

Review Article

Stress-reductive effects of information disclosure to medical and psychiatric patients

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Abstract

Informed consent has become a central part of medical decision-making. It is based on disclosure of medical information to support patients' rights for autonomous decision-making from a legal point of view. However, information disclosure may also benefit patients. Research indicates that information disclosure reduces stress among patients and that the more patients desire relevant information, the more stress-reductive information disclosure may be. In psychiatry, too, studies have shown that educating psychiatric patients may not necessarily reduce compliance or increase relapse rate. These findings are in line with patients' desires and their legal right to know their own medical matters. It has long been believed that patients, be they psychiatric or non-psychiatric, should be protected and not given information that would potentially cause distress or harm to them. However, patient's competency may be a function of the physicians' efforts to make patients understand necessary information. Therefore, a patient's right to give informed consent leads to a physician's duty to disclose individually tailored information understandable to patients.

Key words

informed consent, information disclosure, medical education, stress reduction, physician–patient relationship.

INFORMED CONSENT AS A LEGAL RIGHT

Informed consent has become a central to medical decision-making. No physician of any discipline can commence a treatment or diagnostic procedure for an adult individual without it. It is widely believed that informed consent consists of three basic elements: disclosure of medical information, the patient's competency to give a consent, and the voluntary nature of a consent (i.e. lack of coercion).¹ Thus, informed consent cannot be validated without disclosure of sufficient information for patients to reach a decision that aligns with their value system, personality, religion, and other ways of life. In the early stage of court cases claiming the right to give informed consent in the US, the focus of the argument was on whether the content of treat-

ment had been disclosed beforehand.^{2,3} Patients' rights to know medical information related to their condition and proposed medical treatment is based on their right to autonomy. Thus, rights to informed consent and to medical knowledge are of legal nature.

However, in addition to the legal aspects of information disclosure to patients, many clinicians have long been aware that disclosure of relevant information benefits patients. It is often argued that information disclosure may endanger patients' psychological health and lead to self-destructive behavior,^{4–7} however, this reflects but a small portion of the whole concept of informed consent. Information disclosure can promote compliance to treatment, a better physician–patient relationship, and a better outcome. I will review and comment on the therapeutic aspects of information disclosure in general medicine and then those related to psychiatry.

PATIENTS' READINESS TO FACE REALITY

Many people are not ready to accept the fact that they have a disease.⁸ This is particularly the case if

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the disease is of serious nature.⁹ They have a psychological 'schema' in which they believe that they will be free from serious illnesses forever. The psychological distance from their ideal ('I am free from a serious disease.') and their reality ('I suffer from cancer.') may be determined by many factors, but it may be longer as the illness is more serious. Thus, it may require more time and energy for patients to adapt to new situation (to change their psychological 'schema') than for their family members, friends, and medical professionals.

Due to anxiety, even competent patients may be unable to think rationally at the time.¹⁰ Many patients feel anxious before and during noxious medical procedures. Alternatively, they may feel depressed and temporarily lose their desire to get better or live longer. When a person is depressed, his/her values, beliefs, desires, and dispositions are, in some cases, dramatically different from when he/she is healthy because depressed individuals may lose self-interest and even minimal concern for their own welfare.¹¹ Although the situation is legally more complex if coupled with physical diseases,^{12,13} depression can be lifted and treated. In such cases, it may be premature to conclude that the patient is incompetent (thus commencing the treatment immediately). Psychological support may be needed for patients to restore their reasoning abilities.⁹ Proposed medical procedures should be postponed until patients regain such faculties and are able to make decisions unless, of course, the nature of the condition (emergency) prohibits them from doing so. This is what McCullough *et al.* called assisted autonomy.¹⁴

