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# Enhancing Diabetes Care with Peer Mentorship and Support Groups

Barry McCann, BSN, RN

## Background

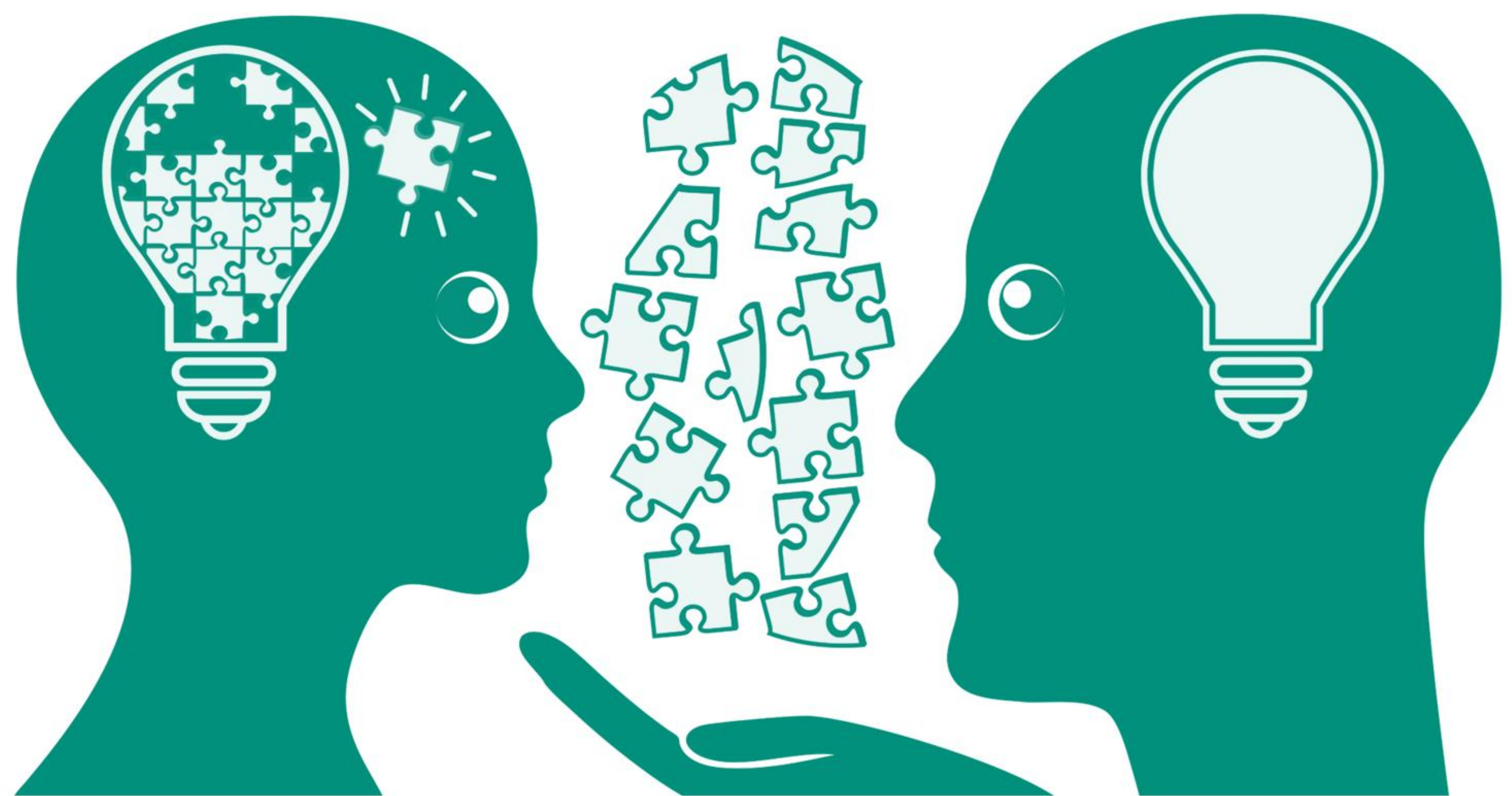
- Management of type 2 diabetes requires long term adherence to recommended dietary, physical activity, and medication regimens (CDC 2022).
- Effectively delivering diabetes education to patients is a vital aspect of this highly self-managed disease.
- Adherence to medical advice is impacted by the quality of patient-provider relationship and communication (Desta et al 2022).
- Societal stigmas, individual bias, racial and ethnic disparities, socioeconomic status all introduce barriers to the development of a therapeutic relationship (Budhwani et al 2022).
- Peer mentorship and support interventions may help overcome these barriers and can improve diabetic patient outcomes (Verma et al 2022, Lu et al 2022, Zhang et al 2016).

