

Risk Factors of Type 2 Diabetes in Low Socioeconomic Status Americans

Understanding and Researching the Factors that Increase the Risk for Type 2 Diabetes in
American Populations

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Title: A Literature Review

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Risk Factors of Type 2 Diabetes in Low Socioeconomic Status Americans

Research Question

What are the risk factors for type 2 diabetes in low socioeconomic populations in the United States?

Abstract

Type 2 diabetes is a growing public health concern in the United States, affecting individuals from low socioeconomic status populations. This literature review explores the main risk factors that contribute to the increased prevalence and severity of type 2 diabetes in low socioeconomic groups. This review focuses on obesity and metabolic factors, food insecurity and dietary habits, and limited access to healthcare and preventative services. This review uses ten relevant articles from two different databases, PubMed and CINAHL in which all of the articles study type 2 diabetes in low socioeconomic populations within the United States and the barriers that come with it. The findings show that low socioeconomic status individuals face many barriers that increase their risk for type 2 diabetes. The findings indicate that obesity increases insulin resistance, food insecurity leads to reliance on high-caloric processed foods and limited healthcare access results in delayed diagnosis and poor diabetes management. Addressing these barriers requires public health officials to intervene and improve these barriers by placing policies that enhance obesity, healthcare accessibility, and food security. The findings also emphasize how low socioeconomic status is one of the main reasons for the increase in prevalence of risk factors of type 2 diabetes.

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Introduction

Type 2 diabetes is one of the most common health diseases affecting people in the United States. Type 2 diabetes is a condition when your body cannot produce insulin properly (Cleveland Clinic, 2023). Type 2 diabetes can cause several health issues including kidney disease, heart disease, stroke, and even death if it is left untreated (Cleveland Clinic, 2023). Type 2 diabetes has been a continuous concern, although, the concern has increased in recent years based on data and public health data. The Institute for Alternative Futures (IAF) projects that by 2030, there will be over 54.9 million people with diabetes worldwide, a 54% increase from the current level (Rowley et al., 2017).

People from lower socioeconomic backgrounds are especially impacted by type 2 diabetes. Socioeconomic status reflects the absolute or relative levels of financial resources, influence, and social standing that are closely tied to an individual, community, or nation's wealth (Tatulashvili et al., 2020). People with low socioeconomic status (SES) may lack the funds to pay for healthcare services, including preventive care and treatments for any medical reasons. In 2022, 25.9 million or 7.9% of people in the United States did not have health insurance at any point during this year (Census, 2023). According to the Food Research and Action Center, 13.5% of households, or 47.4 million Americans experienced food insecurity or lacked access to affordable foods that gave those families nutritious diets (Center, 2024). These individuals may face obstacles in accessing healthcare and nutrition which affects their overall health outcomes. Therefore, this reflects poor overall health and financial stress.

Understanding the risk factors associated with type 2 diabetes in low SES groups is important for learning the ways we can intervene and lessen the disease's disproportionate impact in these groups. Addressing these risk factors will help lower the increasing public health burden of diabetes and it is important that this issue is addressed. While there has been extensive research

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on the relationships between type 2 diabetes and socioeconomic stats, gaps remain in understanding how these factors. This study aims to identify risk factors for Type 2 diabetes in low socioeconomic populations in the United States.

Methods

Two relevant databases were used to conduct research for this literature review. The two databases that were used to obtain information are PubMed and CINAHL. These databases provide a wide range of reliable, peer-reviewed literature related to public health issues. The purpose of this methods section is to describe the steps of how articles in PubMed and CINAHL were selected. PubMed provides extensive information biomedical literature which is overseen by the National Center for Biotechnology Information at the U.S. National Library of Medicine. The database provides access to a wide range of biomedical literature focusing primarily on health, medicine, and sciences. Over 30 million citations for biomedical literature are available in PubMed, including: biochemistry, clinical medicine, dental studies, nursing, pharmacy, and veterinary medicine. CINAHL (Cumulative Index to Nursing and Allied Health Literature) database was selected for its more than 3,300 peer reviewed journals, which provide high-quality research and information. Topics from this database include nursing, biomedicine, physical therapy, occupational therapy, and health education.