Many physicians believe that patients' readiness to accept their fate is not sufficient if the condition is serious or irreversible. Australian oncologists in their consultation with patients with incurable cancer generally inform about the aim of treatment (85%) and the incurable nature of the condition (75%) but are very reluctant to check whether patients understand the information (10%) and to inform about the effects of cancer treatment on patients' quality of life (36%).^{15,16} From the patients' perspective, little information about the possible adverse effects of cancer treatment may make them feel more anxious rather than to trust their physicians. It has recently been reported that psychological support (mindfulness meditation-based group programme) can reduce stress symptoms of cancer patients.^{17,18} Thus, health professionals should be more aware of the 'blend' of information disclosure and psychological support for patients with an incurable condition.¹⁹

STRESS REDUCTION BY INFORMATION DISCLOSURE

Egbert *et al.* studied patients undergoing elective intra-abdominal operation (e.g. cholecystectomy).²⁰ As part of their routine care, all patients were visited the night before the operation by the attending anesthetist, who told them about the operational procedure and the anesthesia. Then the patients were divided into two groups. One group (the control group) consisted of 51 patients who were not told about postoperative pain, while the other group (the experimental group) consisted of 46 patients who were given 'special care', being informed of postoperative pain and its causes and nature as well as related techniques to reduce it. The 'special care' patients were also informed of possible effects of medication (morphine) on pain reduction. After the operation, the 'special care' patients requested fewer narcotics than the control patients. The attending surgeon who had not been informed of the patients' group membership rated pain objectively and found that the 'special care' group patients were in less pain. This finding suggests that disclosure of medical information can reduce postoperative pain and the need for narcotics.

Subsequent studies have also shown that detailed information disclosure reduces the psychological distress of patients. They include surgical operation,²¹ nasogastric intubation,²²⁻²⁴ and cardiac catheterization.²⁵ Family members of patients in an intensive care unit reported more post-traumatic stress reaction if they felt that insufficient time was allowed for information, information was not easy to understand, or information was incomplete.²⁶ These studies suggest that offering medical information prior to noxious medical procedures can reduce a patient's anxiety and increase adjustment during and after procedures. Patients may become more accepting of the medical procedures. Thus, disclosure of information can benefit a patient's well-being; this supports the notion that informed consent can lead to improved conditions in the patients.

INDIVIDUAL DIFFERENCES IN THE STRESS REDUCING EFFECTS OF INFORMATION DISCLOSURE

In the 1980s researchers became interested in individual differences in the effects of information disclosure on the reduction of anxiety and distress during noxious medical procedures. Miller and Mangan studied 40 gynecologic patients undergoing colposcopy for diagnostic purposes.²⁷ These patients were divided into 'monitors' and 'blunters'. The 'monitors' were those who sought information relevant to dangers and

threats, while the 'blunters' were those who preferred to distract themselves from danger/threat-relevant information. Each group was further divided into those women who would be given voluminous preparatory information (20-min communication about the procedure, sensations, results of their smear, etc.) and those women who would be given the usual low level of information. Of these four groups, reduced heart rates, both after the provision of information and after the colposcopy, were observed among the 'monitor' women given high information and the 'blunter' women given low information. A change in heart rate was not observed in the other two groups. Baker also reported 'monitor' patients with multiple sclerosis, as compared with 'blunter' patients with the same disease, are more interested in disease-related information.^{28,29}

Auerbach *et al.* studied patients undergoing dental extraction surgery.³⁰ Prior to the surgery, participants were given two different types of information. One group was given general (i.e. vague) information about the hospital and the surgery while another group was given specific (i.e. precise and detailed) information about the dental extraction procedure. They also measured patients' willingness to take an active role in medical care, their desire to ask questions, and their readiness to be involved in decision-making. This attitude was termed 'preference for information'. They found an interaction between the type of information given prior to the surgery ('general' vs 'specific') and the patients' attitude (high vs low in 'preference for information'). It was the patients high in 'preference for information' who showed greater adjustment during the procedure when given 'specific' information. Thus, there is an interactional effect of the patients' attitude and the quality of medical information on their adjustment.

These empiric studies suggest that patients who desire relevant medical information in order to exercise their autonomous decision-making and coping behaviors, when given that information, can adjust better. Patients who are less interested in such information cannot adjust better but it is not detrimental to these patients to offer the information. Therefore, the first principle of informed consent (i.e. giving necessary and sufficient information to a patient in a way he/she can fully understand) will be beneficial.

