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Participation in randomised controlled trials: perspectives of psychiatric patients and key relatives

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Abstract

This study assessed the perspectives of adults who had acute non-organic psychiatric disorders and were admitted in a private, not-for-profit medical college hospital, and also of their key relatives, on randomised controlled trials (RCTs). Structured questionnaires and audio-recorded interviews were used for the purpose. We explored their willingness and motivation to participate in two hypothetical RCTs with different risks and burdens. The transcripts of the interviews were analysed using the principles of grounded theory and framework analysis. Of the 24 consenting participants (12 patient and key-relative dyads), the 20 who completed the

interviews had largely positive attitudes towards research and RCTs. However, 50% of those interviewed declined to participate in either of the hypothetical RCTs. The refusal to participate seemed to be influenced by a lack of education; forgetfulness, which impeded the process of making informed decisions; unfavourable benefit–risk–burden ratios; practical difficulties; dependence on treating doctors and relatives for decision-making; and the wish to exercise one's choice regarding treatment options. The factors that motivated the patients and relatives were trust in doctors and organisations, altruism, expectation of personal benefits and favourable risk–benefit ratios. These observations indicate that while the respondents in this study valued research, they were discerning about whether or not to participate in the trials; their decision-making was influenced by individualised assessments of risks and burdens and pragmatic considerations, rather than only by the benefits they would obtain.

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Introduction

Informed consent is an ethical and regulatory prerequisite for participation in clinical research. Ethical and regulatory guidelines and directives stipulate the essential elements of the information that must be provided to potential research participants (1–3). These requirements stem from the premise that the provision of adequate information facilitates decision-

making. Often, however, the result of this is that consent forms become long and complex, and key concepts are poorly understood (4, 5).

While the understanding of information can be improved (6), this does not necessarily affect consent rates (7). Participation in clinical trials is also influenced by sociodemographic, cultural, economic and pragmatic factors, as well as by trust in health providers and “therapeutic misconceptions” that shape decisions on consent (5,7,8–11).

Family members play an important role in the provision of consent in India and can legally provide proxy consent, should the patient be deemed to lack the capacity to provide valid consent (2,7,10,11). In South Asia, there is a dearth of studies which have evaluated the views of patients with psychiatric disorders and their family members on research and randomised controlled trials (RCTs), and which have systematically assessed the capacity of the family members to provide proxy consent. It is important to carry out such studies and we undertook an exploratory study, using quantitative and qualitative methods, to assess psychiatric patients’ and their key relatives’ perspectives of participation in RCTs and their capacity to consent to research.

This report presents the results of our enquiries, which were aimed at:

1. Evaluating the perspectives of people with non-organic psychiatric disorders, and of their key relatives, towards participation in RCTs
2. Assessing their willingness to participate, and their reasons for consenting or not consenting to participate, in two hypothetical RCTs with similar purported benefits but different potential risks and burdens.

In a subsequent article in this journal, we will present additional results from this study (12) that pertain to the participants’ comprehension of the information provided on the two hypothetical RCTs, and their capacity to consent depending on clinical judgments during consent procedures as against independently obtained formal competence assessments using the MacArthur Competence Assessment Tool for Clinical Research (13).

Methods

Study setting and participants

This study was conducted in the adult inpatient units of the department of psychiatry of a private, faith-based, not-for-profit, teaching, general and multi-specialty hospital in south India. Family involvement is central to the philosophy of the hospital, which provides multi-disciplinary care, and at least one relative is required to stay with the patient and participate in the treatment process. Inpatient facilities range from private suites to semi-private rooms and general wards, and the charges for services depend on the patient’s financial capacity, but there is provision for subsidised or free treatment. The care provided to all inpatients, however, is similar.

Those eligible to participate were Tamil- or English-speaking adults who had been voluntarily admitted to the hospital for at least one week, or involuntarily admitted under the provisions of the Mental Health Act (14). It was necessary for them to have a clinical diagnosis of a mental disorder, as described in the World Health Organizations’ International Classification of Disorders (ICD-10), excluding organic psychiatric disorders, personality disorders or adjustment disorders (15). The disorder was required to be of at least moderate severity (scoring 4 or >) on the Clinical Global Impressions – Severity (CGI – S) scale (16), yet they should not have been considered to be acutely ill and require continuous monitoring, or run the risk of harming themselves or others. It was also required that for a person to be eligible, his/her treating clinician and key relatives should not object to his/her participation. The first author screened inpatients admitted consecutively for eligibility, and used purposive sampling to achieve representativeness for voluntary versus involuntary admissions; psychotic versus non-psychotic conditions; gender; and literacy. A key relative of each eligible consenting patient, who spoke Tamil or English and did not have a mental disorder, was also invited to participate. The participants were provided no remuneration. Formal estimations of the sample size were not made as the intent of this exploratory study, which used in-depth analyses, was to obtain a saturation of perspectives.

Study design

We used the prospective preference assessment (PPA) method (17), which involves presenting hypothetical trial designs and using both quantitative and qualitative measures (combining interpretative and realist approaches), to learn about the willingness of the patients/ relatives to participate in the trial, and to get an idea of their concerns regarding and motives for participation. This method has been used to gain an understanding of the preferences of potential participants regarding the design and conduct of trials, to test and enhance comprehension of the key concepts of trials, and to evaluate changes in the participants’ understanding following educational interventions (17–19). The first author administered the study instruments in the order mentioned below, after obtaining written informed consent from eligible patients and their key relatives.

Study instruments

1. *Information sheet and consent form to participate in the study.*

The information sheet inviting participation in the study included the essential elements required for informed consent (2), as well as information on the research designs and methods used to study new medicines. Further, it mentioned the scientific rationale and ethical issues related to the methods used in RCTs aimed at minimising bias and balancing confounders. It was also mentioned that the consenting participants (i) would be requested to respond to a structured questionnaire on their opinions about the purpose and methods of RCTs, and to provide additional perspectives in response

to open-ended questions and supplementary probes; (ii) would be invited to participate in two imaginary RCTs, detailed in additional information sheets in their preferred language (English or Tamil) and could seek clarifications, if necessary; and (iii) would be asked to express their willingness or unwillingness to participate in the hypothetical trials, and clarify their reasons. Moreover, they were informed that their responses during all the interviews would be audio-recorded for transcription and analyses. It was also clarified that participation in the study would neither alter their usual clinical care, nor result in personal benefits or remuneration.

