

Supervised treatment for outpatients with schizophrenia (STOPS+)

Submission date 13/05/2019	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered
		<input checked="" type="checkbox"/> Protocol
Registration date 04/06/2019	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 12/09/2022	Condition category Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Schizophrenia is a severe long-term mental health condition. It causes a range of different psychological symptoms including hallucinations (hearing or seeing things that don't exist), delusions (unusual beliefs not based on reality), muddled thoughts based on hallucinations or delusions and changes in behaviour. Schizophrenia is a common cause of long-term disability in the 15-49-year-old group and whilst effective treatments are available, in developing countries around two-thirds of patients receive no treatment.

This lack of treatment, commonly known as the 'treatment gap' arises due to factors including poor treatment adherence, a lack of primary care involvement and poor access treatments. We have previously reported a new approach (Supervised Treatment in Out-Patients for Schizophrenia (STOPS)) that resulted in improved treatment adherence and functioning in a resource-poor setting in Khyber Pakhtunkhwa (KP), Pakistan. In this study we trained and supported relatives and family members to monitor medication taking, building on the success of a similar approach used for patients with tuberculosis.

We now aim to implement and evaluate a 'scaled-up' version of STOPS (STOPS+) which is based on the World Health Organisation mental health guidelines and maintain treatment adherence with the help of family members and text message reminders. We will work with primary care physicians and multipurpose primary care technicians to task shift care, under the supervision of mental health experts.

Who can participate?

Participants aged between 17-65 with a diagnosis of schizophrenia or schizoaffective disorder who are living within the catchment area of one of the participating Primary Healthcare Centres (PHCs).

What does the study involve?

24 PHCs in Peshawar, KP will be randomised to deliver either STOPS+ or Enhanced Treatment As Usual (ETAU). We will recruit 526 patients (263 in each arm) suffering from Schizophrenia or

schizoaffective disorder. Potential participants will be identified from PHCs and hospitals. Potentially eligible patients will be informed about the trial and consent taken for a screening assessment. Eligible patients will be provided with additional information about the trial.

Once informed consent has been taken the baseline assessment will be completed. At the intervention PHCs the family member will also be provided with information about the trial, consent taken and will receive training in how to supervise their family members' medication and will receive text message reminders for the first 3 months of participation.

Participants will be invited for a follow-up assessment at 6 and 12 months.

What are the possible benefits and risks of participating?

Those who take part may not receive any direct benefit, however the information we get from this study will help to improve access to medication and mental health treatment in primary care for people with schizophrenia.

Participants taking part in STOPS+ will continue to receive medication as they would have done otherwise and all medication provided follows current clinical guidelines. We are not investigating or testing any new medications. Medications provided at the Primary Healthcare Centre will be based on current guidelines.

For the intervention arm participants will be informed that the risk of disagreement can rarely cause a problem in relationships with supervising relative. Relatives will be trained for supervision so the risk will be minimised.

Participants will be informed that if there is any problem throughout participation the trained mental health professionals will be available for help. Participants will be informed of their right to withdraw from the study at any time if they find the supervision of treatment or any other part of the study is causing a problem.

Where is the study run from?

24 Primary Healthcare Centres in district Peshawar, Khyber Pakhtunkwa (KP).

When is the study starting and how long is it expected to run for?

May 2019 to June 2022

Who is funding the study?

Keele University has been awarded the funding for this study by the Medical Research Council UK, as part of its Global Alliance for Chronic Disease programme.

Who is the main contact?

Mrs Michelle Robinson
m.e.robinson@keele.ac.uk

Contact information

Type(s)

Public

Contact name

Mrs Michelle Robinson

ORCID ID

<https://orcid.org/0000-0002-2266-8250>

Contact details

Research Institute for Primary Care and Health Sciences,
Keele University,
Staffordshire
United Kingdom
ST5 5BG
01782 734853
m.e.robinson@keele.ac.uk

Type(s)

Scientific

Contact name

Prof Ziaul Haq

Contact details

Dean institute of Public Health and Social Sciences
Khyber Medical University,
Phase V, Hayatabad, Peshawar,
Khyber Pakhtunkhwa
United Kingdom
25100
+92 91 9217703, 9217696
drzia@kmu.edu.pk