EDUCATION AND PATIENTS' DECISIONS

What remains to be studied is why some patients are interested in the relevant medical information and in their own decision-making while other patients are not. Much should be studied about their personality, attitudes towards the medical profession, religious back-

ground, cultural background, etc. The difference between 'monitors' and 'blunters' is one of concrete examples. However, education may have a very important role in forming patients' attitudes towards medical information. This includes not only education in school and at work but also direct and indirect medical education, which should begin with the commencement of therapeutic relationships. This may include the attending physician's encouragement for the patient's participation in decision-making, self-help groups, hospital and non-hospital education such as pamphlets, video programmes, lectures, etc. Patients may seek information voluntarily. These activities make patients more aware of the relevance of medical information as well as help the patients to participate in planning their own therapy.³¹

TREATMENT EDUCATION IN PSYCHIATRY

In psychiatry too, clinicians have become increasingly aware of the importance of the disclosure of a treatment plan. Although emphasis was on the psychoeducation work with the relatives of the patient,^{32,33} there has been a recent trend towards education for patients. For example, Macpherson *et al.* designed an information booklet about antipsychotic medication and distributed it to patients with schizophrenia.³⁴ Compared with a control group of patients, the experimental group showed significantly greater knowledge about the illness and treatment. They also showed an increased knowledge after the distribution of the booklet compared with before distribution.

Wirshing *et al.* performed a drug trial for psychotic patients.³⁵ As a part of informed consent, they disclosed the purpose of the trial, diagnosis, and treatment to the patients. Then, they assessed the patients' comprehension by administering a quiz. They repeated the same information disclosure for patients who failed to answer correctly in any of the quiz items. They found that most of the patients showed perfect comprehension after several occasions of disclosure.

Kleinman *et al.* educated schizophrenic patients who were clinically stable about benefits and side-effects of neuroleptic treatment.³⁶ The side-effects included tardive dyskinesia. The patients' comprehension was examined by questionnaire at the 2-year follow up and was found to be better than that before education.

One may think that disclosure of 'bad news' such as tardive dyskinesia makes patients refuse medication or relapse frequently. However, Munetz and Roth showed that schizophrenic outpatients who were disclosed the risk of tardive dyskinesia due to neuroleptics were no less compliant to treatment than those

patients who were not disclosed such information.³⁷ Also Chaplin and Kent compared two groups of psychotic patients on neuroleptics.³⁸ They taught one group extensively about tardive dyskinesia, while they did not do so for the other group. In a 6-month follow-up, they did not find statistically significant differences in relapse of psychoses or refusal of drug treatment.

Having shown that psychiatric patients are capable of understanding what is disclosed, it still remains to be studied whether information disclosure has therapeutic benefits.

Buchkremer *et al.* compared psychoeducational medication management training, cognitive psychotherapy, key-person counselling, and a control (no special) treatment in patients with schizophrenia.³⁹ Although not reaching statistical significance, the group of patients with all the three treatment regimens showed a 26% reduction in rehospitalization in the 2-year follow up.

Merinder *et al.* reported that, as compared to a control group, patients with schizophrenia showed a trend of a longer duration of remission after psychoeducation.⁴⁰ They also reported that patients given education of treatment showed more satisfaction (rated by the Verona Service Satisfaction Scale score) at the 1-year follow up.⁴⁰ Patients given psychoeducation showed better drug compliance⁴¹ and became more assertive in the medication plan.⁴²

Compulsory admission is one of the medical procedures that both patients and psychiatrists wish to avoid. A group of British mental health professionals started a programme, 'Joint Crisis Plan', in which patients with past episodes of psychotic and bipolar disorders and therapists agree upon in advance of future psychotic episodes. This includes current care, treatment plan, care in crisis, practical help in a crisis, and advance directives such as consent or refusal of specified treatment. What is agreed upon is written in a crisis card. As compared with the control group, the patients with a 'Joint Crisis Plan' showed reduced compulsory admission for 15 months.⁴³

These studies suggest that teaching psychiatric patients mainly with schizophrenia about the benefits and risks of their treatment does not cause identifiable detrimental effects upon their mental state but may lead to better treatment compliance, outcome, and possibly self-esteem.

