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One language or two - does language use affect wellbeing?

Submission date	Recruitment status	[_] Prospectively registered
12/11/2010	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
20/10/2011	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
16/01/2019	Nervous System Diseases	

Plain English summary of protocol

Background and study aims:
Various lifestyle factors are thought to reduce the risk of developing age-related conditions such as Alzheimer's disease (AD) or other dementias. Recent studies with people with dementia suggest that bilingual people develop symptoms several years later than those who are monolingual. However, previous studies have left open the possibility that this effect may be due to other differences between the two groups. The aim of this study is to find out whether which language(s) people speak makes a difference to the kinds of difficulties they experience as they get older and the time at which these difficulties start to arise. People who speak only English will be compared with people who speak both Welsh and English, and the reasons for any differences between these two groups will be explored. Finding out whether thinking abilities are organized differently in the brain should help with the development of new preventive treatments in the future.

Who can participate?
Bilingual (Welsh and English language) people with Alzheimer's disease

What does the study involve?
Participants are asked about their use of either English or Welsh or both, and the difficulties that led up to them being referred to the hospital clinic and when this happened. They complete questionnaires about their lifestyle and well-being and complete some simple mental tasks. Taking part usually involves about four visits, either at home or at Bangor University and these can be arranged to suit. Participants can choose whether the researcher talks to them in English or in Welsh. If they are a Welsh speaker, some of the questions and tasks are in Welsh and others in English. The researchers also if possible speak to a relative (e.g. husband, wife, son or daughter) or a close friend if the participant agrees. The researcher meets with this person on one occasion or speaks to him/her on the telephone. Some information is also requested from medical records, for example the date when the participant was first referred to the clinic or the results of any relevant assessments. The information is provided by NHS staff, so the researcher does not access the records directly.

What are the possible benefits and risks of taking part?
Participants may find it interesting and enjoyable to talk with the researcher and complete the

questionnaires and tasks included in the study. The information from this study will help researchers understand more about ways of preventing or delaying the start of some of the difficulties that older people can experience. This means that by taking part participants are helping others in the future. No disadvantages or risks are expected. Participants are asked about their health and well-being and any difficulties that they have experienced that led them to attend the hospital, so this may mean that they have to think about things that might be mildly upsetting. If this happens, the researcher will try to make sure that they are not left feeling upset. Participants are able to contact the researcher by telephone afterwards if they need to. It is not thought that taking part in this study could cause any harm. In the unlikely event that participants are harmed by taking part in the study, there are no special compensation arrangements. If participants are harmed due to someone's negligence, then they may have grounds for a legal action, but they may have to pay their own legal costs.

Where is the study run from?
School of Psychology, Bangor University (UK)

When is the study starting and how long is it expected to run for?
April 2010 to December 2013

Who is funding the study?
Economic and Social Research Council (ESRC) (UK)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
7988

Study information

Scientific Title
Bilingualism as a protective factor in age-related neurodegenerative disorders: an observational cross-sectional study

Study objectives
Various lifestyle factors are thought to reduce the risk of developing age-related conditions such as Alzheimer's disease (AD) and other dementias. Recent studies of people with AD suggest that people who are bilingual develop symptoms several years later than people who are monolingual. However, previous studies have left open the possibility that this effect may be due to other differences between groups.

This study aims to establish whether this delayed onset effect is robust by comparing bilinguals and monolinguals drawn from a population which is otherwise similar in social and cultural terms. It is also important to understand why this delayed onset effect arises. In general, people who are bilingual tend to outperform monolinguals in capacities such as planning or switching between different tasks. These capacities are called 'executive functions'. Executive functions become impaired in age-related conditions such as AD and Parkinson's Disease (PD).

This study aims to find out if people who are bilingual are more resilient in the face of impairments in executive functions when they develop these disorders. This will be achieved by comparing the performance of bilingual and monolingual healthy older people, people with AD, and people with PD on tests of executive function.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Betsi Cadwaladr Health Board North West Wales Research Ethics Committee, 06/01/2010, ref: 10 /WNO01/3

Study design
Multicentre observational cross-sectional study

Primary study design
Observational

Secondary study design
Cross sectional study

Study setting(s)
Hospital

Study type(s)
Quality of life

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

Health condition(s) or problem(s) studied
Topic: Dementias and Neurodegenerative Diseases Research Network; Subtopic: Parkinson's Disease; Disease: Parkinson's disease, Dementia

Interventions
Current interventions as of 09/11/2012:
We will be seeing participants at one time-point, and asking participants questions about their language use, career, hobbies and activities throughout their lifespan. We will also ask participants to carry out paper and pencil measures such as linking numbers or letters, word tasks, repeating numbers, and some computer tasks. Visits tend to take an hour or so, approximately three times, but we tailor visits to participants' needs so if they prefer shorter visits we will carry out, for example, four visits, if preferable. There are no follow-up measures in this study.

Previous interventions until 09/11/2012:
We will be seeing participants at one time-point, and asking participants questions about their language use, career, hobbies and activities throughout their lifespan. We will also ask participants to carry out simple paper and pencil measures such as linking numbers or letters, word tasks, repeating numbers, and some simple computer tasks. Visits tend to take an hour or so, approximately three times, but we tailor visits to participants' needs so if they prefer shorter visits we will carry out, for example, four visits, if preferable. There are no follow-up measures in this study.

Intervention Type
Other

Phase
Phase II/III

Primary outcome measure
Knowledge, measured continuously throughout the study

Secondary outcome measures
No secondary outcome measures

Overall study start date
01/04/2010

Completion date
31/12/2013

Eligibility

Key inclusion criteria
1. Fluency in English
2. Ability to give informed consent

3. Fluency in Welsh (if bilingual)
4. Aged over 18 years, either sex

Healthy controls only:
5. Intact cognitive function as indicated by a Mini-Mental State Examination (MMSE) core of 26 or above

Participants with AD/PD only:
6. Medical diagnosis of AD/PD
7. Mini-mental state examination (MMSE) score of 18 or above
8. Availability of an informant

Participant type(s)
Mixed

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
300

Key exclusion criteria
1. Fluency in a language other than Welsh and/or English
2. History of brain injury, neurological disorder, neurodegenerative disorder (other than AD/PD) schizophrenia or other significant mental health problems
3. Major depression (current)
4. Lack of capacity to give consent

Date of first enrolment
01/04/2010

Date of final enrolment
01/09/2013

Locations

Countries of recruitment
United Kingdom

Wales

Study participating centre

Bangor University
Bangor
United Kingdom
LL57 2AS

Sponsor information

Organisation
Bangor University (UK)

Sponsor details
School of Psychology
The Brigantia Building
Penrallt Road
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Sponsor type
University/education

Website
http://www.bangor.ac.uk

ROR
https://ror.org/006jb1a24

Funder(s)

Funder type
Research council

Funder Name
Economic and Social Research Council (ESRC) (UK) (ref: RES-062-23-1931)

Alternative Name(s)
ESRC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/09/2016		Yes	No