2. *Sociodemographic and clinical data form.*

The sociodemographic details collected included data on age, sex, socioeconomic status, education, literacy level and occupation. The clinical details of the patients were obtained from case notes, treating clinicians and the patients. These details included the ICD-10 diagnosis, the duration of the illness and of the current episode, the presence of psychotic symptoms in the preceding 24 hours, the medication and doses the patient was currently on, whether admission was voluntary or involuntary, and scores on the CGI – S scale. An assessment was made of the grade of their insight during clinical assessments, ranging from grade 1 (no insight) to grade 6 (intellectual and emotional insight).

3. *Clinical Global Impression – Severity:*

The CGI is a standardised and widely used brief assessment tool that comprises three items rating the severity of illness, global improvement and therapeutic response. Each item is rated on the basis of clinical assessments of observed and reported symptoms, behaviour and function at the time of assessment and in the preceding 24 hours (16). For this study, patients were rated only on the severity item, by the first author. The ratings were on a seven-point scale, in which 1 signified normal, not at all ill; 2, borderline mentally ill; 3, mildly ill; 4, moderately ill; 5, markedly ill; 6, severely ill; and 7, among the most extremely ill.

4. *The attitudes to the research questionnaire:*

The questionnaire was prepared on the basis of previous research reports and clinical experience. It consisted of 20 statements, the responses to which were scored on a Likert-type scale, ranging from strongly agree / agree / do not know / disagree / strongly disagree. The additional responses provided were: did not understand / other. The 20 statements covered eight major themes: the necessity of RCTs, patients' motives for participating in RCTs, doctors' motives for conducting RCTs, problems faced by patients in RCTs, opinions regarding some key elements of RCTs (randomisation, blinding and informed consent), involving patients in designing trials, participation in trials being a family decision, and participation in placebo-controlled trials. The patients and key relatives were also invited to elaborate on these themes and their responses were audio recorded. The questionnaire and related interviews were

administered before the information on the hypothetical trials was presented.

5. *Information sheet for hypothetical RCT 1:*

The information sheet invited participation in an eight-week RCT of a new hypothetical oral medicine that had been developed overseas and was reportedly found to be effective in previous uncontrolled studies for reducing stress-related symptoms among people with psychiatric disorders. The RCT required inpatient care for at least the first four weeks and a wash-out period from the current medications before randomisation to the new drug or placebo. The information provided mentioned: the rationale for the wash-out period; the fact that due to the randomised, blinded design, neither the participant, nor the treating clinician could choose or would know which medicine was being allocated to the patients; that there would be weekly assessments of symptoms and adverse events, but no additional tests or investigations; and that trial medicines and additional treatment for providing relief from symptoms or managing adverse events (that were expected to be minor) would be provided free of cost. The inability to predict outcomes with either intervention was highlighted. Details regarding reimbursement for study-related visits, confidentiality, post-trial access to medicines and further treatment were also provided, as was information on the voluntary nature of participation. The participants were assured of the right to withdraw consent without their clinical care being compromised. They were given the opportunity to seek clarifications on the information sheet and the clarifications requested were audio-recorded.

6. *Assessing willingness to participate in RCT 1:*

Open-ended questions were used to learn about the patients' and key relatives' willingness to participate in such a trial, and their reasons for consenting or declining to participate. Supplementary probes evaluated whether specific aspects of the trial (withdrawal of the usual medicines, lack of choice in the allocation of treatment, treating doctor being blinded to allocation of treatment, possibility of allocation to placebo) raised concerns; whether the recommendation of the treating doctor would influence their decision to participate; and whether trials of this nature should be conducted. These probes were developed *a priori* through discussion among the investigators to ensure that the elements in the trial's design that could facilitate or hinder participation were assessed uniformly in the case of all participants.

7. *Information sheet for hypothetical RCT 2:*

The second hypothetical RCT, the duration of which was also eight weeks, compared the same interventions as did the first, but differed in some aspects of methodology. The participants were expected to continue on their current medication and were to be randomised to the new medicine or placebo after recruitment. Another difference was that they had to undergo weekly blood tests for the

first four weeks and at eight weeks (10 ml of blood each time, with unused blood discarded), as well as an EEG and ECG before and after the trial. The other aspects of the design were identical to those of the first hypothetical RCT. RCT 2 posed fewer risks than RCT 1 since there was no need to withdraw the medication they were on, but it was associated with more burdens due to the additional tests.

8. *Assessing willingness to participate in RCT 2:*

The respondents' willingness to participate in this trial and their reasons for consenting or declining to participate were explored. Supplementary probes evaluated whether the continuation of the usual treatment, or the need for blood tests, ECG and EEG influenced the decision on whether or not to participate. We also elicited their responses on which of the two trials they would prefer to participate in. Finally, their views on whether patients and relatives should be involved in the design of RCTs were sought.

All study instruments were administered by the first investigator. The information sheets and informed consent forms were pilot tested, translated into Tamil and back-translated into English. All other instruments used for the study were assessed for cultural and linguistic appropriateness and pilot-tested, and are available on request. The information sheets, informed consent forms and questionnaires, together with the supplementary probes assessing participation in the two hypothetical RCTs, are available from the Web-appendix (<http://ijme.in/wp-content/uploads/2017/08/donae-rct-perspectives-appendix.pdf>).

Study procedures

The first author interviewed all the participants. She was an English- and Tamil-speaking post-diploma psychiatric trainee in her final year of training for the MD degree. She was not the primary clinician involved in the care of any of the participating patients. The interviews were conducted in a dedicated interview room, which ensured privacy and the quality of audio recordings. The patient and key relative were initially interviewed together, in the absence of non-participants, during rapport-building sessions and then separately. The participants were informed about the credentials of the interviewer and told that the study would form part of the interviewer's dissertation. The study-related interviews of each participant took place in multiple sessions, accommodating their treatment schedules. Written information was read out to them, if they wished, or if the first author felt this was necessary, depending on the participant's literacy level. The interviews were audio recorded. Contextual data were recorded in the field notes. Recordings of relevant aspects of the interviews were transcribed verbatim (and translated into English, if necessary) by independent transcriptionists. All authors, or at least the first and third, reviewed the transcripts and relevant sections of the audio recordings independently.

Ethical issues

The Institutional Review Board (Research and Ethics

Committees) of the Christian Medical College, Vellore approved the study protocol, information sheets and consent forms. All participants provided written consent.

Data analysis

Quantitative data: We categorised the responses to the questionnaire on attitudes to research into "Agree" (agree or strongly agree), "Disagree" (disagree or strongly disagree) and "Don't know" (unsure, do not know, or other). Then we further categorised these under eight themes and 16 sub-themes and estimated the proportions of patients and relatives under each of these. We also assessed the proportions expressing willingness to participate in the two hypothetical trials. We compared the sociodemographic and clinical details of those who consented to participate in the study with those who did not, and the differences between the patients' and relatives' response rates to the questionnaires. We used the Student's t-test for continuous data and presented the difference in means with 95% confidence intervals (CI). We used the chi-squared test to compare dichotomous data.

Qualitative data: We listened to the audio recordings of all the interviews and checked the transcripts for accuracy. The first author checked the field notes and incorporated interview transcripts to analyse the data inductively and iteratively, with the aim of developing and manually coding emerging themes and sub-themes. These were guided by the principles of grounded theory (20). The other authors independently reviewed the themes and sub-themes. We developed a consensus study framework (21), in which themes were coded on the basis of their characteristics being explicit and strongly held; and their being reflective of good research ethics, as exemplified in ethical guidelines and regulatory directives (1-3). The coding also took into account themes which highlighted the participants' concerns and increased their comfort with participation in trials. While some of the themes were predetermined, this framework identified many new emerging themes that were generated by the participants. We selected illustrative quotations from the emerging themes and sub-themes to present in our results.

In designing the study, we took guidance from the consolidated criteria for reporting qualitative research (COREQ) (22); and for reporting the results, we referred to the more recent standards for reporting qualitative research (SRQR) (23).

Results

Participants' characteristics

We identified 40 eligible participants (20 patients, 20 key relatives) from July to October 2012. Of them 16 (40%), comprising eight patients and their key relatives, declined to participate, citing lack of interest, practical difficulties or illness as reasons. The eight non-consenting patients were significantly older than the 12 consenting patients. They were also more likely to be graduates, male and persons with poor insight; but these differences were not statistically significant

	Consenting patients (n=12)	Non-consenting patients (n=8)
Voluntary admission: n (%)	6 (50)	4 (50)
Age in years: Mean (SD; range)	24.7 (6.0; 18 to 38)	34.8 (7.3; 25 to 47)*
Females: n (%)	7 (58)	3 (38)
Education: n (%)		7 (88)
♦ Graduate/diploma	7 (58)	1 (22)
♦ Secondary school	3 (25)	
♦ Primary school	2 (17)	
Unemployed: n (%)	5 (42)	3 (38)
Language: n (%)		
♦ English	8 (67)	5 (63)
♦ Tamil	4 (33)	3 (37)
Diagnosis: n (%)		
♦ Schizophrenia/ other psychoses	8 (67)	5 (63)
♦ Mood disorder	3 (25)	2 (25)
♦ Neurotic disorder	1 (8)	1 (12)
CGI- S score: Mean (SD; range)	4.5 (0.5; 4 to 5)	4.5 (0.8; 4 to 6)
Poor insight: n (%)	3 (25)	5 (63)

n = number; SD = standard deviation; CGI-S = clinical global impressions-severity; * mean difference 10.1 years; 95% CI 3.8 to 16.4 years; t -3.417; df 18; p = 0.003

(Table 1).

Twenty-four participants (12 patients, 12 key relatives) consented to participate. Seven of the 12 consenting patients had an ICD-10 diagnosis of schizophrenia. One was diagnosed to have delusional disorder; three had mood disorders (a manic episode without psychotic symptoms; bipolar disorder, current episode of mania with psychotic symptoms; recurrent depressive disorder, current episode severe with psychotic symptoms); and one had a neurotic disorder (dissociative motor disorder). Three of the 12 patients had very poor insight and two were subsequently deemed to lack the capacity to consent due to the worsening of their symptoms. Seven patients had been educated beyond secondary school. Four were admitted in private suites, five in semi-private rooms and three in general wards.

Attitudes towards research and randomised controlled trials

Only 20 of the 24 consenting participants (9 patients, 11 relatives) completed the questionnaire and associated interviews on attitudes to research. Eighteen (8 patients, 10 relatives) completed interviews related to the hypothetical RCT 1 and 16 were interviewed for the hypothetical RCT 2 (7 patients, 9 relatives). Of the patients not completing the assessments, two could not participate due to a deterioration in their clinical condition. The others declined further participation, or could not be adequately assessed before discharge due to practical difficulties in the scheduling of interviews. The data from the questionnaire on attitudes are presented in Table 2 and are discussed alongside the

qualitative information from the interviews that elaborate on the responses to the questionnaire. Due to the small numbers recruited to the study, the differences between patients and relatives in the response rates to the questionnaire on attitudes to research were not statistically significant.

Theme 1: The importance of research

All participants endorsed that research is important and agreed that it is necessary to test new drugs scientifically before using them in clinical practice (Table 2). For example, a participant stated, "I agree strongly regarding the need for clinical tests on patients. Without strong studies, it cannot be used in a general manner."

Theme 2: Motivation for patients to participate in clinical trials

- All patients and key relatives felt that the most important motivating factors for participating in a clinical trial are faith in the doctor, and the institution.
- All key relatives and nearly all (89%) patients agreed that research participants have altruistic motives, and participate in trials in the belief that this would help reduce human suffering.
- Similarly high proportions of relatives and patients considered it a duty to participate in research, if invited, since it was because other people had participated in research that they enjoyed the benefits of medicines that had been proven to work.
- Five out of 9 patients (66%) also felt that participating patients expect to get personal health benefits. A similar proportion (67%) disagreed with the notion that patients take part in research trials mainly for monetary benefits (Table 2). In the words of a patient, "...they want to get cured". Another patient felt it was morally incorrect to expect monetary benefits for research participation, stating that "... now we are staying here as patients. You are asking for our help for the research study. It is wrong to ask you to provide money for answering the questions which you asked..." However, another patient acknowledged that economic necessity might motivate some to participate: "If he is, you know economically not strong, so for that, for the monetary benefit, he may try. Otherwise, for the money no one will try to take a new medicine; maybe due to some circumstances..."
- In contrast, nearly half the relatives (45%) disagreed that the expectation of an improvement in one's health or monetary benefits motivated patients to participate in clinical trials. Only a third (36%) thought otherwise (Table 2). A relative said, "Considering the risks to health in new trials, healthcare cannot be compromised for monetary gains."