DIAGNOSTIC EDUCATION IN PSYCHIATRY

The idea of informed consent demands the disclosure of all information that patients think is necessary in order to make a medical decision autonomously. This

includes not only the pros, cons, and alternatives of the proposed treatment but also diagnosis on which the proposal of treatment is based. Nevertheless, psychiatric diagnosis is unlikely to be a topic of a conversation between the physician and the patient. This is particularly the case for those suffering from psychotic disorders.^{44,45}

Some commentators note that the disclosure of diagnosis should be withheld if the nature of the disorder is irreversible or incurable.⁷ Another claim against emphasis on information disclosure is based on the assumption that over-emphasis on it results in a defensive consultation style.⁵ Although how it should be disclosed is no less important than what should be disclosed,⁴⁶ patients cannot appreciate the benefits of treatment or reach a rational decision without knowing what they suffer from. The disclosure of diagnosis is much more important when it is of a serious nature.

It is generally believed that patients with psychotic disorders are unable to appreciate their illness due to lack of insight. However, recent trials of cognitive behavioral therapy for psychoses aim to reduce positive symptoms.^{47,48} Ascher-Svanum and Whitesel reported that patients with schizophrenia showed significant increase in their knowledge about the illness after either didactic format or group discussion of psychoeducation on the characteristics of treatment.⁴⁹ Davidoff *et al.* recorded interviews with psychotic patients on admission by a video camera.⁵⁰ When the patients were discharged, they showed them the video recording of the interview and asked their opinion. By this unique method they showed that psychotic patients' insight improved. These findings suggest that psychotic symptoms may be alleviated through patients' appreciation of their condition.

As with the pros and cons of treatment, patients with major psychiatric disorders may gain appreciation of their conditions and develop insight by careful and repeated educational efforts.

DISCUSSION

Past investigations are not without flaws. There is evidence to support a notion that information disclosure is beneficial at least for a subset of patients. There are other patients who are without beneficence or even with possible worsening of the condition. Investigations about the effects of information disclosure related to surgical operations and physical examinations suggest that information disclosure can reduce stress reactions. However, information disclosure related to other aspects of medical treatment such as diagnosis per se, prognosis, and fatal risks of medical procedures has been barely studied. Conclusion as to

the beneficial effects of information disclosure in psychiatry should be cautioned because of a lack of empiric data to support it. Many of the reports cited in this review are at best only suggestive. Second, studies on the psychological, sociological, or biological factors that differentiated people with and without benefit from information disclosure are scarce.

Despite a lack of convincing empiric data to support the beneficial effects of information disclosure in medicine, the present literature review shows that an avenue to a better future means to disclose information to individual patients. I would like to emphasize that this is in line with the patients' desire to know medical information related to themselves.⁵¹ The present literature review would encourage clinicians to disclose information to patients not only from the legal aspects (patients have right to know) but also from clinical perspective (they may benefit from it).

Lukewarm attitudes of some mental health professionals towards information disclosure to psychiatric patients are partly derived from the patients' lack of competency to give informed consent. It is argued that incompetent patients should be protected and be treated for their interest even if it is against their expressed refusal. In such situations, clinicians become less interested in educating patients. Nevertheless, a recent empiric study has reported that voluntarily admitted psychiatric patients are no less competent than medical inpatients.⁵² Moreover, competency is not a stable trait of individuals. It varies from time to time (e.g. it may be influenced by varying symptoms like delirium, depression, anxiety, and psychotic symptoms) and from task to task (e.g. competency to understand neuroleptic treatment is different from that to understand hospitalization). Clinicians and researchers have been all too enthusiastic to develop a reliable instrument to measure patients' competency to give informed consent (for review, Grisso,⁵³ Kitamura *et al.*⁵²). This is based on the assumption that competency is an attribute of a patient which is enduring at least for a while. However, as seen from the above review, competency may be gained through extensive education.¹⁴

