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Financial Difficulty- A Barrier to Self-Care in Patients with Diabetes

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The February, 2017 article by Campbell and colleagues “Understanding Financial Barriers to Care in Patients with Diabetes”¹ explored the experiences of persons with diabetes who had financial difficulties. The article clearly presented the voices of people who describe the strategies they used to cope with financial barriers that impeded their diabetes self-management. The participants described difficulties they faced in obtaining diabetes supplies, medications, and affording healthy food. It was especially significant that the participants reported that they did not find health care providers sensitive to their financial barriers or, even when knowing of their barriers, were not helpful.

While all the participants in the study by Campbell received some basic healthcare from the Canadian government, in the United States support for healthcare is less certain. This suggests that financial difficulty may be even more problematic for persons with diabetes in the US if they do not have insurance, or if they possess insurance that does not cover the costs of diabetes-related supplies.

We would like to supplement the authors’ qualitative findings with our own. The purpose of our study was to examine, in persons with type 2 diabetes, the relationship of participant’s attitudes toward self-care, quality of life, self-management behaviors, and their perceived ability to pay for basic needs, in a racially diverse sample that was recruited as part of the Diabetes Sleep Treatment Trial (DSTT;R01 DK096028-02).

At the baseline assessment, participants completed a questionnaire that included demographic information (age, sex, race, education, marital status). The question “how difficult is it for you to meet your basic needs (i.e. food, housing, utilities, and health care)” had possible responses (“no difficulty,” “some difficulty,” and “extreme difficulty”) that were dichotomized as “not at all difficult” and “some to extreme difficulty.” We used the Summary of Diabetes Self-Care Questionnaire (SDSCA)² to measure of diabetes self-management behavior; diabetes-related distress was measured by the Problems in Diabetes questionnaire (PAID)³ and the SF-12v⁴ was used to measure physical and mental health-related quality of life (HRQoL). A clinical assessment obtained height and weight to calculate body mass index (BMI kg/m²) and A1C level.

The sample (N=194) was middle-aged (Mean $\pm$ SD = 56.82 $\pm$ 10.67 years, range = 26 to 88 years), had suboptimal glucose control (Mean A1C = 7.9% $\pm$ 1.8), obese (Mean BMI = 34.7 $\pm$ 6.8), and was well distributed by gender, race, education, and marital status (females 54%, Non-whites (primarily African American) 45%, college graduate 31%; married/partnered 37%).

Forty-five percent of the participants reported “some to extreme” difficulty paying for their basic needs (n=88). There were no significant statistical differences in A1C or BMI between groups. Participants with “some to extreme” financial difficulty took their oral medications and tested their blood glucose levels less frequently than prescribed; they also reported eating a less healthy diet than people without financial difficulty (p values $<.05$). In addition, participants with “some to extreme” financial difficulty reported worse physical and mental quality of life and more psychological distress from having diabetes (all p -values $<.05$) compared to those with no financial difficulty.

Women and Non-Whites were significantly more likely to report financial difficulty than men and Whites ($p<.01$). There were no differences by sex or race in BMI, medication adherence, blood glucose testing, healthy diet, diabetes related distress, or physical/mental quality of life. Non-whites had significantly higher A1C ($p<.05$)

In the Campbell article, participants discussed the strategies they used to manage their diet, blood sugars and medicines which reflected the challenges that financial difficulties place upon diabetes self-management. Our quantitative findings support Campbell et. al. findings in that financial difficulty places a disproportionate burden on people with diabetes. In addition, our data suggests that participants who report financial difficulty are more likely to report more diabetes-related distress and lower physical and mental quality of life compounding the barriers to self-care.

While our study does not include objective information on income level, the perception of financial difficulty may be important in contributing to negative health outcomes. A limitation in generalizing the findings of our study is that the sample was recruited because of self-reported poor sleep quality or symptoms of sleep apnea.

According to the American Association of Diabetes Educators, holistic assessment and care of persons with diabetes involves consideration of the multiple factors, specifically including financial status.⁵ Our data suggest that special attention should be paid to women and Non-white populations as they are more likely to experience financial difficulty. Researchers may want to further examine the emotional burden that financial disparities create in diabetes self-management. We believe that the article by Campbell and our findings provide clinicians with additional insight concerning the financial barriers that their patients may face when coping with the complex regimen of diabetes self-management.

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