

BACKGROUND



- In the United States, more than 34 million people suffer from diabetes; it is estimated that between 90-95% of those cases are type 2 (Center for Disease Control and Prevention, 2019)
- U.S. diabetes cases projected to increase 165% in 2050 (James, 2001)

Definition of Type 2 Diabetes

- Type 2 diabetes is caused by insulin resistance and or relative insulin deficiency. Complications associated with diabetes mellitus: heart disease, stroke, neuropathy, sleep apnea, and kidney disease. (Mayo Clinic, 2021)

Needed change

- The availability of educators or case managers will aid in debunking misinformation that may be believed in communities.
- Health education shows promising positive effects on life style changes.
- Proper symptom management would prevent or lessen long term complications that may arise.
- Health wellness programs are a cost effective way to help those in all socio-economic levels when tailored to cultural aspects or individual.

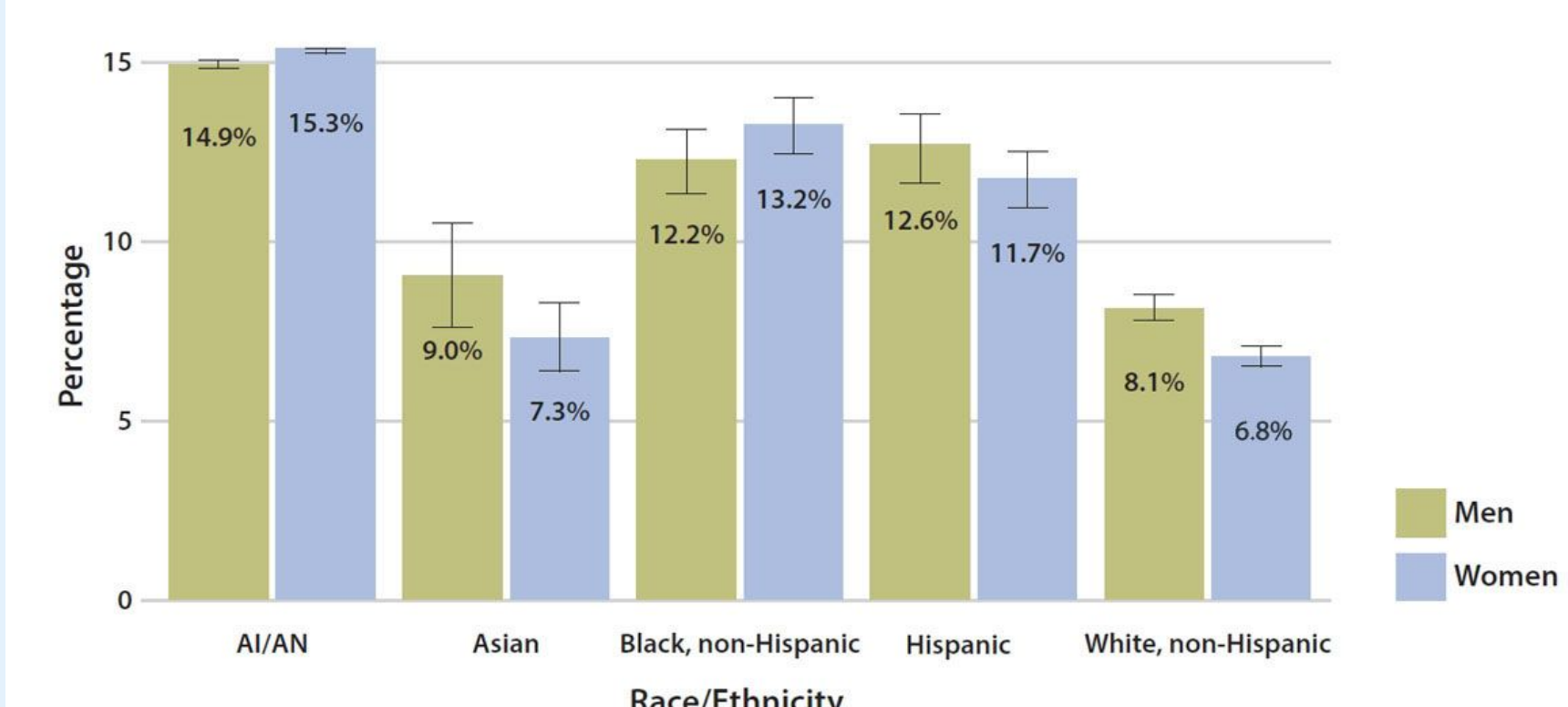
SIGNIFICANCE OF

- 1.5 million Americans are diagnosed with diabetes every year. (2018, ADA)
- Of the people diagnosed with diabetes, 210,000 are children and adolescents younger than age 20 years, including 187,000 with type 1 diabetes. Undiagnosed: An estimated 7.3 million adults ages 18 years or older have diabetes but are undiagnosed (21.4 percent of adults with diabetes). (2020, NIDDK)

An estimated 88 million adults ages 18 years or older (34.5 percent of U.S. adults) have prediabetes. This includes

- nearly 29 million adults ages 18 to 44 years (24.3 percent of U.S. adults in this age group)
- more than 35 million adults ages 45 to 64 years (41.7 percent of U.S. adults in this age group)
- more than 24 million adults ages 65 or older (46.6 percent of U.S. adults in this age group). (2020, NIDDK)

- Diabetes is a major component of Chronic metabolic disease, not only does this disease lower the quality of life but also greatly increases medical expenses and is linked to disease related deaths. (NCBI, 2016)



The Image to the right is the Estimated age-adjusted prevalence of diagnosed diabetes by race/ethnicity and sex among adults aged ≥18 years, United States, 2013–2015 (CDC, 2017)

LITERATURE REVIEW

1. Increased Self-Care Activities and Glycemic Control Rate in Relation to Health Education Via Wechat Among Diabetes Patients: A Randomized Clinical Trial

Dong Y, Wang P, Dai Z, Liu K, Jin Y, Li A, Wang S, Zheng J.

- Article describes randomized clinical trial, to further prove that health education could increase the basic self-care skills and glycemic control rate in patients with type 2 diabetes.
- Results found that patients participating in classes via webchat in conjunction with conventional diabetes treatment could improve glycemic control and self-care skills.

