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IM-COMMENTARY

Development and validation of the medical attitudes towards deprescribing questionnaire: comment

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Dear Editor,

We have carefully read the study on the Development and Validation of the Medical Attitudes Towards Deprescribing Questionnaire (MATD-Q) by Agosti et al. [1].

While deprescribing effectively improves patient health outcomes, barriers related to healthcare professionals' (HCPs) beliefs and attitudes often hinder its implementation. We agree with the authors that assessing these barriers is crucial for improving deprescribing interventions. The barriers assessment is also identified as a key step in several frameworks to guide the development of effective interventions, such as The Consolidated Framework for Implementation Research (CFIR) and The Choosing Wisely De-Implementation Framework (CWDIF) [2, 3]. In particular, the CWDIF framework suggests identifying barriers and searching for implementation strategies to decrease low-care practices, such as inappropriate prescriptions. While we support efforts aiming to develop a tool to assess the efficacy of interventions aiming to enhance deprescribing in clinical practice, we are concerned with the authors' conclusion that the MATDQ-12 (1) includes 'the most meaningful components of the concept of deprescribing' and (2) could be used 'to measure the efficacy of educational interventions aimed at improving the attitude of physicians towards deprescribing strategies with the final goal to allow their implementation in clinical practice'. There are two main reasons for that.

First, during the questionnaire's development, the authors reviewed the literature and identified behavioural constructs to evaluate physicians' attitudes to deprescribing, yet without referring to existing theories. A theory-driven approach could have strengthened this process. Theory-based approaches to both implementation and de-implementation strategies improve the likelihood of successful practice change. In particular, psychological theories have proven effective in implementation science. The Medical Research Council recommends their use in designing and evaluating behaviour-change interventions. Researchers have emphasised the value of applying psychological theories to improve the integration of evidence-based practices into the routine work of HCPs [4]. Furthermore, using theory is likely to give a more accurate picture of the barriers to target behaviour and avoid biases often present in developing questionnaires to assess behavioural determinants [2, 3].

Various studies have proposed theories and theoretical frameworks to address the growing need for theory-based development and evaluation of implementation interventions. Perhaps, one of the most commonly used frameworks is the Theoretical Domain Framework (TDF) which offers guidance for researchers to apply in both qualitative and quantitative research [4]. The TDF comprises psychological, social, and environmental factors that influence behaviour and restructures them into 12 or 14 domains for a comprehensive investigation of determinants influencing behaviour. The TDF (Version 2) used in identifying barriers to and enablers of the implementation of behaviour change intervention, categorises factors influencing behaviour into 14 domains, such as Knowledge, Skills, Beliefs about capabilities, and Goals. The recent systematic review on barriers

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to and enablers of deprescribing benzodiazepine receptor agonists used the TDF to present a clear overview of barriers faced by various stakeholders [5]. Applying theoretical approaches could have revealed a wider range of potential barriers for the authors to account, such as goals and self-efficacy, leading to a more comprehensive evaluation.

Our second comment relates to the wording of the questionnaire items. While designing items targeting HCPs' behaviours is undoubtedly challenging, we believe that some final items retained by the authors create missed opportunities for identifying real and specific barriers. First, the authors reported low variability in some answers, with mainly high scores. These high scores were likely due to the undeniable nature of some statements. This may also have contributed to the validation challenges that the authors reported to face with their questionnaire. For example, item 13 ("Specific guidelines designed to improve polypharmacy management and oriented towards deprescribing are needed") had a mean (SD) of 4.45 (0.62) in the test phase. A revised statement that would better identify a potential barrier might be "There are deprescribing guidelines available that are possible to implement in my practice". Secondly, some items' formulation may introduce confusion. Item 11 ("Physicians are properly educated and trained in the field of deprescribing") combines education and training. Targeting both simultaneously may lead to unclear responses from participants. While closely linked, education initiatives will likely address a lack of knowledge base while training may improve skill acquisition. We suggest differentiating questions about knowledge and actual training in performing relevant behaviours to avoid confusion in the closely related notions. This will also be helpful when designing educational approaches that best target the main barriers.

Overall, we agree with the authors on the need to develop a tool to assess medical physicians' attitudes towards deprescription in older people with multimorbidity and polypharmacy. We appreciate the effort put into creating the proposed questionnaire, yet we believe that there is potential for further refinement to better align it with recommendations from implementation science and behaviour change specialists. This would enhance the questionnaire's potential to identify barriers to later improve deprescribing interventions.

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Data Availability Not applicable.

Declarations

Conflict of interest We declare no conflict of interest.

Human and animal rights statement This article does not contain any studies with human participants or animals performed by any of the authors.

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