Type(s)

Public

Contact name

Prof Saeed Farooq

ORCID ID

<https://orcid.org/0000-0003-2088-6876>

Contact details

School for Primary, Community and Social Care
Keele University
Newcastle-under-Lyme
United Kingdom
ST5 5BG
+44 1782 734973
s.farooq@keele.ac.uk

Additional identifiers**Clinical Trials Information System (CTIS)**

Nil known

Protocol serial number

PID-180207

Study information

Scientific Title

Supervised Treatment in Out-Patients for Schizophrenia: a community-based intervention to improve treatment adherence and reduce the treatment gap in schizophrenia (STOPS+)

Acronym

STOPS+

Study objectives

To evaluate the effectiveness of STOPS+ compared to Enhanced Treatment as Usual (ETAU) in improving the following in patients suffering from schizophrenia:

1. Functioning
2. Medication adherence

Ethics approval required

Old ethics approval format

Ethics approval(s)

Current ethics approval as of 13/08/2019:

1. Approved 30/04/2019, Keele University Faculty of Medicine and Health Sciences Research Ethics Committee (Keele University, Staffordshire, ST5 5BG; health.ethics@keele.ac.uk; 01782 732000), ref: MH-190017.
2. Approved 06/08/2019, Khyber Medical University Ethics Board (Phase - V, Hayatabad, Khyber Pakhtunkhwa, Peshawar, Pakistan; reb@kmu.edu.pk; 091 9217258), ref: DIR-KMU-EB/ST/000648

Previous ethics approval:

1. Approved 30/04/2019, Keele University Faculty of Medicine and Health Sciences Research Ethics Committee (Keele University, Staffordshire, ST5 5BG; health.ethics@keele.ac.uk; 01782 732000), ref: MH-190017.
2. Approval pending, Khyber Medical University Ethics Board (Phase - V, Hayatabad, Khyber Pakhtunkhwa, Peshawar, Pakistan; reb@kmu.edu.pk; 091 9217258).

Study design

Cluster randomized parallel assignment single masking study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Schizophrenia and schizoaffective disorders

Interventions

Current intervention as of 31/12/2020:

ETAU Control arm

In Pakistan, the usual treatment for patients suffering from psychosis consists of accessing hospital-based psychiatric services with little involvement of primary care and limited provision of medication from the hospital pharmacy. Most patients buy medicines from the local chemists. This will be enhanced with the training in MhGAP for PHC physicians and regular and reliable provision of psychotropic drugs at PHC centres in both arms. ETAU provided in the control clusters will include prescribing evidence-based pharmacological treatments, outpatient attendance in the psychiatry department of the local hospital (as deemed appropriate by the consultant), and brief counselling about the treatment and outcome of the disorder. If required, patients may be admitted to an inpatient unit at the hospital. The patients will be informed that the antipsychotic medication is available in the PHC centre and they can assess the centre for the supply of medication. The PHC physician will have the option to liaise with the treating psychiatrist, as provided in the mhGAP guidelines.

The treatment and follow-up duration is for 12 months in total. The follow-up assessments can be completed either face-to-face or over the telephone.

STOPS+ Intervention Arm

The intervention arm will consist of ETAU plus supervision by a trained family member for dispensing and administering medication. The family member will dispense and observe that the patient has taken the required medication and will record this information in a simple sheet of paper provided for this purpose. The treatment supervision will be reinforced by sending automated text message reminders to the person supervising the treatment at least once to confirm whether the medication has been administered.

The treatment and follow-up duration is 12 months in total. The follow-up assessments can be completed either face-to-face or over the telephone.

Randomisation

Randomisation will occur at the PHC level and will be allocated using a 1:1 ratio to either intervention arm (STOPS+) or Enhanced Treatment as Usual (ETAU) and stratified by urban/rural setting.