## Introduction

- Continued increase in prevalence of type 2 diabetes indicates need for more effective interventions to support lifestyle and behavior changes (ADA 2018).
- Evidence indicates attending diabetes self management education programs can improve diabetes outcomes, unfortunately they are often under referred and underutilized (Powers et al. 2015, Boakye et al. 2018).
- Limited class times, locations, and capacities can make attendance for all patients difficult and vulnerable populations are less likely to participate (Boakye et al. 2018).
- Diabetes education programs often lack culturally and individually relevant guidance, provide no long-term support, and most insurance policies only cover up to 10 hours of education (Boakye et al. 2018).
- Despite these shortcomings in diabetes education and support, our communities still have patients that have found success in disease management.
- Successful patients are a potential resource for new and chronic patients struggling to understand and control their disease.
- The purpose of this review is to collect and examine existing literature on the use of peer support or mentorship programs as a treatment adjunct for adult type 2 diabetics to establish the need for local program development and implementation.

## Search Methods

PubMed and CINAHL databases were searched for articles published between 2016 and 2023 using the Boolean phrase search terms “peer support” or “peer mentor” and “diabetes type 2”. Articles included in the literature review had to be conducted with adult type 2 diabetic populations, published after 2016, the intervention used a peer as a mentor or coach, and reported outcomes included glycemic control, self-efficacy, self-management. Systemic reviews, meta-analysis, randomized controlled trials, qualitative studies, and additional study types were included in the literature review if they were relevant to the development and implementation of peer support interventions and programs. Articles were excluded if they included other chronic issues or populations under 18 years of age. Article references were reviewed for additional relevant resources.



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## Results

- Verma et al (2022) conducted systematic review and meta-analysis; found evidence supporting peer support interventions as a viable method promoting clinical improvements in HbA1c values, self-efficacy, and quality of life for type 2 diabetics in a variety of implementation settings for various populations.
- Studies included by Verma et al (2022) had face-to-face, telephone, digital, and mixed methods of peer support covering a vast range of demographics and provide evidence to the intervention benefits. Review provides insights on methods, duration, and target populations to guide development of programs aimed to improve effectiveness and reach.
- A scoping review by Lu et al (2022) indicates peer support programs can support traditional diabetes education and have potential to decrease health disparities through increased community interaction. More detailed data regarding what peer coaching methods work best among different subgroups is needed.
- Meta-analysis conducted by Zhang et al (2016) found peer support interventions can contribute to clinically significant reductions in HbA1c and should be further explored to provide additional treatment support for type 2 diabetes.
- Garn et al. (2023) found relatability between peers such as similar demographics and social context can help increase self-care awareness and help to generate behavioral changes. Peer interactions activate mechanisms such as trust, empathy, respect, and honesty.
- Trial conducted by Long et al (2020) did not result in expected improved patient outcomes. Mentors received minimal training and support from research and medical staff compared to other studies and were not selectively paired with mentees highlighting the importance of these considerations with program development.
- Lyles et al (2021) study provides insights towards digital applications and technology enhancing outreach potential of programs to help reach minority populations.
- Trials conducted by Sampson et al (2021) and Heisler et al (2019) found improvements in HbA1c with peer support interventions with helpful insights for peer training and technology support in programs.
- Lott et al (2019) provided qualitative data from the perspective of patients contributing to evidence of the social benefits of peer mentorship.
- Trial by Yu et al (2018) found peer support interventions were associated with reduced inpatient care utilization over 3.25 years.

## Conclusion

- Evidence supports the use of peer support interventions to improve diabetes outcomes if thoughtfully integrated into evidence-based diabetes self-management education programs.
- Important concepts to consider for program development
  - Mentor selection, role definition, recruitment, training, retention, selective pairing
  - Program objectives, intervention type, duration, reach, support, supervision, cost, data collection
  - Integration with standard education, providing follow up support post intervention, integration with community resources
- Development and sustainment of a peer support program provides an opportunity to contribute to the body of evidence surrounding peer support interventions.

## Acknowledgements

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