

Health-seeking behaviour among newly arrived immigrants in Denmark

Submission date 03/04/2018	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 01/05/2018	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 30/07/2019	Condition category Other	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Immigrants may face problems with accessing the Danish healthcare system due to, for example, lack of knowledge of how to navigate it, which may cause inappropriate healthcare-seeking. Danish municipalities provide a mandatory introduction and language programme for newly arrived immigrants, but no information on the healthcare system is offered. The aim of this study is to find out what effects information about the Danish healthcare system may have on the hypothetical healthcare-seeking behaviour of newly arrived immigrants, their actual healthcare use, their knowledge of the healthcare system and their satisfaction with the Danish healthcare system.

Who can participate?

Adult immigrants attending two language schools in Copenhagen

What does the study involve?

Participants are allocated to one of three groups to receive either a course of 12 hours on access to and optimal use of the Danish healthcare system; written information on the Danish healthcare system in their mother tongues; or no information (current situation). Participants are assessed on healthcare-seeking behaviour, true or false question on access to the Danish healthcare system, as well as satisfaction with the Danish healthcare system, and are linked with registry data on socioeconomic characteristics and healthcare use in the year to follow.

What are the possible benefits and risks of participating?

There are no possible benefits of participating (answering the survey), but benefits related to participating in the intervention are increased knowledge about access to and navigating the Danish healthcare system. There are no risks of participating (answering the survey).

Where is the study run from?

University of Copenhagen (Denmark)

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

January 2012 to March 2016

Who is funding the study?
1. Innovationsfonden (Denmark)
2. Helsefonden (Denmark)

Who is the main contact?
Dr Signe Smith Jervelund
ssj@sund.ku.dk

Contact information

Type(s)
Scientific

Contact name
Dr Signe Smith Jervelund

ORCID ID
<https://orcid.org/0000-0002-1459-4781>

Contact details
Oster Farimagsgade 5A
Copenhagen K
Denmark
1014
+45 (0)35 33 73 39
ssj@sund.ku.dk

Additional identifiers

Protocol serial number
11-115843

Study information

Scientific Title
Health-seeking behaviour among newly arrived immigrants in Denmark

Acronym
SULIM

Study objectives
This study will address whether an intervention will affect health-seeking behaviour among immigrants in Denmark. The objectives are to compare the effect of I) an introductory course dealing with access to and appropriate use of healthcare services as part of their mandatory introduction course versus II) written information regarding the Danish healthcare system versus III) no information (the current situation) on newly arrived immigrants' health-seeking behaviour, including interpretation of symptoms; satisfaction with the healthcare system; knowledge and utilization of healthcare services.

Ethics approval required

Old ethics approval format

Ethics approval(s)

According to Danish law, no approval from an ethics committee is required when human tissue is not part of the research project. The Danish Data Protection Agency granted permission for the study. All potential participants received written information about the study (the information letter) underscoring study objectives, anonymity procedures, participants' rights to withdraw and that (non-)participation had no consequences for the individual. The intervention groups received further oral information from their teachers about the study where it was possible to ask questions. A person-encrypted database comprising both questionnaire and registry data to be used for the analyses was created by Statistics Denmark.

Primary study design

Interventional

Study design

Prospective non-randomised intervention study

Study type(s)

Other

Health condition(s) or problem(s) studied

Immigrants' healthcare-seeking behaviour

Interventions

Immigrants are assigned to one of three groups who receive: a course of 12 hours on access to and optimal use of the Danish healthcare system; written information on the Danish healthcare system in their mother tongues; or no information (current situation). The intervention took place at Vestegnens Language and Competence School (VSK) which has two divisions, while the control group was formed by students at CBSI language school.

Survey data included three case vignettes on healthcare-seeking behaviour, true or false question on access to the Danish healthcare system, as well as satisfaction with the Danish healthcare system and were linked to registry data on socioeconomic characteristics and healthcare use in the year to follow. The intervention lasted 12 lectures (1 week of school) and took place in January. The follow-up took place app. 3 months after (in April-June).

Intervention Type

Other

Primary outcome(s)

1. Immigrants' healthcare-seeking behavior. To assess healthcare-seeking behaviour, three case vignettes with descriptions of persons with different healthcare needs at different times of the day were used: i) flu-like symptoms with a fever of 39.5°C (including sore throat and coughing); ii) chest pain; iii) major depression. The participants were asked to report on what they would do in the three cases by only choosing one of the following answer categories: a) talk to family and friends; b) go to pharmacy; c) call 112 (the Emergency Operations Centre); d) consult an out-of-hours-doctor; e) go to ER; f) contact GP; g) pray to God; h) nothing. To assess the "appropriateness" of service use, we applied an understanding of accessing healthcare services according to health need by the principle of using the lowest effective care level from the lens of a Western medicine oriented healthcare system. In the case of flu-like symptoms with relative