The patient's understanding is a function of medical education, which is, in turn, determined by the clinicians' endeavour to convey as much information as possible at every opportunity. Therefore, a patient's competency is a function of the physicians' efforts to make patients understand necessary medical information. A patient's competency to appreciation of the disclosed information is determined by many factors. These include the patient's intelligence, linguistic ability, consciousness, memory, attention, etc.⁵⁴ For example, patients with medical or nursing backgrounds can

easily appreciate what has been disclosed, while lay patients or those for whom the language spoken by the physician is not their primary language need it to be explained using non-professional words and expressions. Patients with fluctuating consciousness should be disclosed information when their consciousness is at its best. If patients feel it is difficult to 'digest' all the information at one time, it is necessary for physicians to paraphrase the explanation and perhaps deliver it several times until the patients can fully understand it. Furthermore, such efforts should be tailored individually. If informed consent is a patients' right, then it is a physicians' duty to disclose information that is understandable to the patients. This may, in turn, lead to greater capacity of patients to process information in such a way that their decision will benefit their well being. This is a real means to safeguard patients' legal rights.⁵⁵

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REFERENCES

1. Appelbaum PS, Lidz CW, Meisel A. *Informed Consent: Legal Theory and Clinical Practice*. Oxford University Press, New York, 1987.
2. Salgo v. Leland Stanford Jr University Bd. of Trustees, 317 P.2d 170 Cal. Ct. App. 1957.
3. Natanson v. Kline, 350 P.2d 1093 Kan, 1960.
4. Bamford C, Lamont S, Eccles M, Robinson L, May C, Bond J. Disclosing a diagnosis of dementia: a systematic review. *Int. J. Geriatr. Psychiatry* 2004; **19**: 151–169.
5. Davies T. Consent to treatment: trust matters as much as information. *Psychiat. Bul.* 1997; **21**: 200–201.
6. Drickamer MA, Lachs MS. Should patients with Alzheimer's disease be told their diagnosis? *N. Eng. J. Med.* 1992; **326**: 947–951.
7. Rhode K, Peskind ER, Raskind MA. Suicide in two patients with Alzheimer's disease. *J. Am. Geriatr. Soc.* 1995; **43**: 187–189.
8. Schneider CE. *The Practice of Autonomy: Patients, Doctors, and Medical Decisions*. Oxford University Press, New York, 1998.
9. Katz M, Abbey S, Rydall A, Lowy F. Psychiatric consultation for competency to refuse medical treatment: a retrospective study of patient characteristics and outcome. *Psychosomatic* 1995; **36**: 33–41.
10. Appelbaum PS, Roth LH. Clinical issues in the assessment of competency. *Am. J. Psychiatry* 1981; **138**: 1462–1467.
11. Elliott C. Caring about risks: are severely depressed patients competent to consent to research? *Arch. Gen. Psychiatry* 1997; **54**: 113–116.
12. Sullivan MD, Ward NG, Laxton A. The woman who wanted electroconvulsive therapy and do-not-resuscitate