To begin the search in PubMed, “type 2 diabetes” was used as the search term. This term presents the first primary characteristic of the study. There were 232,854 articles populated from this first search. To narrow down the results, “type 2 diabetes AND socioeconomic status” was used. After the addition of these two terms, 2,211 articles populated with the updated combined search terms. By adding socioeconomic status to the search, it allows the search to include more relevant data for the specific population of people. Then, “type 2 diabetes AND socioeconomic

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status AND risk factors” was added to narrow down the results. The number of articles produced from this search was 1,036. This search helps include more relevant data about the risk factors of type 2 diabetes in low socioeconomic statuses. Finally, “type 2 diabetes AND socioeconomic status AND risk factors AND united states” was added to narrow down the results. This search narrowed the articles down to 309 articles. The term “united states” was added to show a specific region of the world to get more accurate and useable data.

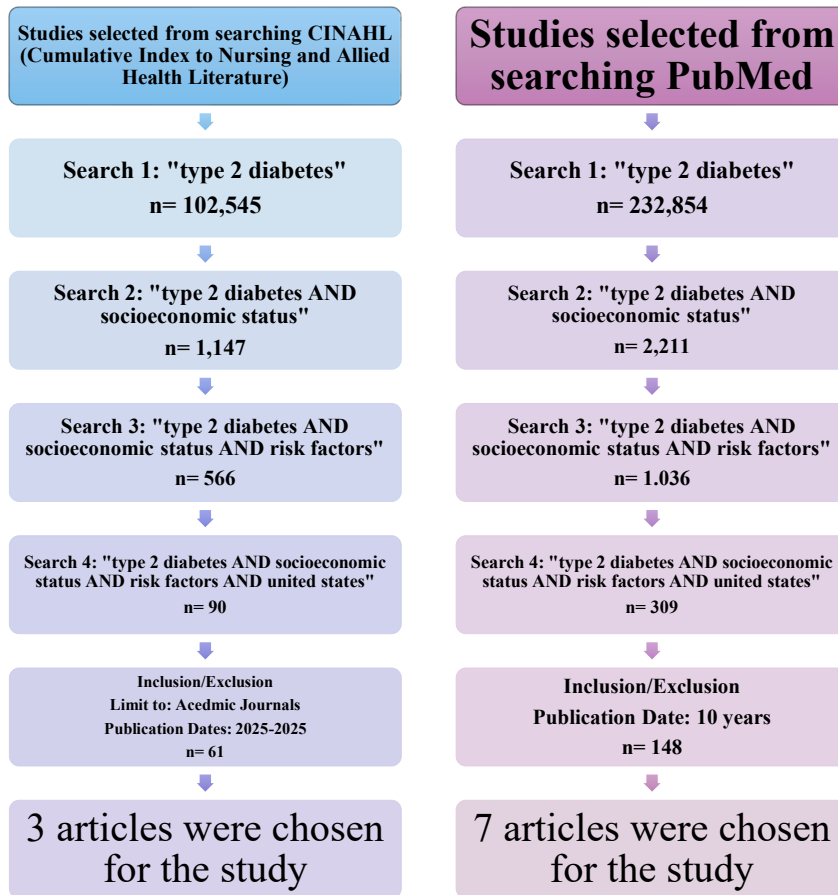
To ensure the literature review is using updated information, the search was set to only provide articles from 2015 and 2024. The search was also set to “peer-reviewed” to make sure the information being received is reliable. This search was able to be narrowed down to 148 articles. 7 out of the 148 articles provided were chosen to be included in the literature review based on their relevance to the study and the quality of data that they provided.

For the CINHALL database, the search began with “type 2 diabetes”. This search produced 102,545 articles. For the second search, “AND socioeconomic status” was added into the search term to narrow down the results. 1,147 articles were provided from this search. The third search included “AND risk factors” to help narrow down the results which produced 566 articles. The fourth search included the term “AND united states” to narrow down the search. After this final search, 90 articles were provided.

Exclusion criteria was added to the search to make sure that the articles being listed were relevant to the study. The research excluded any journals that were not “Academic Journals”. The research also excluded any articles that not specifically address socioeconomic status in relation to type 2 diabetes as well as any studies focusing only on women or children. All these search terms provided, narrowed down the search to 61 articles. Out of the 61 articles produced, 3 were chosen to be included in the literature review.

