

Frailty, falls and the role of exercise in haemodialysis patients: a qualitative study

Submission date 10/04/2017	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 11/05/2017	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 25/07/2022	Condition category Urological and Genital Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Patients who are require haemodialysis (HD) (commonly known as kidney dialysis) need help to remove waste from their blood. This means that they often become frail earlier and quicker. Frailty describes a set of conditions which make patients vulnerable to sudden changes in health. This is due to both to a number of traditional factors (e.g. muscle wasting) which is very common in this population and to unique factors associated with end stage kidney disease (e.g. high levels of physical inactivity). Outcomes for frail HD patients are very poor. They are approximately five times more likely to fall than healthy older adults and more likely to break a bone as a result. Frailty and falls are also associated with reduced quality of life, loss of independence and increased use of health services. Programmes to address frailty and falls in HD patients have received little research attention. Other patients who are frail or might fall have exercise programmes designed to help them, but they haven't been tested in HD patients. Studies into exercise training for HD patients are urgently needed, as well as a detailed understanding of patients' experiences of frailty and falls from their own perspectives. The aim of this study is to explore the experiences of HD patients who fall and may be frail, their perceptions of a specific exercise intervention to address frailty and falls and whether patients would be prepared to take part in a bigger study.

Who can participate?

Adults aged 18 and older who have received haemodialysis for three months or longer and have fallen or are at risk of falling.

What does the study involve?

Participants are asked to take part in an interview to find out more about their experiences, thoughts and feelings of living with dialysis and falling. Afterwards they are asked to keep a diary for up to three months. They will use the diary to record their experiences of living with kidney disease and dialysis and, if they experience a fall, what happens and how they feel about it. Once participants have finished recording their diaries, they are asked to take part in a final interview to ask them more about what they have recorded in their diaries, their experiences about falling and frailty and what they think about a specific frailty and falls programme in the future.

What are the possible benefits and risks of participating?

There are no notable benefits to participants, however participants may find documenting and discussing their thoughts and experiences helpful. There are no notable risks with participants however this study may bring up areas where participants have experienced, or continue to experience difficulties. Participants are free not to tell the research team about anything they don't feel comfortable to and may stop the interview at any time. If the participant is experiencing a lot of difficulties the research team may ask them if they wish to speak about it with their Nephrology team.

Where is the study run from?

University of Leicester (UK)

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

September 2016 to March 2020

Who is funding the study?

National Institute for Health Research (UK)

Who is the main contact?

Mrs Hannah Young

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Contact information

Type(s)

Public

Contact name

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Additional identifiers

Protocol serial number

33933

Study information

Scientific Title

Understanding frailty, falls and the role of exercise in haemodialysis patients: A qualitative study (FLEX-HD)

Acronym

FLEX-HD

Study objectives

The primary aim of this study is to explore haemodialysis patients' experience of and beliefs about frailty and falls. The secondary aim of this study is to explore patients' perceptions of a frailty and falls specific intervention and the feasibility of a randomised clinical trial to evaluate such an intervention.

Ethics approval required

Old ethics approval format

Ethics approval(s)

South West - Central Bristol Research Ethics Committee, 20/02/2017, ref: 17/SW/0048

Study design

Observational; Design type: Qualitative

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Specialty: Renal disorders, Primary sub-specialty: Renal disorders; UKCRC code/ Disease: Renal and Urogenital/ Renal failure

Interventions

Following enrolment in the study participants take part in three phases of qualitative data collection.

Phase one: Pre-diary interview

Semi-structured pre- interviews are used to begin to explore participants past experiences of and beliefs about frailty, falls and to introduce and explain the diary-keeping process. Participants are provided with a 'diary-keeping pack' as part of this introduction. This pack includes an A5 notepad or audio recorder, pen, contact information, written guidance about what to record in their diary, and if appropriate, a simple step by step guide about how to use the voice recorder.

Phase two: Qualitative diaries

Participants complete a prospective diary tailored to elicit information on living with frailty and prospective quantitative and qualitative information regarding falls and 'near misses' over a period of one to three months, following the pre-diary interview. Diaries are primarily used in a written format, but provision for participants to audio-record their diaries are made to allow those with a wide range of abilities to participate. This stage does necessitate any visits on

behalf of the patient. The researcher can contact the participant to support them to complete their diaries, if they wish. This contact can be done via email, phone or during a routine dialysis visit, whichever is preferable to the participant. The frequency of contact is negotiated with the participant after the initial interview in phase one. Following the completion of the diary keeping period the researcher contacts the participant to arrange collection of the diary and a follow-up diary interview.

Phase Three: Post diary interviews

Finally, a short, semi-structured 'post-diary interview' takes place. This interview reviews participants' diaries to ensure that no salient issues are missed and unclear accounts are clarified and to explore their feelings about keeping a diary and issues of non-completion. The participants' attitudes towards a frailty and falls specific intervention and their perceptions of being involved in a larger study is also explored.

Involvement in the study is finished once the post-diary (phase three) interview is complete. The interviews are led and facilitated by a researcher and last approximately 60-90 minutes. To allow the participant full freedom of expression, sessions typically take place in a comfortable, quiet room away from clinical areas, but can take place during haemodialysis, or in the participant's own home, if they request. The total maximum duration of the study period is five months.

Intervention Type

Other

Primary outcome(s)

Experiences of patients will be explored using semi-structured qualitative interviews at baseline and around month four and solicited qualitative dairies kept between months one and three.

Key secondary outcome(s)

There are no secondary outcome measures.

Completion date

01/03/2020

Eligibility

Key inclusion criteria

1. Be a prevalent haemodialysis patient (receiving HD for 3 months or greater)
2. Age 18 years or older
3. Clinically stable at the time of recruitment
4. Able and willing to give informed consent
5. History of falls in the last 6 months or high risk of falls

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Unable or unwilling to give informed consent
2. Patients who are unable to understand, read or speak English
3. Unable to participate in an exercise due to perceived physical or psychological barriers
4. Unfit to undertake exercise or exercise testing according to the American College of Sports Medicine guidelines and as determined by the patient's Consultant Nephrologist including:
 - 4.1. Significant ischaemia, recent myocardial infarction (2 weeks) or other acute cardiac event
 - 4.2. Unstable angina
 - 4.3. Uncontrolled cardiac dysrhythmias causing symptoms or haemodynamic compromise
 - 4.4. Symptomatic severe aortic stenosis
 - 4.5. Uncontrolled symptomatic heart failure
 - 4.6. Acute pulmonary embolus or pulmonary infarction
 - 4.7. Acute myocarditis or pericarditis
 - 4.8. Suspected or known dissecting aneurysm
 - 4.9. Acute systemic infection, accompanied by fever, body aches or swollen lymph glands

Date of first enrolment

12/05/2017

Date of final enrolment

28/01/2019

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre**University of Leicester**

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Sponsor information

Organisation

University of Leicester

ROR

<https://ror.org/04h699437>

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

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?
HRA research summary			28/06/2023	No	No
Interim results article	Participants' perceptions of frailty	22/07/2022	25/07/2022	Yes	No
Participant information sheet	version V3	10/03/2017	11/05/2017	No	Yes

Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
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