GHAIA: The cardiovascular risk profile and the health care seeking behaviour among Ghanaians in Amsterdam

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1. To investigate the presence of risk factors for CVD (i.e. overweight/ obesity, hypertension, diabetes and dyslipidemia,) among the Ghanaian population in Amsterdam.a) To investigate levels of detection, treatment and control of hypertension among...

Ethical review	Approved WMO
Status	Pending
Health condition type	Age related factors
Study type	Observational invasive

Summary

ID

NL-OMON34744

Source
ToetsingOnline

Brief title
GHAIA study

Condition

- Age related factors
- Vascular hypertensive disorders

Synonym
Hypertension, Metabolic Syndrome

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: GGD Amsterdam

Intervention

Keyword: cardiovascular disease risk, Health care, Migrants, sub-Saharan African

Outcome measures

Primary outcome

Blood pressure: systolic BP, diastolic BP, prehypertension and hypertension and use of anti-hypertensive medications.

Lipids: self-reported dyslipidemia and self-reported use of medications.

Blood parameters that are indicative of cardiovascular health, e.g. total cholesterol, LDL-, HDL cholesterol levels, Triglyceride levels.

Diabetes mellitus: self-reported diabetes and self-reported use of insulin and tablets.

Blood parameters indicative of diabetes, e.g. glucose, HbA1c, insulin.

Urinary values indicative of kidney function.

Anthropometrics: height, weight, BMI, waist circumference, hip circumference, waist-hip ratio, overweight, obesity and abdominal obesity.

Secondary outcome

* Migration related factors: ethnicity, generation level, duration of residence in Netherlands, acculturation level, migration history

* Demographic factors: age, sex, marital status.

* Socio-economic factors: education level, income level, employment status.

* Lifestyle factors: Dietary habits, physical activity, smoking, alcohol use,

Study description

Background summary

Cardiovascular disease (CVD) is a major cause of death and the rates are even higher in some minority populations than in European White people [1-4]. In the Netherlands, limited epidemiological data suggest that some risk factors are more common among some ethnic minority groups than in White-Dutch. The preliminary results of the SUNSET study, for example, showed substantially higher prevalence of hypertension, diabetes and obesity in African Surinamese than in White-Dutch.

The Ghanaian population is the largest African group and the fifth largest ethnic group in Amsterdam. The City of Amsterdam Department of Research and Statistics (O+S) 2006 figures indicate that 10.330 registered Ghanaians live in Amsterdam alone, the majority in South-east Amsterdam. It is estimated that an equal number undocumented Ghanaians also reside in Amsterdam.

Essential data on CVD and risk profiles among the growing African population in the Netherlands is limited. Information on similar ethnic minority groups such as the African Surinamese cannot simply be extrapolated to other African groups, such as Ghanaian population since they differ enormously in terms of culture, socio-economic status, migration experience, and eating habits all of which are important determinants of health. This is confirmed by our recent report, which showed huge heterogeneity between African descent populations living in the western world. In addition, there are indications from a small pilot study and studies in the Department of Internal and Vascular Medicine that the African population in Amsterdam are at an increased risk of CVD.

Recognising the importance of the growing Ghanaian population and their impact on health services across the Amsterdam region, the AMC and the GGD have included this group in the Academic Workplace project with the aim of preventing obesity (and ultimately CVD) in the Amsterdam region. However, the lack of data on cardiovascular risk profiles and their determinants among the Ghanaian population in the Netherlands means that the essential knowledge needed for planning effective intervention strategies is lacking among this group. There is an urgent need to fill this gap.

The general objective of this study is to provide knowledge on CVD risk profiles, and the perception of health care seeking behaviour among the Ghanaian population in Amsterdam to facilitate cardiovascular prevention efforts.

Hypotheses

We hypothesise that the Ghanaian population in the Netherlands is at increased risk of CVD due to migration related changes in lifestyles and lower socio-economic status, as well as issue that pertain to the access of

healthcare. In addition, we hypothesise that due to the ageing of this population, the burden of CVD will become increasingly important.