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Figure 1: Literature Review Article Selection Process



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Results

The 10 articles that were chosen for this literature review provide important information about the factors that lead to an increased risk of type 2 diabetes in low socioeconomic status for people in the United States. The current data shows that there are three main factors that increase the risk of type 2 diabetes in men with a low socioeconomic status- obesity and metabolic factors, food insecurity and dietary habits, and limited access to healthcare and preventative services. These factors are a very significant public health burden to the disproportionately high rates of diabetes in low socioeconomic status populations. A detailed summary of the articles used for this literature review can be found in *Table 1*.

Obesity and Metabolic Factors

Obesity is one of the most significant factors for the risk of type 2 diabetes, particularly in populations with lower socioeconomic status as it is one of the most well-documented risk factors. Across the literature, researchers found that excess body weight was a primary factor for insulin resistance and poor glycemic control which both significantly increase the risk for type 2 diabetes (Virtanen et al., 2015). When the body carries an excessive amount of fat, particularly around the abdomen area, it makes it harder for the cells to absorb glucose from the bloodstream. The persistent insulin resistance forces the pancreas to overproduce insulin, which may eventually lead to pancreatic exhaustion and diabetes. (Walker et al., 2024).

Obesity not only raises diabetes risk but also leads to work-related disability among people with type 2 diabetes due to struggle with physical mobility and other health complaints (Virtanen et al., 2015). This then leads to reduced income due to employment instability and further limits access to healthcare and the proper treatment and care for diabetes (Virtanen et al., 2015). With

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the inability to afford healthcare services, diabetes outcomes can worsen and lead to more severe complications outside of just type 2 diabetes like nerve damage, kidney disease, and cardiovascular troubles (Huang et al., 2021).

By addressing obesity as a major factor contributing to type 2 diabetes in populations across the United States, professionals can provide strategies and policy interventions to provide easy access, to outocaffordable, healthy foods. Campaigns aimed at increasing awareness for healthy eating can help those individuals make better decisions about what they are putting into their bodies.

Food Insecurity and Dietary Habits

Food insecurity largely drives poor nutrition, which is another risk for type 2 diabetes in low socioeconomic populations. Limited access to affordable and nutritious foods usually results in foods that are high in processed carbohydrates, sugars, and unhealthy fats, all of which contribute to obesity and metabolic dysfunction. (Zong et al., 2016). Public health professionals determined that individuals who consumed meal-prepped food from home had a significantly lower risk of developing type 2 diabetes compared to those who ate fast foods or processed meals (Zong et al., 2016). However, it is situationally tough for those low-income individuals to have home-cooked meals that are healthy due to financial constraints, lack of time, and food deserts which all affect having meals come from home.

A significant factor that contributes to poor dietary habits among low-income individuals is the widespread availability of fast-food restaurants. Fast food restaurants generally offer cheap, calorie-dense meals that are very unhealthy and contain fats, sodium, bad carbohydrates, and all in all, low in great nutrients for the body. (Chatzi et al., 2020) Fast food restaurants provide quick service with convenient meals that are much more affordable than preparing meals

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at home. Fast food restaurants are a convenient and low-cost way for individuals of low socioeconomic status to have a food source, despite the overall negative impacts that it has on the health of the body. A study linking the connection between food insecurity and diabetes progression found that individuals who come from a lower socioeconomic status were significantly more likely to transition from prediabetes and develop type 2 diabetes (Chatzi et al., 2020). These findings were largely due to relying on inexpensive foods who have large amounts of calories.

To further support these findings, researchers found that diabetes risk in Mexican-origin males that food insecurity and cultural food preferences, contribute to an increased risk of developing diabetes. The study revealed that individuals with limited financial resources often bought inexpensive, filling foods, like white bread, sugary foods, and even processed meats all of which contribute to insulin resistance and lead to type 2 diabetes. (Miranda et al., 2020) This affects the generational cycles of poor nutrition of the younger generations because they are being taught in a way that affects their eating habits. There are long-term consequences of food insecurity that extend beyond individual health outcomes. The consequences include generational cycles of poor nutrition and passing down habits to the young. One article noted that low socioeconomic status individuals often struggle to stick to diabetes prevention programs due to financial barriers and food access limitations. (Huttunen-Lenz et al., 2023)

These findings reveal that there is a desperate need for policy-level interventions that address food insecurity across the nation by increasing affordable nutritious foods. Without interventions, fast food will continue to be on the easiest and cheapest food sources and food insecurity will continue to be a contributing factor for type 2 diabetes in populations across the United States.

