

Effect of migration on risk of diabetes

Submission date 13/01/2014	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 06/02/2014	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 06/02/2014	Condition category Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Type 2 diabetes is an increasing problem in sub-Saharan Africa: the prevalence and burden are rising very quickly as a consequence of major changes in lifestyle. In 2009 the International Diabetes Federation projected a 98% growth in the number of diabetic adults in this region. The main cause of diabetes in Africa, as everywhere, is impaired glucose tolerance (IGT), when blood glucose is raised beyond the normal range but it is not so high that you have diabetes. It is a consequence of urbanization and changes in diet. In Senegal (West Africa) it is already a great public health problem in the main city (Dakar) and its suburbs. In the villages, with a very different way of life, it is still unknown. In our hospital in Saint-Die (France) we have found that the Senegalese migrants (in majority coming from Fuuta, the northern region along the Senegal river) have a very high prevalence of IGT or type 2 diabetes. The aim of this study was to compare the prevalence of abnormal glucose status between the Senegalese migrants in France, especially around Saint-Die, and their relatives living in their villages in Fuuta. Our objective is to find out whether migration can lead to an increase of prevalence of IGT or type 2 diabetes among Senegalese migrants.

Who can participate?

We studied adults of both sexes, older than 18 years, who had accepted to be tested. The study involved two different populations. First, a study was conducted in Senegalese migrants in Saint-Die (SD group). Second, we studied the adult population of five villages in Fuuta (F group).

What does the study involve?

For all the selected participants we recorded the sex and age and measured height, weight, body mass index (BMI), waist/hip ratio and blood sugar levels.

What are the possible benefits and risks of participating?

There were no risks for the subjects. If we discovered a participant had type 2 diabetes the participant was informed of this so they could be treated.

Where is the study run from?

Centre Hospitalier Saint-Charles à Saint-Dié-des-Vosges (France).

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

The study began in November 2000 and finished in November 2001.

Who is funding the study?

Association pour la Prévention de l'Obésité et du Diabète en Déodaté (APODD) (Saint-Die, France).

Who in the main contact?

Dr JM Dollet

jean-marc-dollet@wanadoo.fr

Contact information

Type(s)

Scientific

Contact name

Dr Jean-Marc Dollet

Contact details

Service de Médecine A

Centre Hospitalier Saint-Charles

Saint-Dié-des-Vosges

France

88100

+33 (0) 608423941

jean-marc-dollet@wanadoo.fr

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Diabetes FUUTA

Study information

Scientific Title

High frequency of abnormal glucose tolerance in Senegalese migrants: a new example of the heavy consequences of the nutritional transition

Acronym

Diabetes SD/F

Study objectives

Senegalese migrants have a higher risk of developing diabetes mellitus than their relatives remaining in their birth country. The main reason seems to be the nutritional transition (diet and sedentariness).

We compared the prevalence of abnormal glucose status between Senegalese migrants and their relatives staying in their villages in Fuuta (a region in the Northern part of Senegal).

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Committee of Centre Hospitalier Saint-Charles à Saint-Dié-des-Vosges, June 2000

Study design

Observational cohort study

Primary study design

Observational

Secondary study design

Cohort study

Study setting(s)

Hospital

Study type(s)

Screening

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Diabetes, migration, public health

Interventions

Study on Senegalese adults living in Saint-Die (France) and a representative sample of their relatives in five villages in Fuuta (Senegal). For all the selected subjects we measured four anthropometric parameters (height, weight, BMI and waist/hip ratio) and fasting capillary glycaemia. We stay for one day in each village.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

1. Anthropometric measures (height, weight, BMI and waist/hip ratio)
2. Blood capillary glucose, measured using a Glucotrend device (Lab. Boehringer)

All of the measures were taken at baseline in one day.

Secondary outcome measures

N/A

Overall study start date

01/11/2000

Completion date

01/11/2001

Eligibility

Key inclusion criteria

1. All Senegalese migrants living in Saint-Die (France)
2. A representative sample of their relatives in five villages in Fuuta (Senegal)
3. Adults between 18 and 75 years

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

50 in Saint-Die (France); 1000 in Fuuta (Senegal)

Key exclusion criteria

1. Pregnancy
2. Illness

Date of first enrolment

01/11/2000

Date of final enrolment

01/11/2001

Locations

Countries of recruitment

France

Senegal

Study participating centre

Service de Médecine A
Saint-Dié-des-Vosges
France
88100

Sponsor information

Organisation

Centre Hospitalier Saint-Charles à Saint-Dié-des-Vosges (France)

Sponsor details

c/o Dr Jean-Marc Dollet
Service de Médecine A
Centre Hospitalier Saint-Charles
Saint-Dié-des-Vosges
France
88100

Sponsor type

Hospital/treatment centre

Website

<http://www.centrehospitalierdesaintdiedesvosges.com/>

ROR

<https://ror.org/000tm9s39>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Centre Hospitalier Saint-Charles à Saint-Dié-des-Vosges (France)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration