the hip' approach to clinical decisions. The managers' caregiving heuristics were comprised of four elements: 1) specific guidelines for action that were value-based (presented fully above), 2) "tacit" knowledge, 3) compassion, and 4) cognitive heuristics. Since the guidelines are presented in the previous section, in the following sections we focus on the latter three elements.

Tacit knowledge

The varying degrees of explication in the guidelines the managers developed resembles findings about scientists' tacit knowledge (Collins, 2001; Polanyi, 1967). Tacit knowledge is "knowledge or abilities that can be passed between scientists by personal contact but cannot be, or have not been, set out or passed on in formulae, diagrams, or verbal descriptions and instructions for action'" (Collins, 2001, p. 72). Tacit knowledge is so highly context-specific that it may not be applicable across contexts (unlike theoretical knowledge, which aims to be broadly applicable). Also, it may not be readily replicable, as it is based in recognition of the demands of unique cases (Gendlin, 2008). Through dialogue, tacit elements of scientific experimentation can become explicated: "as we interact socially, that which was not obvious becomes obvious" (Collins, 2001, p. 73). An example of a problem inherent in tacit knowledge is that some residential care managers were concerned about potential harm resulting from unreflective practitioner actions, such as punitiveness towards clients. One residential treatment program required staff to consult with at least one colleague before administering behavioral consequences, allowing staff to make explicit knowledge that had been tacit, and preventing destructive punitiveness. Similarly, Collins found that the transmission of tacit knowledge through face-to-face relationships between scientists can facilitate trust between scientists because it enhances replicability (Collins, 2001, p. 74).

In addition, the relationship-based transmission of tacit knowledge confers scientific "patience" (Collins, 2001): Through working together, colleagues develop their skills and

obtain the experience that persistence despite many setbacks pays off. A similar patience was emphasized by residential care managers as essential, as severely mentally ill clients may require years of commitment to make significant changes.

Compassion

The managers all said that compassion was an essential trait in a good manager. While the managers' emphasis and use of compassion required a paper in its own right (Tyson McCrea and Bulanda, 2008), here we focus on it as a component of their caregiving heuristics. Compassion as described by the managers resonates with traditional definitions in that it involved a capacity for empathy, solidarity, and efforts to alleviate the suffering of the cared-for person. In the managers' view, compassion was typically associated with empathy, teamwork, acting so as to ease the psychological pain of others, using reasonable discussion rather than punishment, and helping others through setting examples and constructive discussion of difficulties. Compassion also figured importantly in that it was present in many case examples and in managers' descriptions of good outcomes, but was missing in managers' descriptions of poor outcomes. One manager eloquently stated, "It is important to understand the stresses of the staff, to be able to put yourself in their shoes, and in the shoes of the resident. Compassion for others and balancing this with making sure the work gets done is what is most important." When asked about the qualities of a good program manager, another said, "Compassion, empathy, boundaries, good listening, working knowledge of diagnoses, ability to communicate on a human level, 'I am on an equal playing ground as the member,' not show superiority but set up boundaries. Sense of fun and humor!"

The managers' use of the term compassion suggests the importance to practitioner knowledge of what Daniel Siegel has called "mindsight" (Siegel 2001): The ability to represent in one's own mind the mind of another, with its salient emotions, biographical experiences, and ways of relating. 'Mindsight' has elements practitioners can explicate, such as accurate understanding of how the client's traumatic history is manifested in puzzling symptoms. But other types of mindsight — such as the manager's intuition that a client may be dangerous or high — appear to involve tacit knowledge, based on prior clinical experience, previous knowledge of the client, and an immediate reaction to nonverbal client signals.