- status: questions of competence on a medical-psychiatry unit. *Gen. Hosp. Psychiat.* 1992; **14**: 204–209.
13. Sullivan MD, Youngner SJ. Depression, competence, and the right to refuse lifesaving medical treatment. *Am. J. Psychiatry* 1994; **151**: 971–978.
 14. McCullough LB, Coverdale JH, Chervenak FA. Ethical challenges of decision making with pregnant patients who have schizophrenia. *Am. J. Obstet. Gynecol.* 2002; **187**: 696–702.
 15. Tattersall MHN, Gattellari M, Voigt K, Butow PN. When the treatment goal is not cure: are patients informed adequately? *Support. Care Cancer* 2002; **10**: 314–321.
 16. Gattellari M, Voigt KJ, Butow PN, Tattersall MHN. When the treatment goal is not cure: are cancer patients equipped to make informed decisions? *J. Clin. Oncol.* 2002; **20**: 503–513.
 17. Specia M, Carlson LE, Goodey E, Angen M. A randomized, wait-list controlled clinical trial: the effect of a mindfulness meditation-based stress reduction program on mood and symptoms of stress in cancer outpatients. *Psychosom. Med.* 2000; **62**: 613–622.
 18. Carlson LE, Ursuliak Z, Goodey E, Angen M, Specia M. The effects of a mindfulness meditation-based stress reduction program on mood and symptoms of stress in cancer outpatients: 6-month follow-up. *Support. Care Cancer* 2001; **9**: 112–123.
 19. Romm J. Breaking bad news in obstetrics and gynecology: educational conference for resident physicians. *Arch. Women Men. Health* 2002; **5**: 177–179.
 20. Egbert LD, Battit GE, Welch CE, Bartlett MK. Reduction of postoperative pain by encouragement and instruction of patients: a study of doctor-patient rapport. *N. Engl. J. Med.* 1964; **270**: 825–827.
 21. Mavrias R, Peck C, Coleman G. The timing of pre-operative preparatory information. *Psychol. Health* 1990; **5**: 39–45.
 22. Johnson JE, Leventhal H. Effects of accurate expectations and behavioral instructions on reactions during a noxious medical examination. *J. Pers. Soc. Psychol.* 1974; **29**: 710–718.
 23. Padilla GV, Grant MM, Rains BL *et al.* Distress reduction and the effects of preparatory teaching films and patient control. *Res. Nurs. Health* 1981; **4**: 375–387.
 24. Wilson JF, Moore RW, Randolph S, Hanson BJ. Behavioral preparation of patients for gastrointestinal endoscopy: information, relaxation, and coping style. *J. Human Stress* 1982; **8**: 13–23.
 25. Kendall PC, Williams L, Pechacek TF *et al.* Cognitive-behavioral and patient education interventions in cardiac catheterization procedures: the Palo Alto medical psychology project. *J. Consult. Clin. Psychol.* 1979; **47**: 49–58.
 26. Azoulay E, Pochard F, Kentish-Barnes N *et al.* Risk of post-traumatic stress symptoms in family members of intensive care unit patients. *Am. J. Respir. Crit. Care Med.* 2005; **171**: 987–994.
 27. Miller SM, Mangan CE. Interacting effects of information and coping style in adapting to gynecologic stress: should the doctor tell all? *J. Pers. Soc. Psychol.* 1983; **45**: 223–236.
 28. Baker LM. Monitors and blunterners: patient health information seeking from a different perspective. *Bibl. Med. Can.* 1994; **16**: 60–63.
 29. Baker LM. A study of the nature of information needed by women with multiple sclerosis. *Libr. Inform. Sci. Res.* 1996; **18**: 67–81.
 30. Auerbach SM, Martelli MF, Mercuri LG. Anxiety, information, interpersonal impacts, and adjustment to a stressful health care situation. *J. Pers. Soc. Psychol.* 1983; **44**: 1284–1296.
 31. Helgeson VS, Cohen S, Schulz R, Yasko I. Education and peer discussion group interventions and adjustment to breast cancer. *Arch. Gen. Psychiat.* 1999; **56**: 340–347.
 32. McGorry PD. Psychoeducation in first-episode psychosis: a therapeutic process. *Psychiatry* 1995; **58**: 314–328.
 33. McFarlane WR, Lukens E, Ling B *et al.* Multiple-family groups and psychoeducation in the treatment of schizophrenia. *Arch. Gen. Psychiat.* 1995; **52**: 679–687.
 34. Macpherson R, Jerrom B, Hughes A. A controlled study of education about drug treatment in schizophrenia. *Br. J. Psychiat.* 1996; **168**: 709–717.
 35. Wirshing DA, Wirshing WC, Marder SR, Liberman RP, Mintz J. Informed consent: assessment of comprehension. *Am. J. Psychiatry* 1998; **155**: 1508–1511.
 36. Kleinman I, Schachter D, Jeffries J, Goldhamer P. Informed consent and tardive dyskinesia. Long term follow-up. *J. Nerv. Ment. Dis.* 1996; **184**: 517–522.
 37. Munetz MR, Roth LH. Informing patients about tardive dyskinesia. *Arch. Gen. Psychiat.* 1985; **42**: 866–871.
 38. Chaplin R, Kent A. Informing patients about tardive dyskinesia: controlled trial of education. *Br. J. Psychiat.* 1998; **172**: 78–81.
 39. Buchkremer G, Klingberg S, Holle R, Schulze Mönking H, Hornung WP. Psychoeducational psychotherapy for schizophrenic patients and their key relatives or care-givers: results of a 2-year follow-up. *Acta Psychiat. Scand.* 1997; **96**: 483–491.
 40. Merinder L-B, Viuff AG, Laugesen HD, Clemmensen K, Misfelt S, Espensen B. Patient and relative education in community psychiatry: a randomized controlled trial regarding its effectiveness. *Soc. Psychiat. Psychiat. Epidemiol.* 1999; **34**: 287–294.
 41. Hornung WP, Kieserg A, Feldmann R, Buchkremer G. Psychoeducational training for schizophrenic patients: background, procedure and empirical findings. *Patient Educ. Couns.* 1996; **29**: 257–268.
 42. Hornung WP, Klingberg S, Feldmann R, Schonauer K, Schulze Mönking H. Collaboration with drug treatment by schizophrenic patients with and without psychoeducational training: results of a 1-year follow-up. *Acta Psychiatr. Scand.* 1998; **97**: 213–219.
 43. Henderson C, Flood C, Leese M *et al.* Effect of joint crisis plans on use of compulsory treatment in psychiatry: single blind randomised controlled trial. *Br. Med. J.* 2004; **329**: 136–138.
 44. Luderer HJ, Böcker FM. Clinicians' information habits, patients' knowledge of diagnoses and etiological con-