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Limited Access to Healthcare and Preventative Services

One of the biggest risk factors for type 2 diabetes in low socioeconomic populations is the lack of adequate healthcare. The ability to receive healthcare like medical checkups and diabetes screenings is a huge part of managing diabetes risk, yet so many people face this barrier. A study done, examined diabetes self-management in socially disadvantaged areas. The study found that many individuals experienced difficulty accessing healthcare which in turn resulted in a poor diabetes outcome (Rutledge et al., 2024). The study also highlighted that individuals who lacked insurance or faced financial constraints were less likely to receive an early diagnosis for type 2 diabetes, preventative screenings, and prolonged medical interventions which then worsened the long-term health outcomes (Rutledge et al., 2024). Another study done found that undiagnosed diabetes in low-income populations was significantly higher than those of a higher socio-economic status. The individuals in low socio-economic status were less likely to get the medical care and diabetes screenings that they needed which highlights the importance of expanding community based diabetes screenings to ensure more individuals receive proper diagnoses. (Huang et al., 2021)

To further empathize the issue, researchers found that individuals from a lower- income background had significantly higher hospitalization rates for diabetes-related for diabetes complications compared to those with great financial stability. This article suggested that a lack of consistent access to preventive diabetes care would lead to delayed diagnosis and worsening disease progression (Gu et al., 2020). Without the healthcare resources for these certain individuals, these people are more likely to develop severe complications that require very high-cost emergency care which in turn hurts their finances even more.

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A study that examined the impact of bariatric surgery on diabetes prevention, found that individuals who underwent the procedure had a significantly lower risk of developing type 2 diabetes compared to those who did not have the procedure. However, it was made clear that bariatric surgery remains largely inaccessible to individuals in low socioeconomic populations due to financial barriers, which means that without obesity prevention and weight management interventions, low socioeconomic men will continue to bear the burden of type 2 diabetes. (Vahtera et al., 2024)

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Table 1. Detailed Summary of Articles Reviewed

	Author(s)	Year	Article Title and Journal	Purpose of Article	Sample Info	Type of Research	Research Finding	Limitations of Article
1	Rutledge, Stephanie Hulbert, LaShonda Charter-Harris, Jasmine Smith, Akimi Owens-Gary, Michelle	2024	A qualitative exploration of facilitators and barriers to adopting a healthy lifestyle among Black, Hispanic, and American Indian males with diabetes or at risk for type 2 diabetes Ethnicity & Health	The purpose of this article is to explore and identify the facilitators and barriers to adopting a healthy lifestyle among Black, Hispanic, and American Indian men diagnosed with diabetes or at risk for type 2 diabetes. Studies were performed to better understand the factors influencing healthy lifestyle behaviors, such as family and social networks, health beliefs, community resources, and barriers like mistrust of the healthcare system and socioeconomic challenges. This understanding seeks to inform interventions and strategies to improve diabetes prevention and management within these populations.	37 participants, 100% male, 14 black males, 14 Hispanic males, 9 American Indian males, 18 years or older, 19 diagnosed with diabetes, and 18 at risk for type 2 diabetes	Qualitative Research	Authors found that barriers to healthy lifestyles for low socioeconomic men included mistrust of the healthcare system, high costs, stress, low SES, and limited access to healthy food and physical activity resources. On the flip side, support from family, access to community resources, and a desire to improve their health helped them adopt healthier habits. The study highlights the importance of creating personalized programs to address these barriers and support diabetes prevention in these groups.	One limitation of the study is the possibility that the focus groups did not reach saturation for specific topics due to limited time for each focus group. A second limitation of the study is the lack of diversity for each of the focus groups which limited the sample size.
2	Miranda, Antonio Sanchez, Claudia Warren, Cynthia	2020	P17 Health and Diabetes Perspectives of Mexican-Origin Males at Risk for Type 2 Diabetes (HD-MxOMA Qualitative Study...Society for Nutrition Education and Behavior, 53rd Annual Conference,	The purpose of this article is to explore diabetes, nutrition, and health among native Spanish-speaking, Mexican-origin males at risk for type 2 diabetes that are in the United States. The study aims to identify health behavior barriers, like poor diabetes and nutrition knowledge, and sociocultural factors like medical machismo and socioeconomic challenges. These findings help	15 participants, 15 native Spanish-speaking, Mexican-origin males, ages 40-64 who are all at risk for diabetes	Qualitative Research	Authors found that there were socioeconomic challenges like prioritizing work over health and growing up with limited access to healthy food. 80% of these participants were hypertensive or physically inactive.	One limitation of the study is the sample size that this article uses. Only 15 participants were used which makes it hard to get true and precise findings. Another limitation may include that these participants were only Spanish speaking which

