

Professional–patient communication in the treatment of mental illness: A review*

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Abstract

The quality of the professional–patient relationship in the treatment of mental illness predicts patient outcome. Hence, we conducted a review of recorded professional–patient communication to identify existing research, methods, and findings. Sixteen studies focused on (i) how psychiatric symptoms are manifested in patient communication; (ii) the role of therapist communication in patient improvement; (iii) the influence of sociodemographic characteristics on doctor–patient communication; and (iv) how patients and professionals jointly construct therapeutic interactions. The findings were disparate and included (a) patient nonverbal communication is impaired in depression and schizophrenia; (b) the use of specific therapeutic skills led to improvement in depression; high expressed emotion (criticism and emotional over-involvement) in treating schizophrenia was a state rather than trait characteristic of therapists; (c) patient gender, income, and education influenced communication about depression, anxiety, and medication; and (d) psychiatrists' varying institutional agendas, which sometimes competed with patients' agendas, strongly shaped their consultations. Few studies investigated two-way professional–patient communication, with most focusing on either patient or therapist communication in isolation from the other. Finally, methodological advances in linking communication processes with treatment outcomes in large-scale observational studies and trials are a challenge for research on medical communication.

Keywords: doctor–patient communication; interaction; audio/audiovisual recording; mental illness; schizophrenia; depression.

1. Introduction

There is growing interest in professional–patient communication in healthcare delivery, partly influenced by the shift in thinking about the doctor–patient relationship from one of active doctor–passive patient to an increasingly active patient working in a partnership model of care. This is reflected in a growing body of research on the subject in general medicine and primary care (e.g., Wasserman and Inui 1983; Britten et al. 2000; Maguire and Pitceathly 2002; Burkitt Wright 2004). Meanwhile, there is evidence that the quality of doctor–patient communication has an impact on the benefit a patient derives from treatment. It has been found that good doctor–patient communication results in less symptom burden for patients (e.g., Greenfield and Kaplan 1985; Little et al. 2001), enhanced treatment satisfaction (Stewart 1984; Brody et al. 1989; Little et al. 2001), and improved treatment adherence (Stewart 1984).

However, there is little known about professional–patient communication in the treatment of mental illness. Mental illness is often chronic and, consequently, therapeutic relationships are typically long term. A better professional–patient relationship in the treatment of mental illness has been found to predict treatment outcome across a range of treatment settings (Martin et al. 2000; McCabe and Priebe 2004) and enhancing the quality of professional–patient communication may be particularly important in successfully engaging patients who are known as ‘difficult to engage’ (Tehrani et al. 1996) in mental health services (McCabe et al. 2002).

Hence, this paper reviewed studies of communication between healthcare professionals and patients

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1612–1783/07/0004–0141

Online 1613–3625

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Communication & Medicine 4(2) (2007), pp. 141–152

DOI 10.1515/CAM.2007.018

suffering from a mental illness that have either audio or audiovisually recorded naturally occurring clinical interactions. The objectives were to (i) identify existing research in the field, (ii) ascertain the methods employed to assess communication, (iii) synthesize the findings to date, and (iv) identify the next steps in this field.

2. Method

The bibliographic databases PubMed, Medline, Ovid, PsychLIT, and EMBASE were searched to identify studies published between 1970 and 2005. Titles and abstracts of papers were identified that potentially fulfilled the inclusion criteria (outlined below). The following four groups of search terms were used: (a) doctor–patient/client, healthcare professional–patient/client, nurse–patient/client, physician–patient/client, psychiatrist–patient/client, psychologist–patient/client, therapist–patient/client, provider–patient/client; (b) communication, interaction; (c) audio recording, audiovisual recording; (d) mental illness, bipolar disorder, depression, mania, personality disorder, schizophrenia. Each term in a group was searched in combination with every other term from the other three groups.

Searches were adapted for each database and performed independently. Full papers or abstracts were assessed and all potentially relevant papers were considered against the following inclusion criteria:

- Adults suffering from a mental illness
- Naturalistic interaction between healthcare professionals and patients
- Audio/audiovizual recordings of the interaction

As the focus was on professional–patient communication in practice, research involving either interviewers or actors (e.g., Goedhuys and Rethans 2001) was not considered applicable as they are artificially generated research scenarios. One study included patients suffering from mental illness or physical illness (i.e., Bain 1976). However, the findings pertaining to patients suffering from a mental illness were presented separately from those relating to patients with physical illness.

After assessing all the relevant abstracts and papers obtained from the search, fifteen studies fulfilled the inclusion criteria. The references from each article were searched and this resulted in a further study being identified, yielding a total of sixteen studies. Experts in the field of communication research were contacted to identify potentially relevant studies that had not been found by the aforementioned searches. No further studies were identified in this way.¹

3. Results

The studies were geographically diverse, conducted in both inpatient and outpatient settings and included patients suffering from mental illness with no specific diagnosis and patients with a diagnosis of depression, bipolar disorder, or schizophrenia. Sample sizes ranged from 2 to 240.

According to their focus, the sixteen studies were grouped into one of four categories:

1. The first group of studies ($n = 6$) were characterized by a psychiatric diagnostic perspective. They focused on how specific symptoms were manifested in the patient's communication, reflecting the exacerbation and amelioration of mental illness (see Table 1). The emphasis here is on how patient communication in the context of mental illness is pathological.
2. A second group ($n = 3$) was conducted from a psychotherapeutic perspective, with an emphasis on how therapist communication influences the patient's outcome and recovery (see Table 2).
3. A third group ($n = 3$) was concerned with the influence of patient and doctor sociodemographic characteristics on doctor–patient communication (see Table 3).
4. Finally, a fourth group ($n = 4$) focused on two-way professional–patient communication, in particular, on how institutional orientations and agendas are displayed in interactions (see Table 4).

3.1. *Studies of how psychiatric symptoms are manifested in patient communication*

Six studies (Bouhuys et al. 1986, 1991; Jones and Pansa 1979; Archinard et al. 2000; Bouhuys and Albersnagel 1992; McCabe et al. 2004) were concerned with the role of communicative behavior in the presentation and, subsequently, improvement of mental illness. All but one (i.e., McCabe et al. 2004) investigated nonverbal communication.

By way of introduction, mental illness is diagnosed in an interaction on the basis of the patient's (and other's) reports of their well-being along with direct observation of the patient's behavior. How the patient communicates in the diagnostic interview is a crucial source of information about their general mental state. A particular focus of these studies has been on how specific communicative behaviors are linked to the concept of *psychomotor activation*, which is the person's level of psychological and physical activation on a continuum from retardation to agitation/hyperarousal. Extreme absence or excess of psychomotor activation might then be linked to underlying biological processes. For example, eye contact is used to assess level of patient–clinician rapport. Lack of rapport is often considered as a sign

Table 1. *Studies of how psychiatric symptoms are manifested in patient communication*

Author and country	Aim	Sample size and diagnosis	Professional–patient	Analytic method	Findings
Jones and Pansa (1979), Australia	To compare nonverbal behavior in depressives, schizophrenics, and controls at admission and discharge.	$n = 20$ schizophrenia, $n = 23$ depression, and $n = 43$ non-psychiatric controls	Psychiatrist–patient	Audiovisually recorded interviews analyzed to record frequency and duration of eight nonverbal behaviors.	Depressed patients smiled less than controls at admission but not at discharge. Schizophrenia patients smiled less than controls at admission and discharge.
Bouhuys et al. (1986), The Netherlands	To investigate whether different aspects of communicative behavior contribute to the maintenance of depression.	$n = 31$ depressed patients in hospital	Psychiatrist–patient	Audiovisual recordings of 20 minutes of the post-admission interview were assessed on six predetermined categories (two verbal and four nonverbal).	Patients who improved after ten weeks displayed more restlessness and arousal in the initial admission interview.
Bouhuys et al. (1991), The Netherlands	To investigate how communicative behaviors are related to psychomotor activation in depression.	$n = 61$ depressed and bipolar patients in hospital	Psychiatrist–patient	Audiovisually recorded interviews assessed on predetermined categories and factor analysis identified five factors: restlessness, speech, active listening, speaking effort factor, and eagerness.	The intensity of certain features of communication—looking, gesticulating, and head movements—were associated with level of psychomotor activation.
Bouhuys and Albersnagel (1992), The Netherlands	To explore the role of communication in discriminating between patients who do and do not improve.	$n = 29$ major depressed patients, $n = 3$ bipolar disorder (depressed phase)	Psychiatrist–patient	Audiovisual recordings of post-admission interviews assessed on five predetermined categories (one verbal and four nonverbal).	Patients who improved after ten weeks were more restless and aroused in the admission interview than those who did not improve.
Archinard et al. (2000) Switzerland	To examine risk factors displayed in nonverbal behavior that might be associated with suicidal reattempting.	$n = 59$ patients admitted to emergency ward after suicide attempt	Psychiatrist–patient	Audiovisual recordings of 20-minute interview to count nonverbal head and facial behavior displayed.	After two years, two groups were identified: reattempters and non-reattempters. Reattempters displayed higher levels of facial activity and looked down more than non-attempters in admission interview.
McCabe et al. (2004) UK	To explore whether schizophrenics use or fail to use ‘theory of mind’ (ToM)-relevant skills in social interaction.	$n = 35$ chronic schizophrenia	Psychiatrist–patient (32) Clinical psychologist–patient (3)	Conversation analysis of 32 audiovisual recordings (>80 h) of psychiatrist–patient consultations and three audio-recorded courses of cognitive behavior therapy.	The patients displayed intact ToM skills in conversational interactions.

Table 2. *Studies of therapist communication*

Author and country	Aim	Sample size and diagnosis	Professional–patient	Analytic method	Findings
Barber et al. (1996), USA	To test whether adherence–competence to supportive-expressive dynamic therapy was associated with symptom change.	$n = 29$ major depression	Therapist–patient	Audio-recorded therapy sessions used to rate the Beck Depression Inventory, to assess symptom change.	Competent delivery of expressive techniques predicted subsequent change in depression.
Feeley et al. (1999), USA	To predict symptom change from process variables in cognitive therapy.	$n = 32$ depression	Therapist–patient	Audio-recorded cognitive therapy used to rate Collaborative Study Psychotherapy Rating Scale and Beck Depression Inventory.	The more the therapist delivered therapy-specific actions early in treatment, the greater the symptom relief for the patient.
Stark and Siol (1994), Germany	To identify the presence and level of expressed emotion among therapists and patients.	$n = 21$ schizophrenia	Therapist–patient	Audio-recorded interviews rated with five-minute speech sample method to rate expressed emotion.	One-third of therapists had high expressed emotion. They were considered more critical and negative by patients.

of loss of interest in interpersonal relationships that occurs, for example, in depression. At the other extreme, excessive foot tapping or scratching are signs of increased agitation, which would be considered in diagnosing a manic episode or schizophrenia. Hence, a number of studies have focused on the link between specific communicative behaviors and the presence of mental illness and, conversely, the absence of these behaviors when patients have recovered from an acute episode of illness.

As information about activation is usually derived from psychiatrists' judgments or patients' self-reports, Bouhuys et al. (1991) aimed to identify whether direct observation of patients' behavior would also produce the same results. They found that more agitated patients displayed more 'speaking effort', indicated by a higher frequency and longer duration of looking, gesticulating, and head movements during speaking and more intensive body touching. They concluded that direct observation of patient behavior was consistent with the concept of activation based on psychiatrists' judgments and patients' self-reports.

While the aforementioned study focused on depressed patients, Jones and Pansa (1979) aimed to identify differences in nonverbal behavior between patients suffering from depression, schizophrenia and controls and how this changes with clinical improvement. The authors noted how traditionally psychiatrists relied on nonverbal behavior to infer the patient's mental state but that contemporary diagnosis places more emphasis on verbal rather than nonverbal behavior. Given that it is the first substantive psychiatrist–patient contact and plays a key role in the diagnostic process, psychiatrist–patient interviews

were audiovisually recorded shortly after admission and once again prior to discharge and rated on eight pre-coded categories of facial and looking gestures. The greatest difference was between depressed patients and controls. Depressed patients smiled less at admission (0.60 times in the first 2 minutes of the interaction compared to 4.27 for controls) but were similar to controls at discharge. Meanwhile, schizophrenic patients smiled less than controls at admission, but this had not improved by discharge. In addition, schizophrenic patients displayed more bodily contact behavior, defined as 'self-touching of any body area, including rubbing and scratching' (1979: 403), as their condition improved compared to depressives and controls. As the authors point out, this finding is difficult to make sense of in clinical terms, as one might expect this behavior to decrease with clinical improvement.

The authors concluded that some nonverbal aspects of communication could be used to differentiate between psychiatric patients and controls. Moreover, comparisons between the person's nonverbal behaviors when they were alone or with others highlighted that the relevant behaviors were more prominent in the interpersonal setting than when the person was alone or looking at pictorial stimuli: 'This implies that they may be elicited in response to another individual, either as a distortion of the ordinary nonverbal signalling system, or as physiological responses to a changed state of arousal induced by the interpersonal settings rather than as static characteristics of the syndrome' (Jones and Pansa 1979: 402). Although the authors stated that they selected behaviors that clinicians would encounter in practice, a weakness

Table 3. *Studies of the influence of sociodemographic characteristics*

Author and country	Aim	Sample size and diagnosis	Professional-patient	Analytic method	Findings
Sleath et al. (1997), USA and Canada	To examine (i) whether patients initiate prescribing and (ii) what factors influence patient versus doctor prescribing.	$n = 88$ with a chronic medical condition with ≥ 2 previous visits	Doctor-patient	Audio-recorded consultations transcribed and content analyzed.	Higher income patients and those with more previous visits initiated psychotropic prescribing more often than doctors.
Sleath and Rubin (2002), New Mexico, USA	To assess the influence of patient gender and ethnicity on communication about depression and anxiety.	$n = 95$ consultations involving depression; $n = 113$ consultations involving anxiety	Doctor-patient	Audio-recorded consultations transcribed and content analyzed.	Female and more educated patients more likely to initiate talk about depression. Doctors more likely to ask (i) males and those with fewer previous visits closed questions about anxiety; (ii) Hispanics and patients with poorer emotional health open-ended questions about anxiety. Female doctors more likely than males to counsel.
Sleath et al. (2003), New Mexico, USA	To examine how Hispanic ethnicity influenced communication about antidepressants and adherence to them.	$n = 98$ consultations involving antidepressants	Doctor-patient	Audio-recorded consultations transcribed and content analyzed.	(i) Doctors more likely to state antidepressant information to White patients and those with a new prescription. (ii) Doctors asked one-fifth on ongoing antidepressants how well they were working and one-tenth whether they had any side effects. (iii) Whites more likely to state information about their antidepressants. Younger patients and those on new prescription asked more questions about them. (iv) Hispanics and those on new prescription less adherent.

with this study is that the eight categories of nonverbal behavior appear to be largely atheoretical, making it difficult to interpret the findings in a meaningful way either in relation to communication or mental illness.

On the basis of the finding that risk assessment of patients to determine their chances of committing suicide are not reliably predictive and the judgment of clinicians relies partly on nonverbal signs such as facial expression, Archinard et al. (2000) examined the

role of patient nonverbal behavior at a baseline interview in predicting repeat suicide attempts after two years. They video-recorded the patient-psychiatrist interview with patients admitted to the emergency ward of a hospital after a suicide attempt. After a two-year follow-up, they identified two groups of patients who were all in the original sample: firstly, eleven people who had reattempted suicide and secondly, a matched group of eleven people who had not reattempted suicide.

Table 4. *Studies of two-way professional–patient communication*

Author and country	Aim	Sample size and diagnosis	Professional–patient	Analytic method	Findings
Bain (1976), UK	To critically self-audit own consultations.	$n = 240$ adult outpatients in primary care (18% with mental illness)	Doctor–patient	Audio-recorded consultations rated with author’s own observation schedule.	Mental health consultations were longer than other consultations and these patients contributed more to the interaction.
Bergmann (1992), Germany	To explore psychiatric intake interviews.	Psychiatric patients assessed prior to admission; sample size not specified	Psychiatrist–patient	Conversation analysis of audio-recorded admission interviews.	Psychiatrists used different resources and methods in order to elicit desired information: fishing, information-eliciting tellings, and descriptive practices.
McCabe et al. (2002), UK	To investigate how doctors engage with patients with psychotic illness in outpatient consultations.	$n = 32$ outpatients with schizophrenia/schizoaffective disorder	Psychiatrist–patient	Conversation analysis of audiovisually recorded outpatient appointments.	Patients repeatedly attempted to talk about the content and emotional consequences of their psychotic symptoms, which was avoided by doctors.
Pinto et al. (2005), Brazil	To examine how different professional psychiatric backgrounds influence interviewing practices.	$n = 2$ (one bipolar disorder, one with schizophrenia)	Psychoanalyst–patient Neuropsychiatrist–patient	Excerpts of audiovisual recorded interviews analyzed using frame analysis.	Psychoanalysts listened attentively to and oriented toward personal topics, whereas neuropsychiatrists oriented to cognitive processes and avoided talking about delusions.

They then used a pre-established scale, the ‘Facial Action Coding System’, to analyze differences in head and facial behavior (i) of both patient groups and (ii) of the doctor talking with either a suicide repeater or a nonrepeater. The results indicated that (a) repeaters had higher mouth activity when not speaking than nonrepeaters and (b) doctors talking to repeaters had higher activity in the upper region of the face, particularly frowning, and gazed at repeaters’ faces for longer. The authors suggested that the repeaters’ heightened oral activity might be associated with their efforts to control moods, e.g., trying not to cry, to suppress anger or contempt, while the doctors’ increase in frowning might be due to their anxiety or preoccupation (i.e., heightened concern) in relation to the suicidal intentions of the patient. The comparison of repeaters and nonrepeaters was based on eleven matched subjects in each group. While these numbers are small, it is practically difficult to follow-up people who originally presented at an emergency

ward who make subsequent suicide attempts *and* to match these repeaters with nonrepeaters at two-year follow-up. People with mental illness tend to be difficult to follow-up in research studies because of the nature of their illness and their mobility as a population.

In an additional part of the study, doctors were asked to make written predictions to assess the patient’s suicide risk at baseline. Only 23% of the patients were correctly classified by doctors as repeaters or nonrepeaters: the remaining 77% were incorrectly classified. The authors concluded that although the doctor’s nonverbal behavior was different with subsequent repeaters which ‘could reflect a very accurate perception of the suicidal patient’s intentions’ (Archinard et al. 2000: 261–262), this did not correspond with the doctor’s ‘conscious acknowledgement’ of the patient’s subsequent risk as her predictions were unreliable (correctly classifying only about one in five of the patients).

There are some problems with Archinard et al.'s interpretation of their findings. Firstly, they did not take into account the verbal content in the interactions, so it is impossible to know whether the doctors' heightened nonverbal activity was related to the content of patients' talk, e.g., their reported hopelessness and thoughts of killing themselves. Secondly, they appear to assume that, all other things being equal, doctors can predict who will reattempt suicide. Extensive research has been conducted on risk factors predicting suicide. The factors with the highest predictive power are previous suicide attempts and suicidal ideation (Hirschfeld and Russell 1997; Mann 2002). However, although these risk factors have been identified for certain subpopulations, prediction of suicide by clinicians for particular individuals is a major clinical challenge (Hughes 1995).

Bouhuys et al. (1986) investigated how patients suffering from depression interact with psychiatrists and whether this behavior might provide clues about who will later improve. Patient behavior was rated with an event recording system, comprising six pre-coded categories: sound, looking, head movement, encouraging behaviors, hand movements, and leg movements. Two categories of patient behavior were identified: relational (gestures, looking, yes nodding) and nonrelational (body touching and head movements). It was found that patients who displayed less relational behavior, i.e., behaved independently of the actions of the psychiatrist, did not improve. On the other hand, patients who displayed more restlessness and arousal in the initial interview were the ones that improved more, a finding replicated by Bouhuys and Albersnagel (1992). A difficulty in coding behavior as relational or nonrelational, however, is that different behaviors can serve different functions depending on the interactional context. Here, body touching and head movements were categorized as nonrelational but they can equally be highly relational, e.g., when participants in an interaction mirror each other (Bargh and Chartrand 1999), an issue which will be addressed in more detail in the discussion.

Finally, in this group of studies, McCabe et al. (2004) analyzed psychiatrist–patient and psychologist–patient recordings to identify whether experimental findings that people with schizophrenia have 'theory of mind' deficits are borne out by interactional analyses. Analyzing communication to identify theory of mind skills is possible because virtually all theories of communication recognize that the premise of communicators' intentionality is crucial for successful communication. We inform each other of things because our beliefs are different and we know this, we tell each other to do things because our intentions do not coincide and we know this, and so on. Hence, they used conversation analysis, which involves the micro-analysis of talk by both patient and professional. Clinical consultations were analyzed on a turn-by-turn basis to identify whether pa-

tients could understand and reason about the mental states of others. Patients spontaneously and appropriately reported on the mental states of others and designed their talk on the basis of what they thought their interlocutor knew and intended. They also recognized that others did not share their delusional beliefs and attempted to reconcile others' beliefs with their own. These findings from analyses of naturalistic interaction were contrary to experimental findings, many of which have shown that patients with ongoing symptoms show theory of mind deficits.

3.2. *Studies of therapist communication*

Of the three studies, two focused on how the delivery of therapy-specific techniques impacts on the therapeutic relationship and symptom change in the treatment of depression, and one focused on therapist expressed emotion (EE) in the treatment of schizophrenia. Feeley et al. (1999) audio-recorded therapist–patient sessions of cognitive therapy (CT) with depressed patients. CT is considered an effective treatment for depression (DeRubeis and Crits-Christoph 1998) but the reasons for its effectiveness are still uncertain. In this study, adherence to CT in the recorded sessions was rated using pre-established subscales, assessing problem-focused, specific aspects in CT along with more abstract discussions about the patients' general beliefs. Problem-focused talk focuses on specific symptom-based problems, while abstract discussions are concerned with the patients' thoughts and beliefs more generally. The more the therapist delivered *concrete* actions, i.e., asking about the patient's feelings, thoughts, and actions in relation to specific problems, early in treatment, the greater the symptom relief experienced by the patient.² However, abstract discussions did not predict symptom relief.

Barber et al. (1996) also investigated whether therapist competence in and adherence to supportive-expressive dynamic therapy for depression was linked to patient outcome. Supportive-expressive (SE) therapy is a form of dynamic psychotherapy employing expressive (interpretative, uncovering the patient's conflicts and defenses) and supportive (offering support to prevent illness relapse) techniques (Pinsker 1994). Each patient's third SE therapy session was audio recorded in order to assess changes in depression from intake to session three. Competence and adherence to the therapy was rated with the Penn Adherence–Competence Scale, which assesses general therapeutic skills, supportive skills, and expressive skills. Although somewhat tentative, the findings suggested that it was the relatively competent delivery of expressive techniques rather than their frequency of use that predicted subsequent change in depression. Moreover, competent delivery of supportive techniques did not predict improvement. These findings held after controlling for therapist effects.

The third study, by Stark and Siol (1994), assessed therapist expressed emotion, which refers to the amount of criticism, hostility, and over-involvement displayed by others (here, therapists) when communicating with patients. They also investigated how communication style was related to patients' perception of the therapist. It is believed that high EE, i.e., being critical of the patient, hostile, and emotionally over-involved, may be linked to blaming and criticizing the patient's personality for their behavior rather than seeing it as part of their illness (Kavanagh 1992). A rating of EE is obtained from recorded interaction using the established five-minute speech sample method (Magaña et al. 1986). In this study, it was found that about one-third of therapists displayed high EE but this was not related to therapist experience. Nor was it an attribute of all the therapeutic relationships that the therapist was involved in, suggesting a 'state' rather than 'trait' characterization of EE. High EE therapists were rated slightly more often as enigmatic, which the authors conclude indicates the need for an unambiguous, well-structured communication style with schizophrenia patients. Although this study did not investigate EE as a predictor of outcome, the clinical importance of these findings must be considered against the background that high EE among family members has been found to predict poorer patient outcome, in particular more relapses, in schizophrenia (Kuipers and Bebbington 1988). The relevance of these findings for clinical practice lies in the 'state' rather than 'trait' nature of EE: if therapists are not always high or low EE, this suggests that their behavior is more flexible and perhaps could be modified, i.e., improved from high to low EE, in turn, improving patient outcome.

3.3. *The influence of sociodemographic characteristics on doctor–patient communication*

Three studies investigated the influence of both patient and doctor sociodemographic characteristics on doctor–patient communication about depression/anxiety and psychotropic medication in primary care. Sleath et al. (1997) explored whether patients were actively involved in initiating the prescribing of psychotropic medications and what factors influenced patient versus doctor initiation. Almost one-fifth of routine primary care consultations involved prescriptions for one or more psychotropic medications. Patients with higher incomes were more likely than doctors to initiate prescribing, while doctors were more likely than patients with lower incomes to initiate prescribing. Patients with more previous visits were as likely to initiate discussions as doctors.

In a similar study, Sleath and Rubin (2002) investigated the influence of doctor and patient gender and ethnicity on communication about depression and anxiety. They found that depression was brought up

in 25% of primary care visits and anxiety in about 30% of visits. In line with the above study, more educated patients (which is strongly correlated with income) were more likely to initiate a discussion about depression, as were female patients. If depression was brought up, doctors asked questions about depression only in 58% of the visits and asked open-ended questions in 21% of the visits. If anxiety was discussed, doctors asked follow-up questions in 44%, and open-ended questions in 12%, of the visits. Also in relation to anxiety, doctors asked males more questions than females. Doctors were more likely to ask males and those with few previous visits closed questions about anxiety. They were also more likely to ask Hispanics and those with poorer emotional health open-ended questions about anxiety. Finally, female doctors were more likely to counsel their patients than male doctors. The authors suggest that doctors may not be sensitive in picking up on patients' cues about their emotional well-being because of the low frequency of follow-up questions and even lower numbers of open-ended questions in relation to depression and anxiety.

3.4. *Studies of two-way professional–patient communication*

The final set of four studies explored professional–patient interactions with a focus on communication as a two-way dynamic process rather than a source of information about other phenomena. Bain (1976) audio-recorded consultations with his own patients in general practice. Psychiatric illness was the most common diagnostic category among adults. He designed an observation schedule consisting of five categories each for the patient (i.e., presentation of symptoms, answering questions, problem-related expression, questions, and social exchange) and the doctor (i.e., social exchange, encouragement, asking questions, problem resolution, and instruction).

The psychiatric consultations were on average longer than the physical consultations. In the total sample, the doctor contributed 59% of the verbal component of the consultation and this decreased to 52% in the psychiatric sample. This was a largely descriptive study so this difference was not tested for statistical significance. In the psychiatric consultations, the patient's increased contribution was accounted for by more 'symptom presentation' (describing symptoms) and 'problem-related expressions' (describing the effects of the illness on other family members and on family income). Although the doctor contributed relatively less when compared with physical diagnoses, more of his time was spent on 'problem resolution' and 'instruction' in the psychiatric consultations. Irrespective of physical or psychiatric diagnosis, patients from higher social classes (I and II) asked more questions than those from lower social classes (IV and V), and patients from lower social classes presented more 'problem-related expressions'. Bain acknowledged the

lack of objectivity in analyzing his own consultations. This study also employed *a priori* coding systems that are somewhat crude and artificial in how they allocate utterances to one category or another. Here, for example, an utterance such as 'How are you?' could equally be categorized as a question and a social exchange.