high fever, where consulting a doctor may be appropriate but in most cases does not require emergency healthcare, the following actions were categorised as appropriate healthcare-seeking behaviour: consult out-of-hours-doctor and go to GP. Inappropriate healthcare-seeking behaviour was considered as: talk to family and friends, go to pharmacy, call 112, go to ER, pray to God and no actions. In the case of chest pain, where fast healthcare might be life-saving, the following actions were considered as appropriate healthcare-seeking behaviour: call 112, go to ER and go to GP. Inappropriate healthcare-seeking behaviour was considered as: talk to family and friends, go to pharmacy, consult out-of-hours-doctor, pray to God and no actions. In the case of major depression that requires healthcare or help to seek healthcare, the following actions were considered as appropriate healthcare-seeking behaviour: talk to family and friends, consult out-of-hours-doctor, go to ER and go to GP. Inappropriate healthcare-seeking behaviour was considered as: go to pharmacy, call 112, pray to God and no actions. The trialists also carried out sensitivity analyses for all three cases, where we added "pray to God" to the appropriate answer category as well as "talk to friends and family", "go to pharmacy", "pray to God" and "do nothing" for cases of flu-like symptoms. Timepoints: Measured at baseline and at follow-up (app. 3 months after).

2. Healthcare utilization. The healthcare services contacts assessed were as follows: ER (number of contacts), GP (number of contacts either telephone, email or in-person consultation), outpatient treatment at hospital (contact versus no contact), inpatient treatment at hospital (contact versus no contact), specialist doctor in private practice which needs referral from GP (contact versus no contact) and dentist (contact versus no contact). Timepoints: Utilisation of healthcare services was assessed by calculating the contacts to healthcare services a year prior to and the year after the intervention took place.

Key secondary outcome(s)

1. Immigrants' knowledge. To assess whether the intervention affected self-perceived knowledge of the Danish healthcare systems, immigrants were asked: "In case of illness, do you know who to contact?" and "In case of an accident, do you know who to contact?". Potential responses included 'Yes, always,' 'Sometimes,' 'No,' 'Don't know'. We dichotomized the responses as "Yes, always" versus other. To assess whether the intervention affected actual knowledge of access to the Danish healthcare systems, immigrants were asked a number of positively and negatively formulated true and false questions e.g. "All children can receive several free vaccines at their doctor" and "You are welcome to contact an out-of-office-hours doctor from 8 am until 4 pm. Also when your general practitioner (GP) is open". Potential responses included 'True,' and 'False'. The responses were assessed based on pre-determined right or wrong answers. Timepoints: Measured at baseline and at follow-up (app. 3 months after).

2. Patient satisfaction. To assess whether the intervention affected satisfaction with the Danish healthcare system, immigrants were asked questions on satisfaction with their GP, specialist doctors in private practice and hospital doctors as well as whether Danish doctors are good at helping you when you are ill. E.g. "Are doctors at hospitals good in Denmark?". Potential responses included 'Yes, very good,' 'They are okay,' 'No, they are poor,' 'I have never been at the hospital,' 'Don't know'. The trialists dichotomized the responses as "Yes, very good" versus other. Missing categories included 'I have never been at the hospital,' 'Don't know'. Timepoints: Measured at baseline and at follow-up (app. 3 months after).

Completion date

31/03/2016

Eligibility

Key inclusion criteria

The study population consisted of adult immigrants attending two language schools, CBSI and Vestegnens Language and Competence School, in the greater catchment area of Copenhagen in 2012 and 2013. To be eligible for the study, the immigrants had to have basic understanding of Danish (for this reason we omitted students from module 1) which also implies that the immigrants have lived in Denmark for some time and have had some experience with the Danish healthcare system. The trialists used Statistics Denmark's definition of an immigrant as a person who is born in a foreign country of parents who both are foreign citizens or born in a foreign country. The participants represent the mixture of migrants in Denmark: labour migrants, family reunified and refugees with different educational backgrounds and countries of birth.

Participant type(s)

All

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

1572

Key exclusion criteria

Immigrants at module 1 at Danish language school (not sufficient Danish skills) and at module 6 (preparing for final Danish exam)

Date of first enrolment

15/01/2012

Date of final enrolment

01/06/2013

Locations**Countries of recruitment**

Denmark

Study participating centre

University of Copenhagen, Department of Public Health

Oster Farimagsgade 5A

Copenhagen K

Denmark

1014

Sponsor information

Organisation

Innovation Fund Denmark

Organisation

Helsefonden

Organisation

Innovation Fund Denmark

ROR

<https://ror.org/00daj4111>

Funder(s)

Funder type

Government

Funder Name

Innovationsfonden

Alternative Name(s)

Innovation Fund Denmark, Innovation Fund, IFD

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Denmark

Funder Name

Helsefonden

Alternative Name(s)

Health Foundation, Helsefonden (Health Foundation)

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Denmark

Results and Publications

Individual participant data (IPD) sharing plan

A person-encrypted database comprising both questionnaire and registry data was created by Statistics Denmark which is also the data holder. Only research institutions and the like who has an official agreement with Statistics Denmark can access data. According to Danish law, when the data permission from the Danish Data Protection Agency has expired, data has to be deleted. When the trialists have completed the planned analyses and publications, they will follow Danish law and delete data; thus, the dataset will not be made available to others.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	03/11/2015		Yes	No
Results article	results	01/03/2017		Yes	No
Results article	results	11/12/2017		Yes	No
Results article	results	11/07/2018	30/07/2019	Yes	No