Trial Description

Title

Cross-cultural comparisons of cognitive test performance in elderly Turkish immigrants, German and Turkish nationals

Trial Acronym

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URL of the trial

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Brief Summary in Lay Language

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Brief Summary in Scientific Language

Accuracy in cognitive assessments is essential in dementia diagnosis as cognitive assessment tools are considered the best means of distinguishing between age-related and disease related cognitive changes or to monitor the effects of treatment of dementia (Sheehan, 2012).However, the diagnosis of dementia can be challenging in culturally and linguistically diverse individuals as the majority of the cognitive tests used in the clinical settings are developed by Western, English speaking nations. Although, normative data are available from older adults to correct for demographic variables; including, age, gender, education level and ethnicity, other potentially important factors, such as, test-taking behaviors, linguistic and cultural equivalence of test translation, the level of language proficiency and fluency, acculturation level and number of years resided in the new country are often not considered when developing norms (Manly&Espino,2004;Gasquoine,1999;Greenfield, 1997;Boone et al.,2007). Lack of identification of these experiential, environmental factors in cognitive test performance studies may potentially render invalid research results (Manly, 2005;Mindt et al.,2010).

Of the population with the migrant background in Germany, Turkish community is a particularly important population to examine the effect of culture and demographic factors on cognitive screening instruments as they are the largest growing ethnic minority in Germany, currently making up approximately 14.9% of the German population (DeStatis, Statistisches Bundesamt, 2016).
Currently, there is dearth of research on the impact of demographic and cultural variables on cognitive test performance and, to the best of our knowledge, there have been no studies that compare cognitive test performances between German, Turkish nationals and elderly Turkish migrants living in Germany with a special focus on clinical samples.
Aims

factors on cognitive test performance in Turkish and German adults and to identify an appropriate and practical scale for the clinicians` use in detecting dementia amongst elderly population. Specifically, the study will address the following questions:
1.Are there differences in cognitive test performance of older Turkish immigrants, Turkish and German nationals with dementia on three leading cognitive screening tools, namely, on The Mini Mental State Examination (MMSE), The Rowland Universal Dementia Assessment Scale (RUDAS) and Transkulturelles Assessment mentaler Leistungen (TRAKULA)?

2.Do the levels of acculturation and bilingualism status influence test performance within the Turkish-German immigrants sample? If so, does it have a positive or negative effect?

Method

Study population
The study will be conducted primarily with older population, above the age of 50, who are diagnosed with Alzheimer's type dementia. Turkish immigrants living in Germany, Turkish nationals and German nationals will be included in the study and will be compared between each other.

Study design
The study will consist of the administration of the Clinical Dementia Rating Scale, Language Background Questionnaire (LSBQ), Frankfurt Acculturation Scale, Geriatric Depression Scale and three cognitive screening tools, namely, the Mini Mental State Examination (MMSE) and the Rowland Universal Dementia Assessment Scale (RUDAS) and Transkulturelles Assessment mentaler Leistungen (TRAKULA). The RUDAS and TRAKULA were of particular interest due to the fact that the test was developed in a multicultural setting and was designed specifically to address the challenges of detecting cognitive impairment in culturally and linguistically diverse populations (Pang et al. 2008, Storey et al. 2004, Goudsmit et al. 2017, Kessker et al. 2005).

Organizational Data

- DRKS-ID: **DRKS00017380**
- Date of Registration in DRKS: **2019/05/28**
- Date of Registration in Partner Registry or other Primary Registry: **[---]***
- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **Cel 2018/1-1 , Universität Heidelberg Ethikkommission der Fakultät für Verhaltens- und Empirische Kulturwissenschaften**

Secondary IDs

Health condition or Problem studied

- ICD10: **F00 - Dementia in Alzheimer disease**
- ICD10: **F03 - Unspecified dementia**
- ICD10: **F06.7 - Mild cognitive disorder**

Interventions/Observational Groups

- Arm 1: **German patients diagnosed with dementia.**

  The participants will be tested by using three cognitive screening tools.They will be tested for once and the single-testing session is expected to last 100 minutes. The participants will be asked about their language and cultural background and the Geriatric Depression Scale (GDS) will be used to screen for depression in the study groups. The administration of each cognitive screening tool is expected to last 15-20 minutes.
- Arm 2: **Turkish immigrants living in Germany with a diagnosis of dementia.**

