# Unconscious racial bias may affect dentists' clinical decision on tooth restorability

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
04/06/2018		☐ Protocol		
Registration date 20/06/2018	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
25/09/2020	Other			

## Plain English summary of protocol

Background and study aims

Bias is an inclination for or against a person or a group, as it allows for one's personal opinions to influence judgement. It is defined in the Oxford dictionary as an 'inclination or prejudice, for or against one person or group, especially in a way considered unfair.' There are many forms of bias, which are generally one sided and have the ability to affect everyday social interactions. The aims of this study are to determine whether explicit and implicit racial bias predicts the recommendation of root canal therapy or extraction for White and Black patients suffering from irreversible pulpitis (inflammation of dental pulp tissue), and to determine whether different treatment decisions are made for Black vs White patients and to determine whether such differences (if any) are related to the presence of explicit or implicit racial bias.

Who can participate? Qualified dentists

#### What does the study involve?

Participating dentists are given a clinical scenario in combination with a patient's relevant clinical photographs and radiographs depicting either a Black or White patient presenting with a decayed tooth and the associated symptoms of irreversible pulpitis. Explicit bias is measured through a questionnaire, which evaluates the recommended course of treatment, the strength of the recommendation and their perception of the patient's dental cooperativeness. Implicit bias is evaluated through brief implicit association tests.

What are the possible benefits and risks of participating?

The possible benefits are to create early awareness and active prevention. Although it might not be likely to completely eliminate the effects impact biases can have upon decision making, a reduction in the occurrence is a worthy result. Ultimately by creating awareness, bias can be recognised and reduced. The risks of participation are that during the tests participants may feel uncomfortable and may not want to continue further.

Where is the study run from? The University of Cagliari (Italy) When is the study starting and how long is it expected to run for? January 2017 to November 2017

Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Neha Patel

# **Contact information**

# Type(s)

Public

#### Contact name

Dr Neha Patel

#### Contact details

Flat 1, Holmefield Court Belsize Grove London United Kingdom nw3 4tt

# Additional identifiers

#### Protocol serial number

**BCAG2017** 

# Study information

#### Scientific Title

Unconscious racial bias may affect dentists' clinical decision on tooth restorability

# **Study objectives**

The race of a patient does not affect dental clinicians recommendation for root canal treatment.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Azienda Ospedaliero Universitaria Di Cagliari, 12/12/2017, ref: PG/2017/7126

# Study design

Single-center cross sectional survey

# Primary study design

Observational

## Study type(s)

Other

## Health condition(s) or problem(s) studied

Implicit and explicit bias and its influence on clinical treatment planning decisions

#### **Interventions**

Dentists were given a clinical scenario in combination with a patient's relevant clinical photographs and radiographs depicting either a Black or White patient presenting with a decayed tooth and associated symptoms of irreversible pulpitis.

Explicit bias was measured through a questionnaire, which evaluated participants' course of treatment, strength of recommendation and their perception of patient's dental cooperativeness.

Implicit bias was evaluated through brief implicit association tests.

#### Intervention Type

Other

#### Primary outcome(s)

Recommendation for root canal treatment (RCT) is measured using a dichotomous scale (yes or no)

## Key secondary outcome(s))

Recommendation for extraction is measured using a dichotomous scale (yes or no)

## Completion date

01/11/2017

# Eligibility

# Key inclusion criteria

Qualified dentist

# Participant type(s)

Health professional

# Healthy volunteers allowed

No

## Age group

Adult

#### Sex

All

#### Total final enrolment

57

#### Key exclusion criteria

- 1. Dental student or nurse
- 2. Any health professional without a BDS

# Date of first enrolment

01/10/2017

#### Date of final enrolment

01/11/2017

# Locations

## Countries of recruitment

Italy

# Study participating centre The University of Cagliari

Italy 09124

# Sponsor information

# Organisation

Guy's and King's College London

#### **ROR**

https://ror.org/0220mzb33

# Funder(s)

## Funder type

Other

#### Funder Name

Investigator initiated and funded

# **Results and Publications**

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Neha Patel. Type of data - questionnaire responses and IAT results (raw, tabulated), accessed over email (.doc).

Consent was provided by each individual participant, and all data was anonymised

# IPD sharing plan summary

Available on request

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2019	25/09/2020	Yes	No
Basic results		13/11/2018	, ,		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes