

# Cross-cultural knowledge, beliefs, attitudes, and responses to tics: A scoping review of evidence outside of Australia, Europe and the USA

Olivia Burn<sup>1</sup>, Morvwen Duncan<sup>2</sup>, Eve McAllister<sup>2</sup>, Alana Loewenberger<sup>1</sup>, Tara Murphy<sup>2</sup>

<sup>1</sup> Research Department of Clinical, Educational and Health Psychology, University College London, UK

<sup>2</sup> The Tic Service, Great Ormond Street Hospital for Children, UK

## Background

Stigma is a profound issue within tic disorder (TD) which impacts wellbeing<sup>1-4</sup>. Research is overrepresented by Europe, the USA and Australia. This poses a barrier to understanding experiences of TD-associated stigma in other cultures

Recent reviews<sup>5-6</sup> have identified a sub sample of studies examining experiences of stigma outside of the USA, Europe and Australia, highlighting some differences in casual attributions of TDs and experiences of stigma and isolation due to public misunderstanding of TD

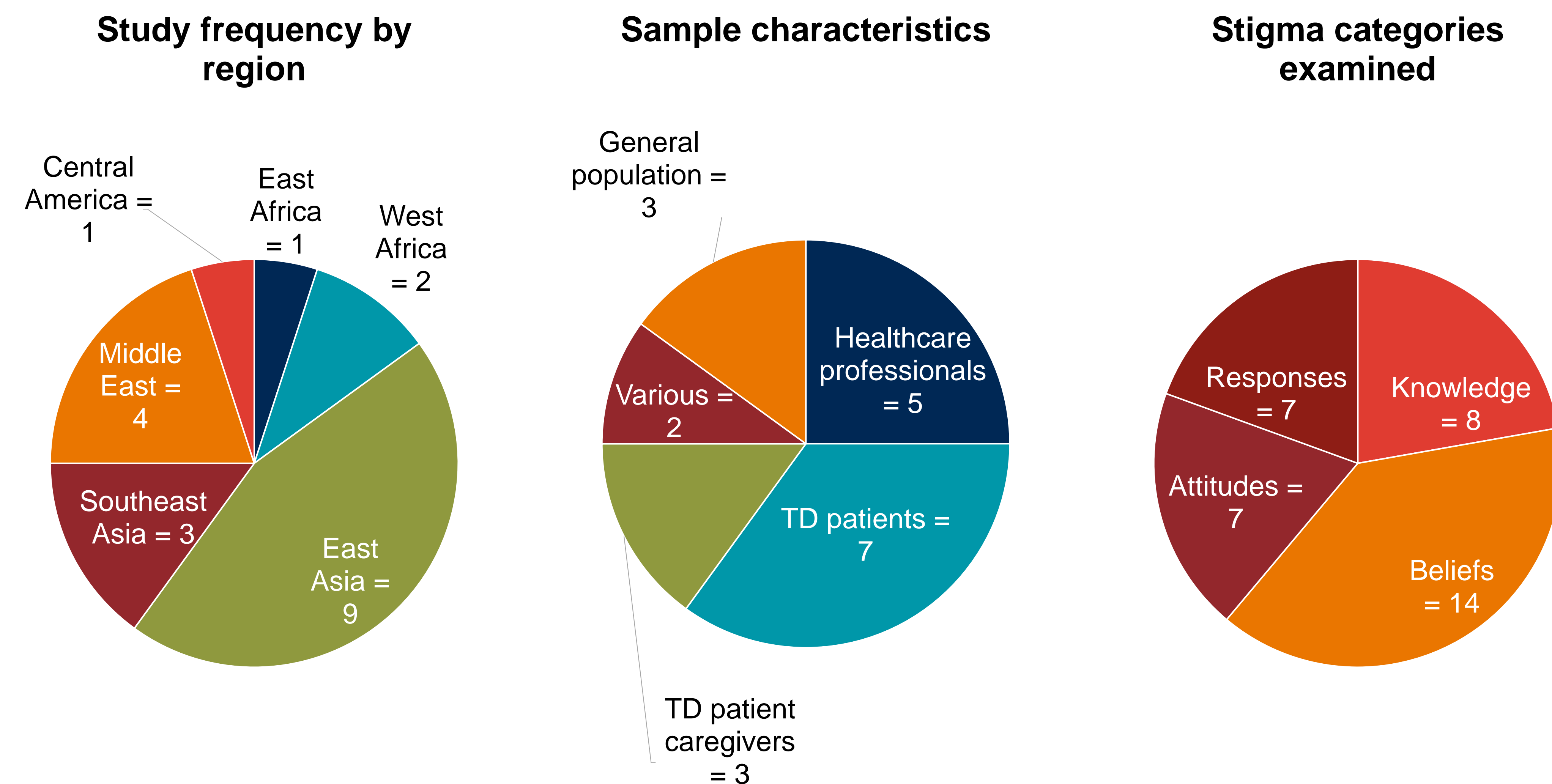
Due to the nature and focus of these reviews, findings were synthesised which limits comparison to inspect cross-cultural differences

## Aims

To inspect components of TD-associated stigma in greater detail (beliefs, knowledge, attitudes, responses)<sup>7</sup>

## Research questions:

- What evidence for components of stigma (knowledge, beliefs, attitudes, responses) exist outside of the USA, Europe and Australia?
- Do differences exist in knowledge, beliefs, attitudes and responses to TDs between countries and continents?
- What factors influence the components of stigma?



## Methods

A scoping review of five electronic databases (PsycINFO, EMBASE, MEDLINE, Global Health, Web of Science)

Search terms focused on 1) countries outside of the USA, Australia and Europe, 2) TDs, and 3) knowledge, beliefs, attitudes or responses

Inclusion criteria:

- Empirical papers published after 1990
- Conducted in countries outside of USA, Europe and Australia
- Include a measure/data concerning attitudes, beliefs, knowledge or responses to TDs

1831 initial articles -> 20 papers

## Findings and discussion

Countries varied in knowledge and exposure to TDs, causal attributions, treatment beliefs, perceived severity and impact of TDs, TD-related attitudes and responses to TDs.

Approximately half of each professional sample demonstrated an understanding of TDs – barriers included reduced TD exposure, reduced help-seeking for TDs.

Endorsement of treatment types, causal attributions and perceived distress varied across countries (for instance, biological in Israel, social-environmental in South Korea, spiritual in Bali and Uganda)

The relationship between stigma components is unclear (e.g., relationship between knowledge and attitudes)

## Key points

Variability is seen across countries in how TDs are conceptualised, perceived and responded to

Need to consider intersectionality (such as the role of gender and ascription to dominant beliefs)

Cross-cultural relationships between components of stigma are tentative and descriptive and require statistical examination

Acceptance of TDs across cultures supported through social support and acceptance by wider networks

## Limitations and next steps

Comparisons across studies are constrained by heterogeneity and lack of reliability in study design and sample

Need to develop valid cross-cultural stigma measures to conduct reliable cross-cultural research

Further research to examine cross-cultural differences in TD-associated stigma using statistical measures

Informative to examine relationships between components of stigma to develop effective stigma interventions to improve acceptance of individuals with TDs