2. Impact of Health Coaching on Glycemic Control in Low-income Patients with Diabetes: A Randomized Controlled Trial

Thom DH, Ghorob A, Hessler D, De Vore D, Chen E, Bodenheimer TA

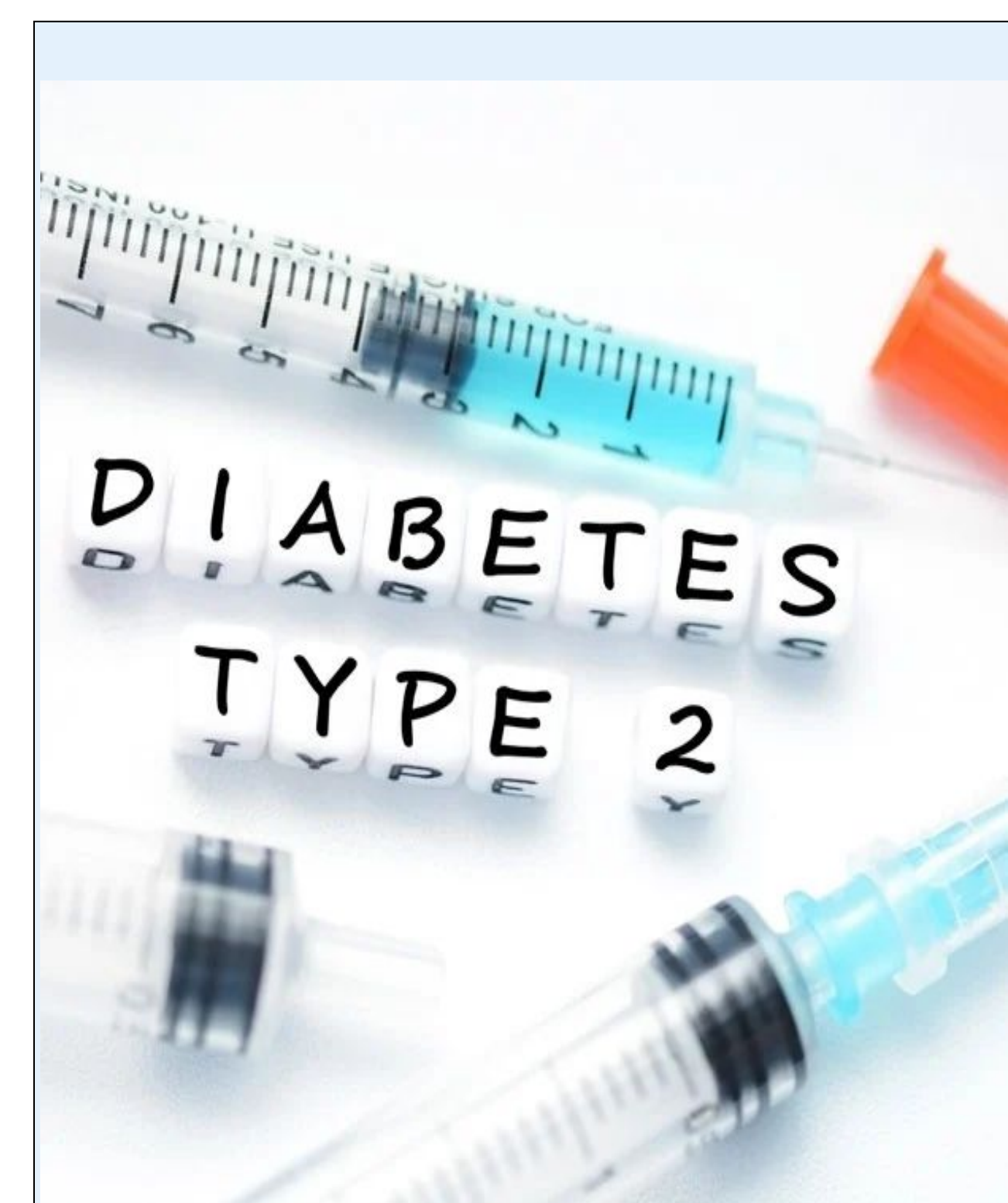
- Article aimed to show advantages in offering one on one, clinical based, coaching in order to improve self-management skills and health in low-income patients living with poorly controlled diabetes.
- Results found that peer health coaching significantly improved diabetes control in low-income patients.

3. Culturally Appropriate Health Education for Type 2 Diabetes in Ethnic Minority Groups: An Updated Cochrane Review of Randomized Controlled trials

Creamer, J., Attridge, M., Ramsden, M., Cannings-John, R., & Hawthorne, K.

- The review conducted aimed to access effectiveness of culturally appropriate health education for those in ethnic minority groups with type 2 diabetes.
- Results showed consistent benefits over conventional care. Patients exhibited better glycaemic control and diabetes knowledge, sustained in the short- to mid-term (24 months).

FUN FACTS



- Diabetes patients, or patients with other chronic conditions are currently being prioritized under the rollout of the COVID vaccine
- Health care education has been shown to improve more than just symptoms of chronic diseases. It also has been shown to improve mental health, prevent injuries, improve nutrition, and prevent drug and alcohol abuse.
- Widespread health care education rose to prominence in America during the 50s to 70s

OUTCOMES

Quantitative Outcomes:

For Participants in Article 1

- Glycated Hemoglobin decreased significantly compare to control group and Self-Efficacy score increased more.

For Participants in Article 2

- Glycated Hemoglobin levels decreased 1.07% Vs the control groups 0.3%

For Participants in Article 3

- Knowledge Scores of Diabetes improved more then control group

Qualitative Outcomes:

- Reduction in negative mental health symptoms associated with chronic conditions

- Patients significantly more likely to make changes in improving their chronic conditions



SUMMARY

- Patient access to quality health care education shows marked improvement in symptoms associated with their chronic diseases.
- Literal review supports wider access to health education. All studies suggest positive impacts (lower negative symptoms and lower adverse complications associated with chronic diseases) amongst patients who have had access to health education regarding their chronic conditions.

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