Theme 3: Doctors' motives for conducting clinical trials

- All patients and 82% of their relatives endorsed the view that doctors conduct trials with the aim of helping their patients (Table 2). A relative said: "They can find

Table 2
Attitudes of patients and key relatives towards research and randomised controlled trials

Theme	Sub-theme	Patients (n=9)			Relatives (n=11)		
		Agree (%)	Disagree (%)	Don't know (%)	Agree (%)	Disagree (%)	Don't know (%)
Importance of research	It is important to test new drugs in research before using them clinically	9 (100)	-	-	11 (100)	-	-
Motives for participation in clinical trials	Trust in doctors and organisation is most important	9 (100)	-	-	11 (100)	-	-
	Altruism (to relieve human suffering)	8 (89)	-	1 (11)	11 (100)	-	-
	Participation is a duty	8 (89)	-	1 (11)	11 (100)	-	-
	Expectation of personal health benefits	5 (66)	2 (22)	2 (22)	4 (36)	5 (45)	2 (18)
	Expectation of monetary benefits	3 (33)	6 (67)	-	4 (36)	5 (45)	2 (18)
Doctors' motives to do research	Mainly to help patients	9 (100)	-	-	9 (82)	1 (9)	1 (9)
	To conduct experiments	7 (78)	-	2 (22)	7 (64)	2 (18)	2 (18)
	To promote career	4 (44)	5 (56)	-	7 (64)	3 (26)	1 (9)
Problems with participating in clinical trials	Information in consent forms is difficult to understand	5 (56)	3 (33)	1 (11)	7 (64)	4 (36)	-
	Do not fully address patients' concerns about efficacy and safety	5 (56)	-	4 (44)	4 (36)	5 (45)	2 (18)
	Confidentiality is compromised	5 (56)	4 (44)	-	2 (18)	8 (73)	1 (9)
	Time-consuming and interferes with doctors' clinical work	4 (44)	4 (44)	1 (11)	6 (56)	5 (45)	-
	Motives of doctors and organisations are difficult to trust	4 (44)	3 (34)	2 (22)	6 (54)	5 (45)	-
Methods used in RCTs	Randomisation and blinding are justified	7 (78)	1 (11)	1 (11)	8 (73)	2 (18)	1 (9)
	Placebos are not justified	6 (67)	2 (22)	1 (11)	3 (27)	7 (64)	1 (9)
	If informed consent is taken, randomisation, blinding and placebos are justified	7 (78)	1 (11)	1 (11)	5 (45)	4 (36)	1 (9)
Decision-making	The decision to participate is the family's decision, not an individual's	6 (67)	3 (32)	1 (11)	10 (91)	1 (9)	-
Participants' involvement	Involving patients in understanding research and helping design trials is not necessary	2 (22)	3 (34)	4 (44)	3 (27)	8 (73)	-
Willingness to participate in trials	If invited, I will most probably participate in a placebo-controlled randomised trial of a new drug	7 (78)	1 (11)	1 (11)	4 (36)	3 (28)	4 (36)

n = number; RCT = randomised controlled trial

the medicine by doing a lot of tests as early as possible, so that even a child in the mother's womb can be protected from this (illness). So we can do something for this. Thus, I cannot say that the doctors are doing (research) for fame or pride. They are also doing service. That we are seeing with our own eyes."

A patient stated, "They want to cure the patients. They are caring."

A relative added, "According to me, doctors are doing this research study to help others and to curb the disease. Nothing but that." One of the relatives disagreed that doctors could help their own patients, since the immediate results might not suffice for this purpose: "... the research is not going to have any immediate result. Only if it is beneficial, he will have to go a long distance to establish it. Only after that can the medicine be generalised or approval to use the medicine in general be given."

- g. The majority of patients (78%) and relatives (64%) agreed that motives related to academics also drive doctors to experiment with patients. More relatives (64%) than patients (44%) opined that doctors conduct

research to promote their own careers. The actual place of research in a doctor's career path was not entirely clear to some. According to a relative, "The profession of a doctor is such that to promote one's career, one is not expected to do any trials. They are expected to do experiments for the benefit of the patient or for the community in general, not for their own career. I do not think they should be doing it."

Theme 4: Problems patients face in participating in RCTs

- h. More than half the patients (56%) and relatives (64%) agreed that consent forms are difficult to understand, while a third of the patients (33%) and relatives (36%) disagreed (Table 2). In addition, the participants highlighted that a patient's mental status could create difficulties with the consent procedures. According to a relative, "... because of audio hallucinations, he is not able to understand things easily. He requires more time to understand anything and if you disagree with him on any point, he gets irritated. He even forgets whether he has taken the medicine or not. He cannot tell me certainly whether he has taken the medicine. This is the state of his mind, so this being the case, he may not be able to understand these things. That is my perception."

Another relative felt that seeking consent, particularly for selective aspects of care, can cause anxiety among patients: "Nobody asked for my consent while going for aripiprazole; but while going for the clozapine therapy, everybody is asking for my consent. Why my consent? Why are they not starting it? So their asking for consent itself raised a lot of fear... particularly regarding agranulocytosis in my case."

- i. More than half the patients (56%) and a third of the relatives (36%) felt that RCTs do not fully address patients' concerns about whether the drug is effective or safe. Many relatives disagreed (45%) with this view.
- j. More than half the patients (56%) felt that taking part in clinical trials usually compromises confidentiality, but the majority of relatives (73%) disagreed with this view.
- k. The patients and relatives were nearly evenly divided on whether RCTs consume their doctors' time and interfere with the care of patients.
- l. Similarly, the patients and relatives were divided on whether patients find it difficult to trust the motives of the doctors and organisation conducting a clinical trial. Referring to his experience with the treatment of a relative of his, a patient said,

"I do not blame them (doctors). They tried to infuse confidence in me, but I could not believe them at that time. I did not have that much confidence at that time. Even if I believed them, I wanted to have a third opinion."

- m. As for the reasons for participating in RCTs, reasons other than those stated in the questionnaire were also forthcoming. One relative felt that the type of medication being tested influences participation, "It also depends on the intensity or like what type of medicine and what are the risks involved. So if it is a normal medicine, like suppose paracetamol, maybe someone wants to try something similar to it. Maybe nobody will object to it because that will not cause harm. But if it is such a medicine which can harm in some other way, then a patient can resist... He will be a little hesitant."

Some felt that lack of response to other medication may be a reason to join a trial. According to one of the participants: "Certain patients may like to participate because they do not have any other options. Many tablets have already been tried out on him. It has not been beneficial to him, so he does not have any option but to let us try a new medicine... that may be one of the reasons."

Theme 5: The methods used in RCTs aimed at increasing internal validity

- n. The majority of patients (78%) and relatives (73%) agreed that the methods used in RCTs, whereby patients and doctors do not have a choice about the treatment given to the patient, are justified because they help one be sure if the new drug actually works

(Table 2). In the words of one participant, "If Rohan is in group 1 and Mohan is in group 2, and Rohan is actually given the medicine and Mohan is given a dummy tablet, both will feel like they have been given the medicine, and after some time, you can see the (true) result." Some equated randomisation to luck and "athishti". A relative said, "We are saying that this is their luck. You have already informed us that it is just like a toss. It goes according to their luck." Another relative added, "If you don't know and I don't know (what medicine will be given)... then it is our luck... I don't have a problem with that."

- o. The same proportion of patients (78%), but fewer relatives (45%) agreed that randomisation and blinding are justified if informed consent is taken.
- p. This divergence of views between patients and relatives was particularly apparent when it came to the use of placebos. The majority (67%) of patients agreed that giving half the patients in RCTs a dummy tablet that looks identical to a new medicine is not justified, even though it may be a good way of doing research. As one patient put it, "If you give them a dummy tablet, then their illness will get worse." Only 27% of the relatives agreed with this.

Theme 6: The decision to participate is the family's, not the individual's

Most relatives (91%) and many patients (67%) felt that the family, and not the patient alone, should take the decision to consent to participate in trials. However, the mother of one of the patients responded, "Patients alone can take the decision. The patient's cooperation is the most important. They won't accept it if we (relatives) tell them. Even though we are accompanying them, they won't accept it."

Theme 7: Involving patients in understanding research and helping design trials

The majority of the relatives (73%) felt that the patient's involvement in designing trials is necessary, but fewer patients (34%) held this view.

Theme 8: Willingness to participate in a placebo-controlled trial

Contrary to the negative views expressed on the use of placebos, the majority of the patients (78%) appeared willing to participate in a placebo-controlled trial (Table 2). The opinions of those who were against such participation were influenced by aversion to risk and pragmatic considerations. "I want that only tested medicine should be used. I do not want to take more risks," was one patient's explanation, while another stated, "I could have taken part if I had not been on this psychosis medicine already."

Only a third of the relatives (36%) expressed willingness to permit participation in placebo-controlled trials. One relative stated, "Generally, I think patients will not be willing to take part in trial medicines because what everybody wants (is) that new medicines should come and more beneficial medicines should come, but I should not be the first to try.

Let others be tried and I will take the benefit. It is the general nature of humans. Every day we are coming across a new antibiotic, but nobody wants that he should be the first man to try the new medicine."

Some relatives felt that while participation in such trials may be ideal, more pragmatic considerations also need to be acknowledged. Thus, one said, *"If a patient is recovering well with the treatment given to him by the doctor, he may not agree to the trials. Why waste time on the trials if the trials may be useful, or may not be useful? Rather, they may leave behind some side effects also, so why take risks? Theoretically many things are correct, but when things apply to practical life, most people flee the scene."* Another relative said, *"Today, in the fast-running world of selfish people, if you think, 'I will sacrifice and others will be benefited,' that's okay. I do not think that."*

One of the relatives summed up these perspectives succinctly: *"What I perceived is that this is simply a theoretical study and we want to talk about these things, but actually I do not intend my patient to be given any new medication, even if it is a dummy one."*

Willingness to participate in the hypothetical RCTs

In the questionnaire on attitudes to research and RCTs, 78% and 36% of the patients and relatives, respectively, had stated that they would most probably participate, if invited, in a placebo-controlled, randomised trial of a new drug. However, only 3/8 (38%) of the patients interviewed were likely to participate in the hypothetical RCT 1, and 62% were not inclined to participate. More of them (4/7; 57%) reported that they would consider participation in the hypothetical RCT 2. The key relatives of the patients were evenly divided on whether they would permit their patient to participate in RCT 1 (5/10; 50%) and were marginally more likely to refuse permission (5/9; 56%) to participate even in RCT 2. Again, because of the small sample size, these differences between the patients' and key relatives' responses were not statistically significant.

The patients' preference for RCT 2 appeared to be largely influenced by the fact that they could continue their usual medicines. *"...Because the required medicine will go on regularly and the new medicine will also be tested (in the second trial); but in the former one, the medicine will be completely stopped and the level of the medicine in the brain will go down, so all the hard work of two to three months will go in vain"* (patient 2: 27-year-old male; diagnosis – schizophrenia).

One patient felt that the doctors should decide which trial would be better.

"Rather than people finding it easier, it depends upon the doctors, I think. Because the doctor knows about the patient's health more than the patient ... so it is completely up to the doctor as far as I am concerned. Though the patient must be willing to give their consent, the doctor must be the key factor in answering the call here because whatever kind of a patient he or she is, the doctor will know better than he or she" (patient 6: 26 years, male; diagnosis – mania without psychotic symptoms).

Reasons for unwillingness to participate in the hypothetical trials

The major themes and sub-themes that emerged as barriers to participation in the hypothetical trials are summarised in Table 3. The inability to remember information due to cognitive deficits associated with mental illness, and a lack of education made it difficult for patients to make an informed choice. The patients and relatives cited various other reasons for which they found participation undesirable, including an unfavourable ratio of risks and burdens compared to benefits. These responses suggested that the participants were discerning about what they considered was in their best interest, and were not easily swayed by the invitation to participate. The other factors influencing their reluctance to participate were the unsuitability of the study drug for the condition being treated; the concern that the imported new drug may not be available in the future; fear of the side-effects of the new drug; the possibility of the exacerbation of the condition being treated if the usual treatment were to be withdrawn; concerns regarding the lack of efficacy of the new drug; and the burden of undergoing investigations. The relatives also cited pragmatic concerns, such as time constraints, lack of support, other commitments and financial problems. An important reason for the lack of willingness to participate were the opinions of significant others. The relatives felt that the recommendation of the treating doctor was important, and both patients and relatives felt that the responsibility for the decision to participate lay with other family members, such as parents or spouses. However, they also expressed a desire to choose their preferred treatment options (Table 3).

Reasons for willingness to participate in the hypothetical trials

Trust was the major theme that emerged from the reasons cited by the patients for wishing to participate in the trials, and by relatives for permitting their relatives to participate. Trust in doctors and in the organisations they worked for, and trust in the recommendations of their treating doctor were prominent sub-themes. However, this trust clearly led to a therapeutic misconception that minimised any potential risk, since the participants expected that the requirements of research would not supersede the requirements of the clinical care they expected from their doctors (Table 4). Altruism was another theme that emerged during the discussions, though the desire to contribute to reducing human suffering may have, in the case of some patients, been influenced by over-optimism resulting from their mental state. The expectation of personal health benefits, and economic and material benefits also influenced participation. The perception that the proposed intervention would have a favourable risk-benefit ratio was another motive for participation. As noted above, the fact that the drug was imported was a deterrent to participation for some, but this very fact served to lure others.