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			Virtual Conference, July 20-24, 2020 Journal of Nutrition Education & Behavior	educators and physicians develop culturally tailed programs and improve clinical interactions with Hispanic men in order to address diabetes prevention and even management.			Most participants had not completed high school (53.3%) and earned \$30,000-59,999 annually (73.3%) and worked active jobs (40%). The authors organized the results into 4 categories of barriers, facilitators, motivators, and educational preferences. This study really shows how much these certain group of people just do not understand the risks of diabetes and do not have much knowledge about the health risks that goes along with diabetes.	excludes any other sub groups. Another limitation may be that they did not include geographic constraints and how access to healthcare might differ across regions in the United States.
3	Vahtera, Viiko Pajarinen, Jukka Kivimäki, Mika Ervasti, Jenni Pentti, Jaana Stenholm, Sari Vahtera, Jussi Salminen, Paulina	2024	Cohort study on incidence of new-onset type 2 diabetes in patients after bariatric surgery and matched controls British Journal of Surgery	To investigate the impact of bariatric surgery on the incidence of type 2 diabetes among patients compared to controls.	Patients undergoing bariatric surgery compared to matched controls, large cohort study.	Cohort Study	Bariatric surgery significantly reduces the risk of type 2 diabetes compared to non-surgical controls.	Selection bias in surgical patients; long-term follow-up challenges.
4	Zong, Geng Eisenberg, David M. Hu, Frank B. Sun, Qi	2016	Consumption of Meals Prepared at Home and Risk of Type 2 Diabetes: An Analysis of Two Prospective Cohort Studies PLOS Medicine	The purpose of this article is to study the frequency of meals prepared at home and the risk of type 2 diabetes and obesity over a 24-26-year follow-up period. The study aimed to determine if preparing meals at home was associated with lower type 2	58,051 women (1986-2012) and 41,676 men (1986-2010) reported the frequency of	Observational Research	Having more meals prepared at home was associated with lower T2D risk in both men and women, those eating 11-14 MPAH per week had a 14% lower risk of	The first limitation is that the majority of the participants were white and health professionals which limits the true findings in the real world and more diverse

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				diabetes risk mainly with reducing weight gain and how this can influence dietary and lifestyle factors. This study highlights the benefits of making home meals compared to dining out, the study wants to inform the public of health strategies that encourage meal preparation at home as a means of preventing diabetes and obesity.	having midday or evening meals prepared at home per week.		developing T2D than those eating 0-6 MPAH per week. Men and women eating 11-14 MPAH per week had less weight gain compared to those eating 0-6 MPAH per week. The association between MPAH frequency and T2D risk could be partially ascribed to less body weight gain related to consumption of MPAH.	populations. This study was also self-reported which means the study relies on people to tell the truth and unbiased opinions which may affect the reliability of the results. The next limitation is that this study did not address the nutritional quality or the extent of food processing or the ingredients that were used in the home-prepared meals which may influence or impact the results.
5	Huang, Yun-Ting Stephoe, Andrew Zaninotto, Paola	2021	Prevalence of Undiagnosed Diabetes in 2004 and 2012: Evidence From the English Longitudinal Study of Aging The Journals of Gerontology: Series A	To examine the prevalence of undiagnosed diabetes over time and the factors contributing to disparities in diagnosis.	Data from a longitudinal aging study, tracking undiagnosed diabetes prevalence over time.	Epidemiological Study	Undiagnosed diabetes rates are higher in low-income populations due to lack of screening.	Limited generalizability beyond older adults; does not account for recent healthcare policy changes.
6	Chatzi, G. Mason, T. Chandola, T. Whittaker, W. Howarth, E. Cotterill, S. Ravindrarajah, R. McManus, E. Sutton, M. Bower, P.	2020	Sociodemographic disparities in non-diabetic hyperglycaemia and the transition to type 2 diabetes: evidence from the English Longitudinal Study of Ageing Diabetic Medicine	To analyze the disparities in hyperglycemia and transition to type 2 diabetes among different sociodemographic groups.	Large dataset from aging study on diabetes risk transition in different social groups.	Epidemiological Study	Socioeconomic disparities influence diabetes progression, with lower-income individuals facing higher risks.	Lack of racial diversity; limited longitudinal follow-up.
7	Gu, Tian	2020	Characteristics Associated With	To study racial/ethnic disparities in diabetes outcomes and how	Used all sorts of factors like	Retrospective Study	Ethnic and socioeconomic	Retrospective design; hospital-based study

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	Mack, Jasmine A. Salvatore, Maxwell Prabhu Sankar, Swaraaj Valley, Thomas S. Singh, Karandeep Nallamothe, Brahmajee K. Kheterpal, Sachin Lisabeth, Lynda Fritsche, Lars G. Mukherjee, Bhramar		Racial/Ethnic Disparities in COVID-19 Outcomes in an Academic Health Care System JAMA Network Open	socioeconomic factors contribute to these disparities.	race, age, alcohol consumption, comorbidities, body mass index.		disparities in diabetes outcomes persist, with low-income groups experiencing worse health outcomes.	limits broader applicability.
8	Virtanen, Marianna Vahtera, Jussi Head, Jenny Dray-Spira, Rosemary Okuloff, Annaleena Tabak, Adam G. Goldberg, Marcel Ervasti, Jenni Jokela, Markus Singh-Manoux, Archana Pentti, Jaana Zins, Marie Kivimäki, Mika	2015	Work Disability among Employees with Diabetes: Latent Class Analysis of Risk Factors in Three Prospective Cohort Studies PLOS ONE	To evaluate the impact of diabetes-related work disability and its risk factors in different occupational settings.	20,625 participants (73%) men, aged 35-50 years. 1989-2003.	Longitudinal Study	Work disability due to diabetes is prevalent, especially in lower-income employment sectors.	Self-reported data may introduce bias; study focuses primarily on work disability, not overall health outcomes.

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9	Walker, Rebekah J. Williams, Joni S. Linde, Sebastian Egede, Leonard E.	2024	Social Risk and Clinical Outcomes Among Adults With Type 2 Diabetes JAMA Network Open	To examine social risk factors and their influence on clinical diabetes outcomes in adults.	615 participants that with a mean age of 61	Cross-Sectional Study	Social determinants like financial instability and healthcare access significantly impact diabetes outcomes.	Cross-sectional nature limits causal inference; self-reported social risk data.
10	Huttunen-Lenz, Maija Raben, Anne Adam, Tanja Macdonald, Ian Taylor, Moira A. Stratton, Gareth Mackintosh, Kelly Martinez, J. Alfredo Handjjeva-Darlenska, Teodora Bogdanov, Georgi Assenov Poppitt, Sally D. Silvestre, Marta P. Fogelholm, Mikael Jalo, Elli Brand-Miller, Jennie Muirhead, Roslyn Schlicht, Wolfgang	2023	Socio-economic factors, mood, primary care utilization, and quality of life as predictors of intervention cessation and chronic stress in a type 2 diabetes prevention intervention (PREVIEW Study) BMC Public Health	To assess socio-economic factors, stress, and healthcare utilization as predictors of diabetes intervention success or failure.	36 month long period of randomized controlled study. Does not explicitly say how many participants there were. Although, in each group there were 18-20 people in each group.	Observational Study	Socio-economic stress and lack of healthcare access contribute to intervention dropout and poor diabetes management.	Limited to participants already enrolled in a diabetes prevention study; does not account for broader population trends.

