# README file

Title: Dataset for "Identifying the Key Components of Social Support for Patients Living with Type 2 Diabetes: A Systematic Review and Meta-Analysis"

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**Holder(s) for the dataset: Liverpool John Moores University**

**Year of Publication: 2025**

This dataset supports the systematic review and meta-analysis titled "Identifying the Key Components of Social Support for Patients Living with Type 2 Diabetes." It includes a data characteristics table (Study ID, population details, intervention context, sample size, age, gender, follow-up, and HbA1c outcomes), quality assessments using MMAT and JBI tools, and relevant figures. The dataset ensures transparency, enables replication, and supports further research on social support interventions in Type 2 diabetes management.

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**Contents**

- Data set table which was divided into three main sections: Study ID (Authors and year of publication), Population (Country, Intervention context, Sample size, Age, and gender), and Outcomes (Follow-up and HbA1c results).

- A data table providing more information about which categories of social support were used in each intervention (Tangible, Informational, Emotional, and Appraisal support).

- Three Tables providing information the MMAT assessment results

- Three Tables providing information the JBI assessment results

- Meta-analysis PRSIMA Checklist

-Meta-analysis Abstract PRISMA Checklist

- Figure 1: PRISMA Flow Diagram

- Figure 2: Forest Plot

- Figure 3: Funnel Plot

-Figure 4: Egger’s test and Trim and Fill test Funnel plot

**Methods**

The dataset was generated through a systematic review and meta-analysis, following a structured protocol (DOI: [0.1371/journal.pone.0306709](http://dx.doi.org/10.1371/journal.pone.0306709)) to ensure methodological rigour. Four databases (Medline, Web of Science, ProQuest, and CINAHL) were searched between March and April 2024, covering studies from 1990 to 2023.

The inclusion criteria focused on participants with Type 2 Diabetes (T2D), aged 18 or older, and studies involving family members or carers, while excluding those with other diabetes types, psychological conditions, or comorbidities. A dual-screening process was employed by **RM and LN** using the Rayyan AI tool, with discrepancies resolved through discussion.

Risk of bias was assessed using the Mixed Methods Appraisal Tool (MMAT), with **RM, LN, KU, and PH** conducting the appraisal. Data synthesis followed the PRISMA checklist, structuring study characteristics, population details, and intervention outcomes.

A multilevel random-effects meta-analysis was conducted in R using the ‘metafor’ package, with HbA1c mean differences as the effect measure and heterogeneity assessed using the I² index. Publication bias was evaluated through Trim and Fill, Egger’s test, and the Graphical Display of Study Heterogeneity (GOSH) approach. The Joanna Briggs Institute (JBI) tool was used to assess confidence in cumulative evidence. The dataset was curated by a research team, ensuring methodological robustness and reliability.