Study objective

1. To investigate the presence of risk factors for CVD (i.e. overweight/ obesity, hypertension, diabetes and dyslipidemia,) among the Ghanaian population in Amsterdam.
a) To investigate levels of detection, treatment and control of hypertension among the Ghanaian population in Amsterdam.
b) To determine whether socio-economic status (e.g., education and occupation), lifestyle factors (e.g., eating habits, physical activity, smoking, and alcohol consumption), psychosocial factors (e.g., stress) and acculturation are associated with cardiovascular risk factors among Ghanaian population in Amsterdam.
c) to investigate the similarities and differences with similar ethnic groups, specifically Surinamese of African origin.
d) To explore the feasibility of conducting a large scale population-based study within the Ghanaian population of Amsterdam. For example, in the HELIUS study (a longitudinal study of cardiovascular disease, mental health and infectious disease in five ethnic groups living in Amsterdam: ethnic Dutch, Surinamese, Turkish, Moroccan and Ghanaian) which is planned to commence in the spring of 2010.

2. To investigate the perceptions within the Ghanaian community regarding their access to health care and to understand the health seeking behaviour among this community.

Study design

This is an explorative study which will employ both qualitative (focus groups) and quantitative (structured interview using questionnaire and physical examination) study methods.
Data collection
Objective 1:
Structured interview using a questionnaire
In addition to the focus group study we will conduct a quantitative study among a separate sample of participants. These participants will be recruited using the methodology described in the section *Study Population*.
The interview will be based on a structured health questionnaire, and will provide information on country of birth, parental and grand parental country of birth, age, sex, religion, marital status, family structure, socio-economic status and acculturation and medical history. In addition, the questionnaire will include questions on lifestyle factors such as smoking, alcohol consumption, physical activity, self-reported weight or weight fluctuations. Psychosocial stress will be measured using a standardised and validated

questionnaire. Finally, information on medication used and disease history will also be ascertained.

Physical Examination
Subsequently all participants in the structured interview will be invited to return for a physical examination. The physical examination will be held at a number of locations, chosen for their accessibility to the participants. Participants will be invited to attend the examination in a fasting state (minimum 10 hours). During the examination participants will be asked to provide a fasting blood sample and a small sample of their urine. In addition we will measure and record weight, height, waist and hip circumference. All physical examinations will be conducted by trained staff, according to a standardised protocol (see attachment, protocol lichaamelijk onderzoek). During the examination, blood pressure will be measured with a validated oscillometric automated digital blood pressure device (OMRON) using appropriate cuff sizes. All results of this physical examination will be reported back to the participant. In addition, participants who require further diagnostic evaluation or treatment will be referred to their GP for consultation. Participants who are not registered with a GP practice will be referred to one of three study GPs in their local area.

Main outcome measures
Blood pressure: systolic BP, diastolic BP, prehypertension and hypertension and use of anti-hypertensive medications.
Lipids: self-reported dyslipidemia and self-reported use of medications.
Blood parameters that are indicative of cardiovascular health, e.g. total cholesterol, LDL-, HDL cholesterol levels, Triglyceride levels.
Diabetes mellitus: self-reported diabetes and self-reported use of insulin and tablets.
Blood parameters indicative of diabetes, e.g. glucose, HbA1c, insulin.
Urinary values indicative of kidney function.
Anthropometrics: height, weight, BMI, waist circumference, hip circumference, waist-hip ratio, overweight, obesity and abdominal obesity.

Objective 2: Qualitative study using focus groups
Participants for the focus groups will be invited to participate by key figures within the Ghanaian community. The aim of the focus group discussion is to elicit the perceptions of participants of their access to health care. Topics to be covered in the focus groups will be loosely based on the Anderson Model of access to health care. This includes domains such as the needs driving health seeking behaviour, the barriers and facilitating factors in health care access and the predisposing characteristics of individuals.

Study burden and risks

There is no direct benefit for the participants. Due to the extensive health examination, potential benefit may be derived from early detection of

unexpected findings. Since it is an observational study, no risk is to be expected for the participants.
The burden of participation is limited as participants are only asked for a single data collection.
Futher, they will be interviewed at home and the physical examination will take place in their neighbourhood, at three different locations so that participants will have the opportunity to undergo this examination close to their home.
Arriving in a fasting state is a burden, but participants may come early in the morning for the examination. In addition, we will draw blood first and then offer participants something to eat. The remaining measurements will take place last.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Healthy volunteers aged 18 years and older.

Exclusion criteria

Pregancy

Study design

Design

Study type: Observational invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Prevention

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-04-2010
Enrollment:	200
Type:	Anticipated

Ethics review

Approved WMO

Application type:	First submission
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL31702.018.10