Opinions regarding the use of placebos

Many patients and relatives had unfavourable views about the use of placebos.

"Do not give a dummy medicine. What is the use of giving the dummy medicine? It won't work in the patient's body. There is no chance of cure. Then what is the use?" (mother of patient 1)

"All these tablets are related to the brain. If something, even a small chemical reaction happens in the brain, I am scared of what will happen." (mother of patient 6)

"Madam, whatever medicine you give her she must become normal. If she goes back to her previous state, it is scary isn't it? It's three months since we came here and now she is better; if you now give her a dummy medicine and then something happens? Then...?" (mother of patient 9)

Others were less concerned about the potential harmfulness of placebos.

"I have no concerns about the dummy tablets. It is not in anybody's hands." (father of patient 10)

In the case of some, this lack of concern was linked to trust in doctors and therapeutic misconception:

"I am not worried (about dummy medicine). You (doctor) know about it. The side-effects of the dummy tablet or the side-effects of the GVV tablet (study drug) are known by the doctor. I don't know. And the doctor should advise what should be taken" (grandfather of patient 3).

Opinions on the involvement of patients in designing clinical trials

While most participants were undecided on this issue, some had definite opinions. "These studies are done on patients, so they have to help design trials" (patient 3: 18-year-old male; diagnosis schizophrenia). The responses of others were qualified: "One or two people who you think are credible – maybe 30% of the people participating – they may give economical, theoretical points or research-related points" (father of patient 10).

Discussion

This cross-sectional study, which used mixed methods of research, provides valuable insights into the attitudes and preferences of psychiatric patients and their relatives regarding RCTs. It also throws light on the essential elements of the informed consent process that can help in designing and interpreting future trials, particularly those involving psychiatric patients.

Key findings

All participants endorsed the view that it is necessary to carry out research on new drugs before using them clinically. Many also supported the view that participation in trials is an important duty, born of altruism. In other words, these participants valued the objectives and methods of modern research.

An important factor that motivated patients to participate in clinical trials was trust in doctors, particularly their treating doctors, and their organisations. Trust is a commonly reported reason for patients and relatives to consider the participation

in trials of people with and without psychiatric disorders, both in the developed and developing countries (7,9,10,11). However, trust is also considered a reason for therapeutic misconception, whereby patients confuse the nature and aims of research in clinical settings with those of usual clinical care, thus underestimating the risks and overestimating the benefits of the trial. As for obtaining the patient's/ relative's consent, the importance given by patients and relatives to trust in the treating doctors' recommendations is in contrast to recommendations in ethical guidelines (2), which prescribe that consent should ideally be obtained by people not providing clinical care so as to prevent conflicts of interest. If this recommendation were followed and the treating doctor not involved in the discussions on informed consent, the consent rates would probably be lower. One option is for an independent person to check how far the participants' decision was voluntary and their understanding of key aspects of the study after their consent has been obtained by the treating team.

The study subjects' views on participation were also influenced by the expectation of personal health benefits, fear of side-effects, and the apprehension that the unproven medicines might worsen their underlying problems. Pragmatic difficulties associated with the costs and the duration of their involvement in the trial were other factors that played a role in their decision. The majority of relatives and a third of the patients felt clearly that apart from the opinions of their doctors, decisions on consent required family involvement. These factors clearly outweighed altruism and, to some extent, trust, as the motivating factors for many who participated in the discussions on the hypothetical trials. Several studies eliciting participants' views have reported similar findings (5,7,9,10,11).

The majority of patients and relatives believed that randomisation and blinding are justified. The participants, however, were divided in their opinions on the use of placebos, even if informed consent was obtained for their use. Many clinicians and researchers share the concern about the use of placebos (5).

An important observation regarding recruitment to this study was that a sizable number of eligible patients and relatives (40%) refused to participate because the study involved no actual interventions. In addition, while two-thirds of patients and a third of relatives indicated that they would most probably participate in a placebo-controlled randomised trial of a new drug, only 38% of patients and 50% of key relatives were willing to be involved in the hypothetical RCT 1, which involved withdrawal of the patients' usual treatment. Only 57% of patients and 44% of key relatives expressed willingness to participate in RCT 2, which did not involve withdrawal of the usual treatment but included additional investigations. Even higher rates of refusal were reported in another published Indian study (specifically excluding those with psychiatric disorders) – 70% of the adults invited to participate in a hypothetical trial refused to do so, irrespective of the amount

Table 3		
Reasons for unwillingness to participate in the hypothetical RCTs		
Themes	Sub-themes	Perspectives of participants
Difficulty in making an informed choice	<i>Inability to remember information</i>	"I am forgetting everything, what I am reading. How can I remember the name of the drug or the chemical? I will not be able to write and give the side-effects." (patient 1: 38 years, female; diagnosis – schizophrenia)
	<i>Lack of education</i>	<p>"Because people who know that this is research, this is the science and all that will not be afraid... so education plays a lot of role..." (patient 2: 27 years, male; diagnosis – schizophrenia)</p> <p>"The education level and era comes in. The people of this era, who have some scientific background or who know that some research is necessary may say yes, but it could be very difficult to convince the fathers and grandparents and all that." (husband of patient 5)</p> <p>"Because knowledge is less; there are less educated people. There are more illiterate people. 'Why should we come forward first?' That sort of attitude also spreads to educated people." (patient 6: 23 years, male; mania without psychosis)</p> <p>I cannot understand why you are asking questions like this. I have never even gone to a hospital before. I have delivered five children but still have never been to a hospital. I have not heard of such things as research and testing medication" (mother of patient 8)</p>
Unfavorable ratio of risks, benefits, burdens	<i>Fear of side-effects of drug</i>	<p>"I do not feel like going into any new medicine trial. The medicines that are already proven right had so many adverse effects on me that I dare not go on any medicine that is not yet proven. I already know that my body is so sensitive to the (anti-) psychotic medicine – how can I go with the trial? Does it make sense? How can I go with the trial?" (patient 2: 27 years, male; diagnosis – schizophrenia)</p> <p>"One thing is sure- any (anti-) psychotic medicine does not have good side-effects. It is bound to trouble the patient and during my experience in this field in the last two years with my son, I have come to learn this – that no (anti-) psychotic medicine has good side-effects. When I do not have any option, we have to treat the patient to get him cured. Along with the recovery, he also happens to get some (side) effects. Then somewhere, we have to make the compromise and let this compromise be made with the known medicines. Known and tested. That is my personal opinion." (father of patient 2)</p> <p>"I would fear that her other problems might increase or maybe that medicine may not go hand in hand with whatever medicines she is taking...Or maybe (she may have) some type of side-effects." (husband of patient 5)</p>
	<i>Study drug appears unsuitable</i>	<p>"He is already suffering from schizophrenia of perhaps a high degree and this medicine is not meant for schizophrenic symptoms. This is only meant for stress, so this medicine may not be useful for his original disease." (father of patient 2)</p> <p>"The persons willing to go in this trial I think will be 1/10 persons. Because it is risky. So many side-effects can occur. We do not know anything. This is coming from outside India. Why are they experimenting in our country? Why are they not experimenting in their own country? You test on your own people and then it will be okay; then send to my country." (patient 2: 27 years, male; diagnosis – schizophrenia)</p> <p>"If we consider the present condition of the patient and then judge this medicine, then maybe it does not suit her requirement." (husband of patient 5)</p> <p>"Medicines are being supplied from Switzerland. Suppose due to some reason, the supply of medication gets stopped. Then what would happen to the patient?" (mother of patient 6)</p>
	<i>Fear of stopping usual medicines</i>	<p>"What has made me make the decision that at this stage, he will not be going for any clinical trial is simply that it will remove all the medications that are being given to him. This is bound to create problems. Stopping the current medicine altogether and putting the patient on the new medicine – that would jeopardise the whole current treatment process." (father of patient 2)</p> <p>"The doctors have told us to continue the medication. Now you are saying the medication will be stopped. Now I am scared that the illness will come back." (mother of patient 4)</p> <p>"If the current medication is stopped, I am scared about what will happen." (mother of patient 9)</p>
	<i>Fear of condition worsening with new medicines</i>	<p>"I am as it is in such a bad condition. Suppose it gets even worse after I take the new tablets?" (patient 1: 38 years, female; diagnosis – schizophrenia)</p> <p>"The situation is very paradoxical actually. A trial that has been carried out only on animals, mice and cats is not enough for the medicine to be tried on human beings. Everybody does not have that much courage to participate. Maybe I am weak (in this respect). You will find many more persons like me. You may find many brave persons who would like to encourage the tests, but the number is perhaps less in India, and perhaps this is the reason Indian scientists have not been able to come up with new medicines at the rate expected of them." (father of patient 2)</p> <p>"Because my patient at this stage is in a critical condition. I already lost about two years in treatment and now I do not want any more experiment regarding the medicines. What I want (is that) only tested medicines should be used in this case." (father of patient 2)</p>
	<i>Burden of investigations</i>	"Different types of tests are to be carried out during the entire procedure. That is certain to put extra burden on the patient; psychological load on him. Schizophrenia is such a disease that I cannot predict whether if he agrees today, he will agree tomorrow. Once he sees that EEGs and ECGs are being conducted on him, he may think that the trial itself is false and (he is) actually being treated differently for the disease. These things may come to his mind." (father of patient 2)

<p>Pragmatic concerns</p>	<p><i>Time and other constraints</i></p>	<p>"I cannot take part in this research because I have children. If I participate, there is nobody to stay with me. I have to stay alone. My health condition is not good. Nobody is there. Today my brother is here. He cannot stay because he has to go for work." (mother of patient 1)</p> <p>"Once my patient takes part in this study, the usual medicines will be withdrawn temporarily and he will be put on new medicines. This is likely to lengthen the treatment period here. That I cannot afford. This is the primary reason to refuse participation." (father of patient 2)</p> <p>"Even for the four weeks – suppose if they say that just for the trial we have to stay for four weeks. Then maybe most of the people will say no, unless they live nearby. Who will spare one month just for your trial?" (husband of patient 5)</p> <p>"I am from a faraway place. There are children at home. We cannot come for these trials. We cannot stay here for four weeks. Even getting meals here is expensive. My husband, who is at home, is also eating at a hotel." (mother of patient 4)</p>
	<p><i>Importance of treating doctor's recommendations</i></p>	<p>"What is the purpose of the trial – to improve her condition or to make this trial a successful one? Because seeing her condition, I don't think the doctor will say yes (to stopping medication)." (husband of patient 5)</p> <p>"The patient is taking the medication her doctor has given. Meanwhile, if we go and join this trial... how will we answer the doctor?" (mother of patient 4)</p> <p>"I won't know what medicine I will be taking. That will be difficult for my health. My doctor knows my condition, so if my doctor does not have a choice, my health will become worse." (patient 3: 18 years, male; diagnosis – schizophrenia)</p>
<p>Decision depends on the opinions of others</p>	<p><i>Opinion of family members important</i></p>	<p>"My wife is not going to agree. Mothers are more possessive of their children; more concerned, I think, in general. Fathers may take some risks, but mothers will not. It may or may not have a detrimental effect, but she will never agree. She may not think in the broader terms that I do have the courage at times to think in... I think this scenario exists in every Indian family." (father of patient 2)</p> <p>".. (if) you have signed the consent slip maybe even with their (family members') consent, but afterwards the family members say that I had said I had not wanted to. Who will answer them if something goes wrong? Then how will you be able to face them? They will accuse you. Nobody would like to be accused." (patient 5: 26 years, female; diagnosis – schizophrenia)</p> <p>"..but, as I am under my parents, I will listen to what they say. I don't think they are interested." (patient 6: male; bipolar disorder: mania without psychotic symptoms)</p> <p>"I can say only after I ask my husband." (patient 8: 23 years, female; diagnosis – schizophrenia)</p> <p>"Once we join the trial, you want us to come back... but will her husband allow her to be brought (back here)?... I don't know. I can decide only after asking her husband. I cannot do anything without asking him." (mother of patient 8)</p> <p>"If I take a decision alone and something happens, then my husband will ask me why I did not ask him about it." (mother of patient 9)</p>
	<p><i>Other options preferred</i></p>	<p>"I could have agreed to this trial test had there been no other options left for me, but as of now, I think there are certainly other options available, so at this juncture I am not prepared to let my boy participate in the trial." (father of patient 2)</p> <p>"Even if the doctor recommends (it), I won't take part. Now I am better; now why should I try other medicines?" (patient 4)</p> <p>"At present, if we are trying clozapine on her. Like suppose after one year, we find that is also not working... then we will say yes because we don't have any other options. Now when she is already being tried on clozapine and if you say, 'Okay, for our research purpose, let us try this medicine,' I will say sorry." (husband of patient 5)</p>
<p>Exercising choice</p>	<p><i>Personal choice</i></p>	<p>"I can only take the medication I choose." (patient 1; 38 years, female; diagnosis – schizophrenia)</p>

of information disclosed (7). This suggests that Indian patients are generally discerning about the studies they consent to participate in. It also indicates that published RCTs which involve Indian participants in interventions, and in which very few eligible people have refused to participate, should raise concerns about the nature of the informed consent process used in that trial. Such a scenario should also lead us to examine whether incentives, including access to better care than they would get outside the trial, influenced their decisions to participate.

Limitations

The limitations of this study include the following.

- a. The study had a relatively small sample size, which resulted from the fact that more people than anticipated refused to participate. The nature of this study, which required

many sessions to complete, probably contributed to low recruitment and also, a lower completion rate than that envisaged. The small numbers recruited also resulted in insufficient power to rule out chance differences between the patients' and their relatives' responses in the questionnaire on attitudes to research and RCTs. Further, the relatively small sample size limits the generalisability of the results.

- b. We did not assess whether the order of presentation of the information on the hypothetical trials may have affected the decisions on consent. Since the differences in the risks and burdens involved in the trials were so clear, we did not think that the order of presentation would affect the decisions of people who understood the implications of these differences. The higher refusal rates for RCT 1,

Table 4		
Reasons for willingness to participate in the hypothetical RCTs		
Themes	Sub-themes	Perspectives of participants
Trust	<i>Trust in doctors and the organisation</i>	"I may not have a problem. I saw the earlier research and all are very authentic and if the doctor recommends..." (patient 5: 26 years, female; diagnosis – schizophrenia) "Doctors won't stop (medication) for nothing. There will be a reason behind it and that would not let me down that much. That belief in doctors helped me arrive at the conclusion. I firmly believe that doctors will help me to come out of a problem if it arises. Everything can be done on the patient if the doctors suggest it is good to go for it." (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms)
	<i>Trust in the treating doctor</i>	"If the treating doctor recommends, we will participate. Nothing else needs to be asked, we will join." (mother of patient 9)
	<i>Therapeutic misconception</i>	"I will ask you to do whatever you wish. We don't know what medication should be given to whom, but you (doctors) do, and you are taking care of crores of people. If anything to be scared of was happening in this hospital, would so many people be coming here? If anything happens after giving the dummy medicines, the doctors only will take care. So I am not scared. You (doctors) can do everything, we can do nothing." (mother of patient 8) "Whatever you do, you are doing as doctors; so if it is good or bad, we will accept it. Whatever the doctor gives it will be for the patient's good and so we will accept it. Because you are asking, I will agree... I feel that you will not ask me to do something that will harm my daughter. So with that trust I am agreeing to participate. I believe you will want to do only what is best for me." (mother of patient 9)
Altruism	<i>Helping people</i>	"It is my nature... I like new things to come. If it is successful, it will give a new turn to the lives of the patients." (father of patient 10) "It is for a good cause, that's it. I am in a situation to be participating in this to get a good solution to a problem. Whereas other people may not take part, they might be requiring it, so in that case I can help them out. Helping people – that's the sole motive for me, at least for me." (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms)
Expectation of personal benefit	<i>Health benefits</i>	"Personally do, yeah, because if I suffer (from) that sort of a disease in future, I might be given those medicines to sort out this problem. Who knows?" (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms)
	<i>Economic and material benefits</i>	"Some monetary compensation must be there from the research side. He is volunteering to undergo so many tests, he must get a medal at least." (father of patient 10) "You said, 'Your stay will be free of cost for the four weeks you stay here.' That helped me arrive at this decision because we are not that well off (as) to pay to stay for a long period of time. It was a good incentive that helped me to arrive at this decision." (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms) "I am probably likely to participate in this trial, provided I am not disturbed monetarily. Food also needs to be given. You are providing for conveyance, lodging. Food also has to be provided." (father of patient 10)
Favourable risk-benefit ratio	<i>Lack of serious adverse effects</i>	"Both (drugs) are not injurious. It might suffocate me a bit and get me down a bit as you said; a few problems with that, but it won't be harming me. So that's what helped me to state that I am very likely to participate in it." (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms)
	<i>Blood tests not a problem</i>	"Not much concern, because even for the normal treatment blood tests are done." (patient 8: 23 years, female; diagnosis – schizophrenia) "I have given blood earlier and I know that that is not a big issue, so it does not matter." (patient 6: 23 years, male; diagnosis – mania without psychotic symptoms) "I am afraid of needles. Even when I had malaria and was sick, I would not give blood tests. But I will agree to it for her because I want her to be well." (mother of patient 8)
Miscellaneous	<i>Foreign drug</i>	"It doesn't matter; the medicine from Switzerland is good. Indians would like imported, so if it is from Switzerland, it is good." (husband of patient 5)

which posed greater risks due to the withdrawal of the usual medicines, but fewer investigation-related burdens than RCT 2, suggest that the participants understood the implications of the differences in the study designs.

- c. Since not all recruited participants contributed to all assessments, we are unsure whether a saturation of views was actually achieved. However, previous qualitative studies of a similar nature reported from this institution have assumed saturation with a sample of 14 participants (24).
- d. The information gathered on participation in hypothetical trials may not tally with what happens in the case of actual recruitment in genuine trials. However, in previous studies using the prospective preference assessment method, the

willingness to participate in the hypothetical trial increased the likelihood of participation in actual trials (21).

In spite of these limitations, the findings of this study provide insights into the views of psychiatric patients and their key relatives regarding participation in research, adding to the growing body of research evidence from low- and middle-income countries on informed consent. This has heuristic value to aid future research. However, the results presented in this paper need to be interpreted in the light of those of the clinical assessments of the capacity to consent and of formal competence assessments. These will be reported in a separate article in this journal (12).

Conclusions

The findings of this study indicate that the selected sample of consenting psychiatric inpatients and their consenting key relatives valued modern research, considered participation in clinical trials an aspirational goal, and trusted that their doctors would make decisions on their participation that would be in their best interest. Yet, roughly half of the participants were unwilling to participate in the two hypothetical trials. Contrary to the views of some who feel that trial participants from India, particularly those with psychiatric disorders, are vulnerable to exploitative recruitment to clinical trials, the findings of this study indicate that if sufficient information is provided on participation, patients and their key relatives consider individualised assessments of benefit–risk-burden ratios and other practical details before making a decision.

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