- cepts in four different clinical samples. *Acta Psychiatr. Scand.* 1993; **88**: 266–272.
45. McDonald-Scott P, Machizawa S, Satoh H. Diagnostic disclosure: a tale in two cultures. *Psychol. Med.* 1992; **22**: 147–158.
46. Goldie L. The ethics of telling the patient. *J. Med. Ethics* 1982; **8**: 128–133.
47. Drury V, Birchwood M, Cochrane R, Macmillan F. Cognitive therapy and recovery from acute psychosis: a controlled trial. II. Impact on recovery time. *Br. J. Psychiatr.* 1996; **169**: 602–607.
48. Kuipers E, Fowler D, Garety P *et al.* London-East Anglia randomised controlled trial of cognitive-behavioural therapy for psychosis. III. Follow-up and economic evaluation at 18 months. *Br. J. Psychiatr.* 1998; **173**: 61–68.
49. Ascher-Svanum H, Whitesel J. A randomized controlled study of two styles of group patient education about schizophrenia. *Psychiatr. Serv.* 1999; **50**: 926–930.
50. Davidoff SA, Forester BP, Ghaemi SM, Bodkin JA. Effect of video self-observation on development of insight in psychotic disorders. *J. Nerv. Ment. Dis.* 1998; **186**: 697–700.
51. Hasui C, Hayashi M, Tomoda A *et al.* Patients' desire to participate in decision-making in psychiatry: a questionnaire survey in Japan. *Psychol. Rep.* 2000; **86**: 389–399.
52. Kitamura F, Tomoda A, Tsukada K *et al.* Method for assessment of competency to consent in the mentally ill: rationale, development, and comparison with the medically ill. *Int. J. Law Psychiat.* 1998; **21**: 223–244.
53. Grisso T. *Evaluating Competencies: Forensic Assessments and Instruments.* Plenum Press, New York, 1986.
54. Freedman M, Stuss DT, Gordon M. Assessment of competency: the role of neurobehavioral deficits. *Ann. Intern. Med.* 1991; **115**: 203–208.
55. Appelbaum PS. Missing the boat: competency and consent in psychiatric research. *Am. J. Psychiatr.* 1998; **155**: 1486–1488.