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Discussion

Key factors such as obesity and metabolic dysfunction, food insecurity and poor diabetes habits, financial instability, and limited access to healthcare play a significant role in increasing type 2 diabetes among people in the United States in low socioeconomic status. To substantially address health disparities in the United States and the higher rates of type 2 diabetes in low socioeconomic status populations, it is essential to understand the underlying risk factors contributing to these trends. This literature review aims to highlight the risk factors that cause low socio-economic status populations in the United States to experience worse outcomes of type 2 diabetes and to uncover which factors are most responsible for an increased risk of type two diabetes in those populations. This literature review shows the importance of recognizing the high prevalence of type 2 diabetes in low socioeconomic populations in the United States. This paper focuses on obesity and metabolic factors, food insecurity and dietary habits, financial instability, and healthcare instability. The issue of a higher risk of type 2 diabetes in a low socioeconomic status population, is a complex issue that requires a targeted, well-rounded solution. Understanding these risk factors is crucial for designing effective public health interventions and policies to stop the growth of the percentage of people in low socioeconomic states developing type 2 diabetes and their poor health outcomes.

To understand a deeper meaning of the implications of low socioeconomic status disparities of type 2 diabetes risk, external sources will provide more information to prove the income inequality and the long-term effects on diabetes. A study published by PLOS examined the relationships between income levels and the prevalence of diagnosed diabetes in the United States over 17 years (ChenY, 2023). The researchers found that diabetes rates were significantly higher in the lower-income populations, which helps reinforce that income is one of the biggest

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contributors to diabetes. Research from the American Diabetes Association highlights that people living in low-income areas often face difficulty with healthcare services as this may lead to a delayed diagnosis, blood sugar levels that are not being watched or managed, and higher rates of diabetes complications within the population (Association, 2025). These external sources reinforce the importance of addressing economic and other barriers to help reduce the level of type 2 diabetes diagnosis, and bad health outcomes in low socioeconomic populations.

Future Research

One of the most effective ways to reduce diabetes rates in low socioeconomic populations is to expand access to preventative care. Having free or lower costs of diabetes screenings, regular checkups, and even educational initiatives would help these individuals identify the risk of type 2 diabetes and receive the proper medical guidance from physicians to help lead these individuals into the right spot for their health (Association, 2017). Implementing community-based healthcare clinics in these underserved areas would also ensure that preventative care and management programs are more accessible to those who need them most.

Improving access to affordable and healthy foods would also help the rates of diabetes in lower socioeconomic populations become lower (Ziso D, 2022). Your diet is crucial for having a healthy and long life. Many of these lower socioeconomic individuals lack access to fresh, nutritious foods. Therefore, policymakers should consider expanding nutrition programs to allow for more healthy food options, implementing grocery stores in low-income neighborhoods to increase the availability of fresh foods and produce, and encouraging local farmers' markets in food deserts to provide more affordable food options.

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Limitations

There is a limited amount of available literature on this topic and this review was restricted to 10-12 articles so the full scope of the problem may have not been adequately addressed. Another limitation is that this review focuses on low socioeconomic populations in the United States, but diabetes disparities are influenced by many other factors like racial, geographic, and cultural factors. Future research should explore the other options for how type 2 diabetes risk factors differ across other variousness of racial and ethnic groups within low socioeconomic populations to explore a deeper understanding of type 2 diabetes disparities.

Conclusion

Addressing the risk factors for type 2 diabetes in low socioeconomic populations requires a serious approach that includes public health interventions, improved food accessibility, and expanded healthcare coverage. This review confirms type 2 diabetes in low socioeconomic status populations that obesity, food insecurity, and healthcare inaccessibility, are all main reasons for why these individuals have higher rates of poor type 2 diabetes outcomes compared to other populations. With policy changes, type 2 diabetes in low socio-economic populations could improve significantly if the right actions are taken. Future research should focus on intervention programs as well as studying the role of race and ethnicity in diabetes disparities to identify and improve those healthcare solutions to help decrease the gap in diabetes care for those in underserved populations.

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