  The participants will be tested by using three cognitive screening tools and they will be tested for once. The single-testing session is expected to last 100 minutes. The participants will be asked about their language and cultural background and the Geriatric Depression Scale (GDS) will be used to screen for depression in the study groups. Additionally, an acculturation scale will used to assess acculturation level of immigrants in this group.The administration of each cognitive screening tool is expected to last 15-20 minutes.
- Arm 3: **Turkish patients diagnosed with dementia.**

  The participants will be tested by using three cognitive screening tools.They will be tested for once and the single-testing session is expected to last 100 minutes. The participants will be asked about their language and cultural background and the Geriatric Depression Scale (GDS) will be used to screen for depression in the study groups. The administration of each cognitive screening tool is expected to last 15-20 minutes.

Characteristics

- Study Type: **Non-interventional**
- Study Type Non-Interventional: **Other**
- Allocation: **Non-randomized controlled trial**
- Blinding: **[---]***
- Who is blinded: **[---]***
- Control: **Other**
- Purpose: **Screening**
- Assignment: **Other**
- Phase: **N/A**
- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

Study Type: **Non-interventional**

Study Type Non-Interventional: **Other**

Allocation: **Non-randomized controlled trial**

Blinding: **[---]***

Who is blinded: **[---]***

Control: **Other**

Purpose: **Screening**

Assignment: **Other**

Phase: **N/A**

Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

Primary Outcome

Turkish immigrants living in Germany, Turkish nationals and German nationals will be included in the study and will be compared between each other by using three cognitive screening tools. These tools are the Mini Mental State Examination (MMSE) and the Rowland Universal Dementia Assessment Scale (RUDAS) and Transkulturelles Assessment mentaler Leistungen (TRAKULA).Specifically, the comparison of Turkish immigrant and Turkish national groups may give an insight into the impact of the acculturation level and bilingualism status on cognitive test performance. The comparison between the German and Turkish nationals may provide helpful information on the cultural differences in cognitive test performance.

Secondary Outcome

The results of this study can reveal whether test norms available for elderly Turkish and German nationals are appropriate for use with elderly Turkish immigrants.

Countries of recruitment

- DE **Germany**
- TR **Turkey**

Locations of Recruitment

- Medical Center **Zentralinstitut für Seelische Gesundheit (ZI), Mannheim**
- University Medical Center **Klinik und Poliklinik für Neurologie, UniKlinik Köln, Köln**
- University Medical Center **Dokuz Eylül University Hospital, Izmir**

- other **NAR, Netzwerk AlternsfoRschung, Heidelberg**

Recruitment

- Planned/Actual: **Planned**
- (Anticipated or Actual) Date of First Enrollment: **2019/06/03**
- Target Sample Size: **60**
- Monocenter/Multicenter trial: **Multicenter trial**
- National/International: **International**

Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **50 Years**
- Maximum Age: **90 Years**

Additional Inclusion Criteria

Diagnosis of AD type of dementia

Cutoff points between 23 and 12 for the Mini-Mental State Examination (MMSE) score.

Turkish immigrants: being born in Turkey and whose mother tongue is Turkish

German natives: Being born in Germany and whose mother tongue is German

Exclusion criteria

History of neurological and psychiatric illness (except depression), current known alcohol/drug abuse, head injury resulting in >5 min of loss of consciousness, learning disability, heart attack in the last 12 months, brain tumor

Addresses

- **Primary Sponsor**

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Sources of Monetary or Material Support

- **Private sponsorship (foundations, study societies, etc.)**

Robert Bosch Stiftung GmbH
Heidehofstr. 31
70184 Stuttgart
Germany

Telephone: **0711 46084-0**
Fax: **0711 46084-0**
E-mail: **[---]***
URL: **https://www.bosch-stiftung.de/de**

Status

- Recruitment Status: **Recruiting planned**
- Study Closing (LPLV): **[---]***

Trial Publications, Results and other documents

** This entry means the parameter is not applicable or has not been set.*
**** This entry means that data is not displayed due to insufficient data privacy clearing.*