McCabe et al. (2002) analyzed audiovisually recorded interactions between psychiatrists and outpatients suffering from schizophrenia. Using conversation analysis, they found that patients repeatedly attempted to talk about the content of their psychotic symptoms (e.g., believing that they were God, that there were people drilling holes in their head) along with the emotional consequences of these experiences. This created considerable interactional tension with psychiatrists displaying avoidance strategies, i.e., they replied to a patient question with another question rather than a response and smiled or laughed. McCabe et al. (2002) suggested that addressing these specific concerns might be more satisfactory in attempts to engage this challenging patient group in services.

Bergmann (1992) also used conversation analysis to analyze audio recordings of psychiatrist-patient interviews, conducted to determine whether a patient should be voluntarily or involuntarily hospitalized. He identified ways in which psychiatrists elicited information from patients about their activities leading up to admission. Psychiatrists used indirect descriptive practices (i.e., they did not ask but told the patient something about themselves) such as mitigating elements (e.g., 'not so completely dressed', 'kind of irritated a little bit', acting 'a little bit' peculiarly) and euphemisms (e.g., an early description 'you withdrew very much' is later reformulated as 'you had yourself barricaded') in eliciting information. Bergmann (1992) identified two possible ways that patients responded to psychiatrists' discreet 'fishing' for information. They could either respond in a 'neutral' and 'friendly' way, thus implicitly accepting the suggestion of wrong doing in the psychiatrist's utterance, or they could respond in a negative protest and turn against the psychiatrist, thus leading to the judgment that the patient is exhibiting strange and aggressive behavior.

Bergmann (1992) discussed the rationale behind this method of eliciting information from a sociological perspective and related it to the difficult and sensitive nature of the psychiatric interview. It led him to observe that psychiatry is an institution that has to manage the contradictory demands of practicing medicine, i.e., dealing in a neutral, disengaged way with illness, and practicing morality, i.e., dealing with people whose behavior is treated morally, as improper. In the light of theoretical writings about how morality and values come into psychiatric assessment and diagnosis (Fulford 1989), it is interesting to see how the contradictory structure of medicine and morality 'materializes itself at the level of turn-by-turn interac-

tion in the various manifestations of psychiatric discretion' (Bergmann 1992: 158).

Finally, Pinto et al. (2005) examined the interviewing practices of psychiatrists from different traditions: one from a psychoanalytic and the other from a neuropsychiatric tradition. They explored the extent to which these different theoretical traditions guide and shape the interaction. Audiovisually recorded interviews (one between a psychoanalyst and a patient suffering from bipolar disorder, and one between a neuropsychiatrist and a patient suffering from schizophrenia) were analyzed using frame analysis.

The neuropsychiatrist oriented to assessing the patient's cognitive processes and avoided discussing patient's delusional ideas by redirecting the conversation back to assessing the patient's thinking and fluency. In contrast, the psychoanalyst listened attentively to personal topics introduced by the patient and sustained and developed these topics. This study highlights how clinicians construct the interaction in line with their theoretical perspective but must balance it with the need to listen to the patient.

4. Discussion

Sixteen studies were identified, the majority of which focused on patient communicative activities in isolation from the doctor's contribution to the interaction or vice versa. A number of studies have found that patient nonverbal communication is impoverished in depression. Nonverbal communication was also different among patients (they had higher facial activity) who reattempted suicide within two years of presenting at an emergency ward after a suicide attempt. Interestingly, doctors' nonverbal communication was also different with subsequent reattempters, but this did not translate into an ability on their part to predict who would reattempt to commit suicide. In the treatment of depression, therapist problem-focused talk predicted symptom relief. In the treatment of schizophrenia, about one-third of therapists had a negative communication style, characterized by criticism, hostility, and over-involvement, which may be associated with more patient relapses. In primary care in the United States, female patients and more educated patients were more likely to initiate talk about depression and psychotropic medication. In consultations involving depression and anxiety, doctors asked follow-up question approximately half the time, and female doctors were more likely to counsel their patients than males. Finally, psychiatric institutional agendas are 'talked into being' (Heritage 1984) in interaction: psychiatrists tend to focus on diagnostic and medication talk in the treatment of schizophrenia, whereas patients attempt to topicalize experiential aspects of their illness.

Analyzing communication in a medical context raises questions about the quality or usefulness of this

communication. The key research issue is linking findings about communicative processes in treatment with the outcomes of treatment. In other words, does it make a difference how health professionals communicate with their patients? Moreover, analyzing communication in a psychiatric context raises questions about what aspects of patient communication are abnormal.

