

# **SWAR 44: Experiences of novice team members in evidence synthesis: Barriers, facilitators and opportunities for the future.**

## **Objective of this SWAR**

To identify barriers, facilitators and opportunities for the future for the involvement of students in the conduct of evidence syntheses.

Study area: Evidence Synthesis Training

Sample type: Review Authors, Student authors

Estimated funding level needed: Low

## **Background**

Evidence synthesis is an important research method, with the power to identify key knowledge and methodological gaps, as well as directing practice and informing policy [1, 2]. Moreover, evidence syntheses may help readers to appreciate large bodies of research more efficiently, informing decision-making in health care. However, as the demand for high-quality evidence syntheses continues to rise, so do the technical and methodological challenges. One such challenge is ensuring appropriate conduct of reviews and accurate and thorough reporting of the review process [3], which may help to avoid “research waste” [4]. An important part of this is the creation of a suitably skilled and well-managed review team. Increasingly, students are involved in evidence synthesis to build capacity in research methods and upskill them in the critical appraisal of existing studies. These skills are important precursors to conducting primary research studies. Whilst inclusion of novice team members is valuable in increasing capacity in the area [5], the often-complex nature of evidence syntheses requires upskilling, during which students may encounter issues.

Although many training resources are available publicly to assist with the conduct of reviews, it is important to explore the student perspective of contributing to evidence syntheses, to identify and evaluate the barriers and facilitators to completing this process. Thus far, few studies have addressed this research question, with previous research pertaining to early career researchers [6]. The proposed Study Within a Review (SWAR) [7] aims to address this gap in the literature. This research is particularly important in health care, in which participating in evidence syntheses as an undergraduate or postgraduate student may impact practice as a current or future clinician. These students are among the ultimate end users of reviews. Therefore, evaluating their experiences with a view to improvement may help to increase stakeholder literacy of evidence syntheses, as well as potentially encouraging clinicians to engage in future evidence syntheses projects.

## **Study Design**

This SWAR will be conducted in the Faculty of Education and Health Sciences in the University of Limerick, which spans many health-related disciplines and offers both undergraduate and post graduate study opportunities. This SWAR will adopt a mixed methods approach to address the research aims in sufficient breadth and depth [8]. Students who have just completed or are in the process of completing their first evidence synthesis in the Faculty will be recruited for focus groups. Students will also be asked to complete a short survey (5-10 minutes in duration) to provide details that include their clinical position (if any), their systematic review experience and their perceptions of the experience. Ethical approval will be sought from the University of Limerick Ethics Committee before commencement of the study and the research will be reported in accordance with the Good Reporting of a Mixed Methods Study (GRAMMS) checklist [9].

## **Participants**

Students will be eligible for participation if they meet the following criteria: (a) 18+ years, (b) student in higher education, and (c) currently participating in or have experience within the past year of participating in their first evidence synthesis project in the area of health or behavioral sciences. They must have had experience with one or more of the following: database searching, study screening, data extraction, quality appraisal or evidence synthesis.

## **Interventions and Comparators**

Intervention 1: N/A

Intervention 2: N/A

Index Type: N/A

## **Method for Allocating to Intervention or Comparator:**

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## **Outcome Measures**

Primary: Information on barriers and facilitators to the participation of students in evidence syntheses.

Secondary: N/A

## **Analysis Plans**

Data will be analysed in line with Braun and Clarke's (2023) [10] reflexive thematic analysis. Interviews and focus group discussions will be transcribed verbatim using Microsoft Teams and verified for accuracy using audio recordings. To achieve familiarisation and contextual understanding of the data, the principal investigator will review the recordings as required. Interviews will be coded by seeking "central organising concepts" [10, 11] and themes will be generated by the principal investigator. Quantitative survey data will be analysed using descriptive statistics in SPSS (IBM).

## **Possible Problems in Implementing This SWAR**

There may be difficulties recruiting students completing their first systematic review.

## **References**

1. Flemming K, Noyes J. Qualitative Evidence Synthesis: Where Are We at? *International Journal of Qualitative Methods* 2021;20.
2. Sutton AJ, Cooper NJ, Jones DR. Evidence synthesis as the key to more coherent and efficient research. *BMC Medical Research Methodology* 2009;9:29.
3. Glasziou P, Altman DG, Bossuyt P, Boutron I, Clarke M, Julious S, et al. Reducing waste from incomplete or unusable reports of biomedical research. *Lancet* 2014;383(9913):267-76.
4. Ioannidis JP, Greenland S, Hlatky MA, Khoury MJ, Macleod MR, Moher D, et al. Increasing value and reducing waste in research design, conduct, and analysis. *Lancet* 2014;383(9912):166-75.
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7. Devane D, Burke NN, Treweek S, Clarke M, Thomas J, Booth A, et al. Study within a review (SWAR). *Journal of Evidence-Based Medicine* 2022;15(4):328-32.
8. Schoonenboom J, Johnson RB. How to Construct a Mixed Methods Research Design. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 2017;69(Suppl 2):107-31.
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10. Braun V, Clarke V. Toward good practice in thematic analysis: Avoiding common problems and becoming a knowing researcher. *International Journal of Transgender Health*. 2023;24(1):1-6.
11. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health* 2019;11(4):589-97.

## **Publications or presentations of this SWAR design**

## **Examples of the implementation of this SWAR**

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