Previous intervention:

ETAU Control arm

In Pakistan, the usual treatment for patients suffering from psychosis consists of accessing hospital-based psychiatric services with little involvement of primary care and limited provision of medication from the hospital pharmacy. Most patients buy medicines from the local chemists. This will be enhanced with the training in MhGAP for PHC physicians and regular and reliable provision of psychotropic drugs at PHC centres in both arms. ETAU provided in the control clusters will include prescribing evidence-based pharmacological treatments, outpatient attendance in the psychiatry department of the local hospital (as deemed appropriate by the consultant), and brief counselling about the treatment and outcome of the disorder. If required, patients may be admitted to an inpatient unit at the hospital. The patients will be informed that the antipsychotic medication is available in the PHC centre and they can assess the centre for the supply of medication. The PHC physician will have the option to liaise with the treating psychiatrist, as provided in the mhGAP guidelines.

The treatment and follow-up duration is for 12 months in total.

STOPS+ Intervention Arm

The intervention arm will consist of ETAU plus supervision by a trained family member for dispensing and administering medication. The family member will dispense and observe that the patient has taken the required medication and will record this information in a simple sheet of paper provided for this purpose. The treatment supervision will be reinforced by sending automated text message reminders to the person supervising the treatment at least once to confirm whether the medication has been administered.

The treatment and follow-up duration is 12 months in total.

Randomisation

Randomisation will occur at the PHC level and will be allocated using a 1:1 ratio to either intervention arm (STOPS+) or Enhanced Treatment as Usual (ETAU) and stratified by urban/rural setting.

Intervention Type

Behavioural

Primary outcome(s)

Global Assessment of Functioning Scale (GAF, American Psychiatric Association, 2000) and Medication adherence are measured using a 5-point Likert scale (where 1 always takes medication and 5 is never), adapted from Herz et al. (2000) at baseline, 6 and 12 months.

Key secondary outcome(s)

Current secondary outcome measures as of 31/12/2020:

1. Mental state and psychiatric symptoms are measured using the Brief Psychiatric Rating Scale (BPRS)(Overall et al, 1962) at screening, baseline, 6 and 12 months.
 2. Caregivers' burden is measured using the Family Burden Scale (Pai & Kapur, 1981) at baseline, 6 and 12 months.
 3. Physical health assessments are measured using the Body Mass Index (BMI) Blood Pressure, waist circumference, PHC health record at baseline.
 4. Perceived stigma is measured using the internalized Stigma of Mental Illness (Lysaker et al, 2007) at baseline, 6 and 12 months.
 5. Cost of care is measured using the Client Service Receipt Inventory SRI (Chisholm et al, 2000) at baseline, 6 and 12 months.
 6. Quality-adjusted life year (QALY) and general Health status are measured using the EuroQoL (EQ5D) (Whynes et al, 2008) which is a standardized instrument for measuring generic health status will be used for computing quality-adjusted life year (QALY) at baseline, 6 and 12 months.
 7. Side effects of antipsychotic medication are measured using the Glasgow Antipsychotic Side effect Scale (GASS) at baseline, 6 and 12 months.
 8. Drug use is measured using the Drug Abuse Screening Test-10 (DAST-10 Skinner, 1982) at baseline, 6 and 12 months.
 9. Illness severity, improvement and response to treatment is measured using the Clinical Global Impression (CGI Guy, 1976) at baseline, 6 and 12 months.
 10. Depression is measured using the Patient Health Questionnaire (PHQ9 Kroenke, 2001) at baseline, 6 and 12 months.
 11. Suicide ideation is measured using the Suicide Behaviours Questionnaire-Revised (SBQ-R Osman, 2001) at baseline, 6 and 12 months.
-

Previous secondary outcome measures as of 13/08/2019:

1. Mental state and psychiatric symptoms are measured using the Brief Psychiatric Rating Scale (BPRS)(Overall et al, 1962) at screening, baseline, 6 and 12 months.
2. Caregivers' burden is measured using the Family Burden Scale (Pai & Kapur, 1981) at baseline, 6 and 12 months.
3. Physical health assessments are measured using the Body Mass Index (BMI) Blood Pressure, waist circumference, PHC health record at baseline, 6 and 12 months.
4. Perceived stigma is measured using the internalized Stigma of Mental Illness (Lysaker et al, 2007) at baseline, 6 and 12 months.
5. Cost of care is measured using the Client Service Receipt Inventory SRI (Chisholm et al, 2000) at baseline, 6 and 12 months.
6. Quality-adjusted life year (QALY) and general Health status are measured using the EuroQoL (EQ5D) (Whynes et al, 2008) which is a standardized instrument for measuring generic health status will be used for computing quality-adjusted life year (QALY) at baseline, 6 and 12 months.
7. Side effects of antipsychotic medication are measured using the Glasgow Antipsychotic Side effect Scale (GASS) at baseline, 6 and 12 months.
8. Drug use is measured using the Drug Abuse Screening Test-10 (DAST-10 Skinner, 1982) at baseline, 6 and 12 months.
9. Illness severity, improvement and response to treatment is measured using the Clinical Global Impression (CGI Guy, 1976) at baseline, 6 and 12 months.
10. Depression is measured using the Patient Health Questionnaire (PHQ9 Kroenke, 2001) at baseline, 6 and 12 months.
11. Suicide ideation is measured using the Suicide Behaviours Questionnaire-Revised (SBQ-R Osman, 2001) at baseline, 6 and 12 months.

Previous secondary outcome measures:

1. Mental state and psychiatric symptoms are measured using the Brief Psychiatric Rating Scale (BPRS)(Overall et al, 1962) at screening, baseline, 6 and 12 months.
2. Substance abuse is measured using the Mini-International Neuropsychiatric Interview (M.I.N.I.) section on substance abuse (Sheehan et al, 1998) at screening, baseline, 6 and 12 months.
3. Caregivers' burden is measured using the Family Burden Scale (Pai & Kapur, 1981) at baseline, 6 and 12 months.
4. Physical health assessments are measured using the Body Mass Index (BMI) Blood Pressure, waist circumference, PHC health record at baseline, 6 and 12 months.
5. Perceived stigma is measured using the internalized Stigma of Mental Illness (Lysaker et al, 2007) at baseline, 6 and 12 months.
6. Cost of care is measured using the Client Service Receipt Inventory SRI (Chisholm et al, 2000) at baseline, 6 and 12 months.
7. Quality-adjusted life year (QALY) and general Health status are measured using the EuroQoL (EQ5D) (Whynes et al, 2008) which is a standardized instrument for measuring generic health status will be used for computing quality-adjusted life year (QALY) at baseline, 6 and 12 months.
8. Side effects of antipsychotic medication are measured using the Glasgow Antipsychotic Side effect Scale (GASS) at baseline, 6 and 12 months.

Completion date

30/06/2022

Eligibility

Key inclusion criteria

Current inclusion criteria as of 13/08/2019:

Participant inclusion criteria

1. Have a diagnosis of schizophrenia or schizoaffective disorder based on the International Classification of Disease 10 (ICD-10) criteria assessed using the Mini-International Neuropsychiatric Interview (MINI, Sheehan et al., 1998).
2. Aged between 17-65 years.
3. Do not meet the criteria for remission as defined by the Remission in Schizophrenia Working Group (Andreasen et al., 2005).
4. Have capacity and are able to give informed consent.

Previous inclusion criteria:

1. Have a diagnosis of schizophrenia or schizoaffective disorder based on the International Classification of Disease 10 (ICD-10) criteria assessed using the Mini-International Neuropsychiatric Interview (MINI, Sheehan et al., 1998).
2. Aged between 17-45 years.
3. Do not meet the criteria for remission as defined by the Remission in Schizophrenia Working Group (Andreasen et al., 2005).
4. Have capacity and are able to give informed consent.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

526

Key exclusion criteria

1. Have a serious or unstable medical illness.
2. Have a learning disability.
3. Have a severe drug dependence requiring treatment and/or detoxification.
4. Pregnant, trying to get pregnant or breastfeeding.

Date of first enrolment

01/09/2019

Date of final enrolment

30/04/2021

Locations

Countries of recruitment

United Kingdom

Pakistan

Study participating centre

Lady Reading Hospital

Soekarno Rd,
Pipal Mandi,
Peshawar,
Khyber Pakhtunkhwa
United Kingdom
25000

Study participating centre

Khyber Medical University

Phase V Hayatabad, Peshawar,
Khyber Pakhtunkhwa
United Kingdom
25100

Sponsor information

Organisation

Khyber Medical University

ROR

<https://ror.org/00nv6q035>

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, Medical Research Committee and Advisory Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	30/06/2020	31/12/2020	Yes	No