The majority of studies employed quantitative coding methods and counted the frequency of patient and, less often, therapist or doctor, behaviors. Although this approach is useful and necessary for conducting quantitative analysis in relation to other phenomena, it also has limitations. The main limitation is specifying *a priori* a particular meaning or function to the phenomenon being studied. How researchers choose categories of behavior to be subsequently coded has been an issue of concern (Heritage 1984; Potter and Wetherall 1987; Silverman 1997). The categories chosen are considered 'common sense' and researchers often justify them on the basis of selection by experienced clinicians who consider these aspects of behavior to be important to the clinical encounter. Haakana (2002) notes the shortcomings of many coding systems used to assess medical interaction (e.g., Roter 1989). For example, laughter is included in the category 'positive talk', but laughter does not always mark humorous or unproblematic talk. Sometimes, it indicates that a delicate issue is under discussion and can be a sign of interactional discomfort (Haakana 2002; McCabe et al. 2002).

In addition, as the categories are discrete (e.g., speech, looking behavior), they overlook the inter-relationship between the categories, e.g., between speech and looking behavior that are intimately connected (Ruusovuori 2001). Because of the requirement to categorize complex information, they tend to be overly reductionistic and simplify actions by stripping them of their context. For example, in the Bain (1976) study, a doctor who responded to a patient's problem description by saying 'hmm' and nodding was categorized as displaying 'encouraging behaviour'. However, if analyzed in more interactional detail, the same behavior can be avoidant behavior (e.g., McCabe et al. 2002), emphasizing the fact that a category of behavior (e.g., encouraging behavior) serves more than one function and coding it into one category is insensitive to its differing uses depending on the context.

In a similar vein, Jones and Pansa (1979) found that patient smiling behavior differed between diagnostic groups. However, this is based solely on observing the patient without considering how it was influenced by communication as a two-way process between the psychiatrist and patient, e.g., in what specific interactional context did smiling occur, if a patient smiled, did the doctor also smile? The doctor/therapist and patient are treated separately and there is no analysis of 'how' the parties respond to each other and how interaction is jointly constructed.

Alternative analytic approaches such as conversation analysis and frame analysis (McCabe et al. 2002, 2004; Bergmann 1992; Pinto et al. 2005) do not involve *a priori* coding. They analyze, albeit to differing degrees, micro-level aspects of communication, including the nonverbal features of gaze, gesture, and postural orientation. Most importantly for the current discussion, they seek to identify categories participants themselves use rather than those generated by analysts.

However, these approaches also have limitations and may be unwieldy for certain types of analyses: the main obstacle is how to categorize and quantify the wealth of descriptive data in sufficiently large samples so that it can be used to predict concurrent and future behavior and outcomes. This entails a substantive methodological problem, i.e., translating, in a valid way, rich descriptive findings into a form that can be quantified and then integrated into statistical analyses to predict outcome from interactional processes. This has been successfully achieved (Stivers et al. 2003) but remains an exceptional approach in the study of medical communication.

Hence, there is a tension between preserving the unique character of each individual case and identifying regularities across cases. This remains a challenge for medical communication researchers interested in analyzing interactional processes in detail (without applying simplified pre-coded categorization systems) and linking these processes with the patient's outcome from treatment.

5. Conclusions

It is clear that research on professional-patient communication in the treatment of mental illness is in its infancy. The clinical significance of the findings to date remains unclear, with some findings even appearing to be trivial. There is little methodological consistency across studies, and the field would benefit from studies building on one another by using comparable methods. This should not, however, preclude sensitivity to different contexts, as it is likely that at least some issues will be specific, for example, to the diagnostic group being studied.

Few studies have investigated communication as a jointly constructed two-way process between the professional and the patient, and the challenge ahead lies in integrating fundamental research of this kind in larger clinical trials and studies. As mental health problems are often chronic, the professional-patient interaction and relationship may play a central role in the patient's involvement in treatment and their adherence to treatment recommendations and longer-term outcome. Finally, as these problems are widely treated in primary, and not just secondary, care, research findings will be applicable to a range of professionals and treatment settings.

Notes

- * We are very grateful to the anonymous reviewers for helpful comments and references, which were incorporated into the revised version of this paper.
1. There is older literature on communication in the context of psychiatric illness/treatment (e.g., Pittenger et al. 1960; MacKinnon and Michels 1971; Labov and Fanshel 1977), which, although not having met the criteria for inclusion in the current review, may be of background interest.
 2. The concrete subscale was a significant predictor of change in depression ($r = 0.39$, $P < 0.05$).

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