Cognitive heuristics

Since cognitive heuristics are necessary for and undergird any act of knowing (Kahneman and Tversky, 1983; Wimsatt, 1986), they invariably function in clinicians' judgments, although the specific nature of the heuristics is a focus for continued study. Social work practitioners clearly use cognitive heuristics to organize their data and their work (Berlin and Marsh, 1993; DeRoos, 1990). The question is, what kind of heuristics, and how do the heuristics operate? Rosen believed a confirmatory bias caused practitioners to believe that their clinical data support their hypotheses (1993, 1994 as cited in 2003). The confirmatory bias can occur in many contexts, including those that do not involve caring for human beings (such as, potentially, researchers analyzing their data).

Like tacit knowledge and compassion, heuristic knowledge is highly context-specific.

Gigerenzer (1991) identified the concept of "ecological rationality" to describe how

different environments affect which heuristics perform better. Evans, Block et al. found physicians employed heuristic guidelines, for instance, "if the patient has a rash, ask about allergies" (1986, p. 1027). Similarly, the managers' guidelines were action-oriented, such as 'creating a caring community,' or 'starting where the client is.' In their action-oriented focus, the practitioners' knowledge fits the social scientific knowledge described by Patrick Baert as "pragmatic." Rather than a spectator form of knowledge that seeks to mirror the truth, knowledge in the pragmatic sense goes beyond those positivistic criteria and is an activity that is part of a reflective dialogue (Baert, 2005).

One of the more challenging decisions confronting the managers concerned choosing those intervention options that were likely to lead to the best outcome. The priority heuristic (Brandstatter, Gigerenzer et al. 2006; Hutchinson and Gigerenzer 2005) sheds light on this dilemma. Rather than weighing trade-offs and evaluating the likelihood that an outcome will occur, when people use the priority heuristic, they "choose the gamble with the more attractive gain" or outcome (Brandstatter, Gigerenzer et al. 2006, p. 413). The priority heuristic illuminates how managers could combine seemingly contradictory interventions: Their focus on a good outcome took priority over theoretical consistency, and they engaged in sequential searches for interventions that would work (a 'satisficing' criterion, Brandstatter, Gigerenzer et al. 2006, and Hutchinson and Gigerenzer, 2005, following Herbert Simon). Maintaining a constructive sense of agency while managing residential care is highly challenging. Using the priority heuristic served this purpose.

Managers apparently could experience more mastery as they tried different interventions in their efforts to help clients have fulfilling lives.

Conclusions

What can we learn from these managers about clinical judgment under difficult conditions of high stress, minimal specific theoretical guidelines, and complex decisions involving values and several levels of systems? The managers creatively developed a form of practitioner "knowledge-in-action" (Floersch, 2000, 2004) we termed caregiving heuristics. The knowledge comprised in caregiving heuristics:

- Is action-oriented,
- Is grounded in a specific problem-solving social work practice context with its unique constraints, pressures, and benefits,
- Is based in values,
- Includes compassion, when it is connected with beliefs that outcomes were positive,
- is comprised of guidelines for how to respond to challenging clinical situations,
 and
- includes the use of a cognitive problem-solving strategy termed the priority heuristic (Brandstatter, Gigerenzer et al. 2006; Hutchinson and Gigerenzer 2005).

Managers' guidelines could be compared and had some common features, including compassion, recognizing the clients' strengths as essential to fostering change, tailoring treatment planning with the client's individual needs in the foreground and history or diagnosis in the background, allowing clients flexible lengths of stay, carefully monitoring

medication regimens, creating a caring community atmosphere that was restorative of clients' dignity, and helping clients to form empathically-based relationships with staff.

Areas where managers differed with each other were the degree of client involvement in treatment goals and in the specific interventions they chose, such as differential use of behavioral modification techniques.

Aspects of formal theories and available evidence from outcome studies may or may not contribute to managers' caregiving heuristics, and did not appear to play a significant role in these managers' decision-making. Future research may shed light on the extent to which the above elements of caregiving heuristics occur in other practice contexts, and how practitioners' caregiving heuristics can be developed through education and consultation. Finally, this study underscores that understanding what practitioners actually do can make the applied emphasis of the social work profession a strength — useful for building a meeting ground between researchers and practitioners that can have real-world benefits for practitioners and clients.

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