Factors influencing the management of diabetic foot ulcers among health professionals at the primary health care level in the Bosomtwe district of Ghana

By Clement Zuuri

Supervisor: Dr. Opoku Daniel

Department of Health Policy, Management and Economics, College of Health Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

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BACKGROUND

The incidence of diabetes is rising in low- and middle-income countries, with many cases undiagnosed until complications, such as diabetic foot ulcers (DFUs), manifest. Effective management of DFUs requires a multidisciplinary approach involving various Healthcare Professionals (HCPs) such as doctors, nurses, physician assistants, and disease control officers among others. This study assessed the factors influencing the management of DFUs among HCPs at the primary healthcare level in the Bosomtwe District, Ghana.

METHODOLOGY

A cross-sectional study where a quantitative approach was used across three purposively selected health facilities.

A sample size of 231 respondents was selected using a simple random sampling technique. Data were collected using self-designed, pretested questionnaires and analyzed using descriptive and inferential statistics with STATA version 16.

RESULTS

Majority (71%) of the participants were registered nurses, with no podiatrist available in the district. While 69.5% of the respondents had general knowledge about managing DFUs, they lacked specific knowledge on dressings and offloading devices.

Nearly all the respondents (99.75%) did not follow evidence-based guidelines for DFU management due to the absence of a universal protocol. However, there is a strong association between regularly consulting evidence-based guidelines and better DFU management outcomes (P < 0.001, odds ratio [OR] = 0.36, confidence interval [CI] =0.17–0.72). Furthermore, challenges in HCPs adhering to these guidelines (P = 0.001, OR: 0.03 CI = 0.04–0.22), patient difficulties in following treatments (P < 0.001, OR = 0.04, CI = 0.02–0.81), and low confidence in diagnosing DFUs (P < 0.001, OR = 0.65, CI = 0.55–0.76) are also significantly linked to poorer management outcomes.
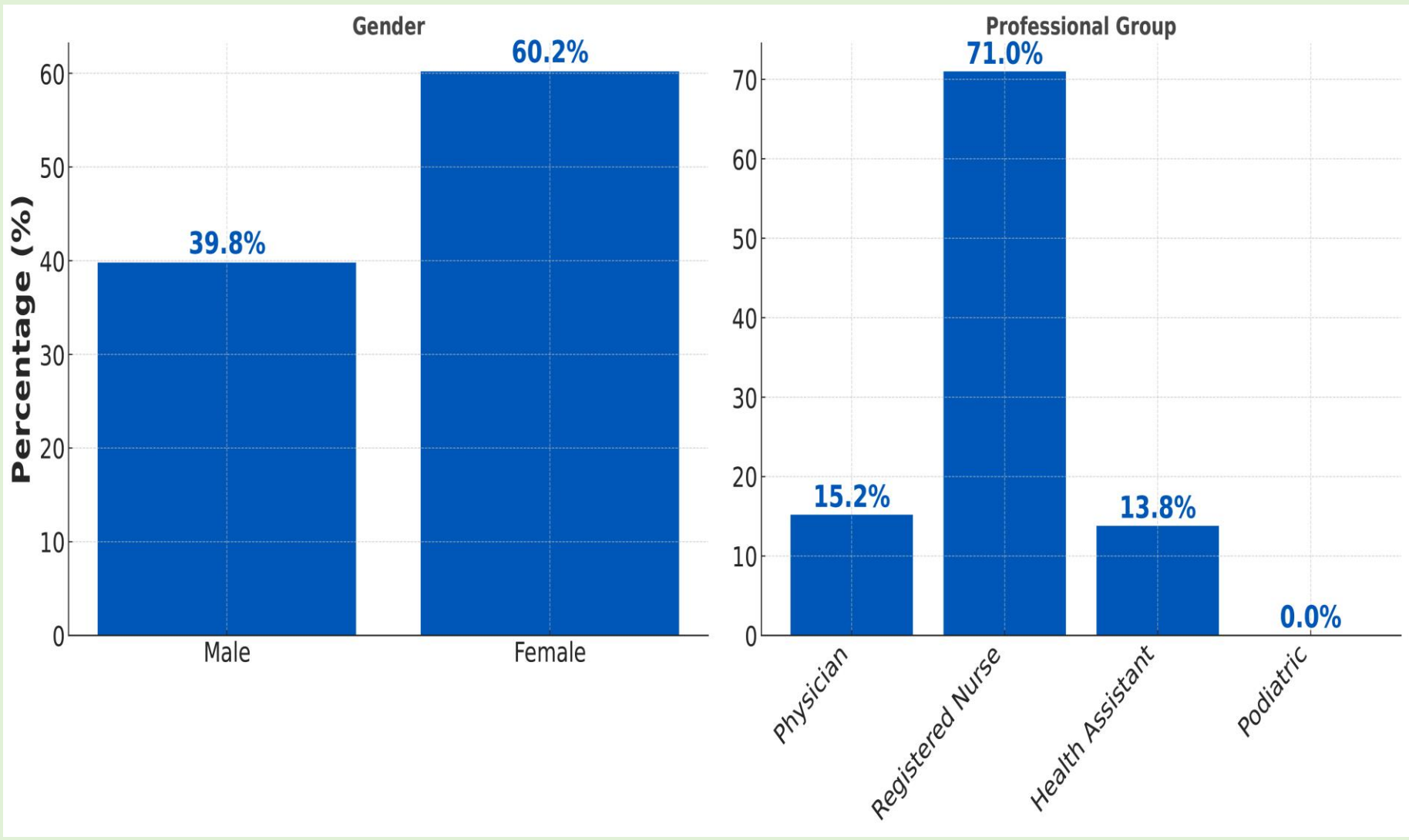
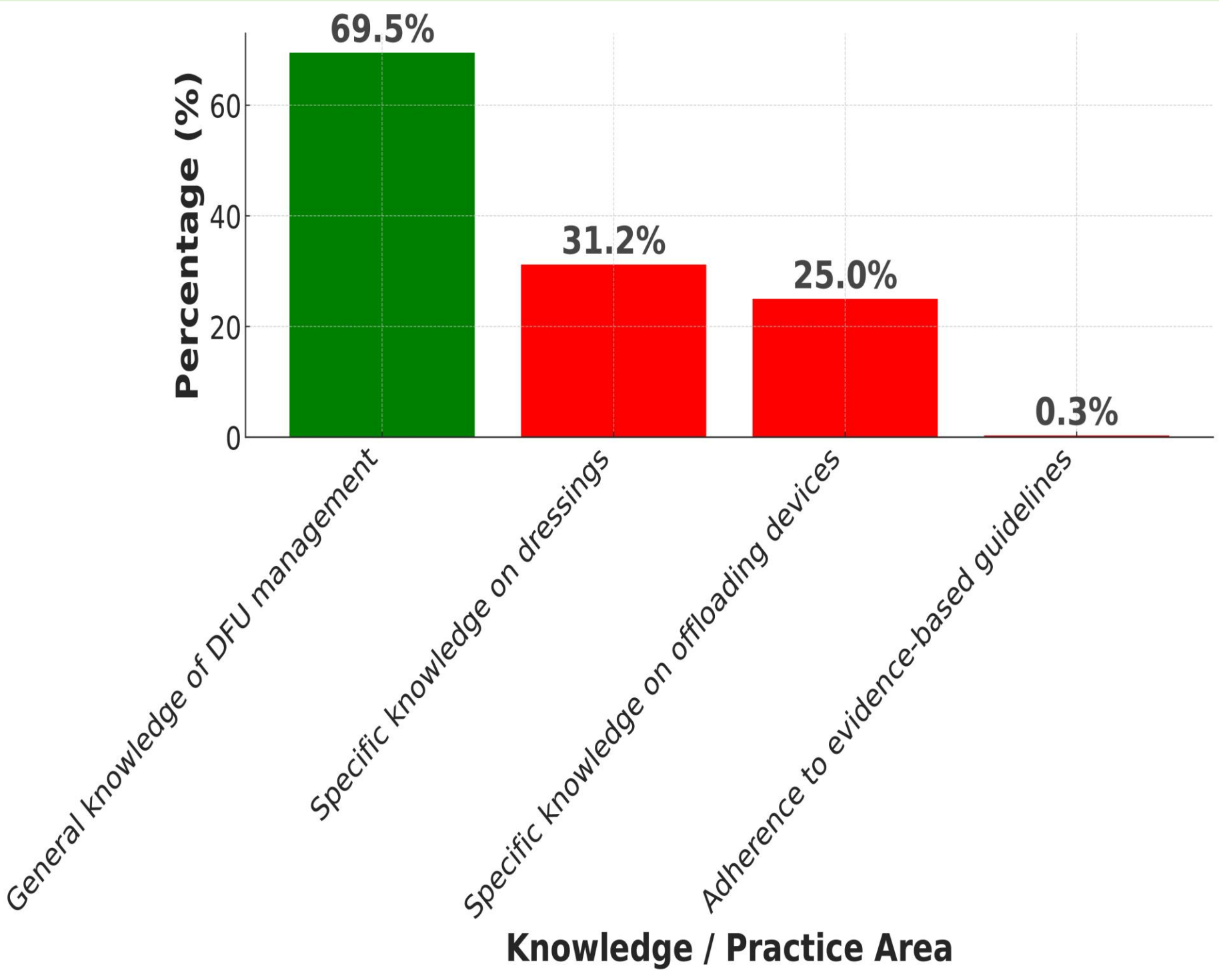Figure 1: Socio-demographic Characteristics of Respondents

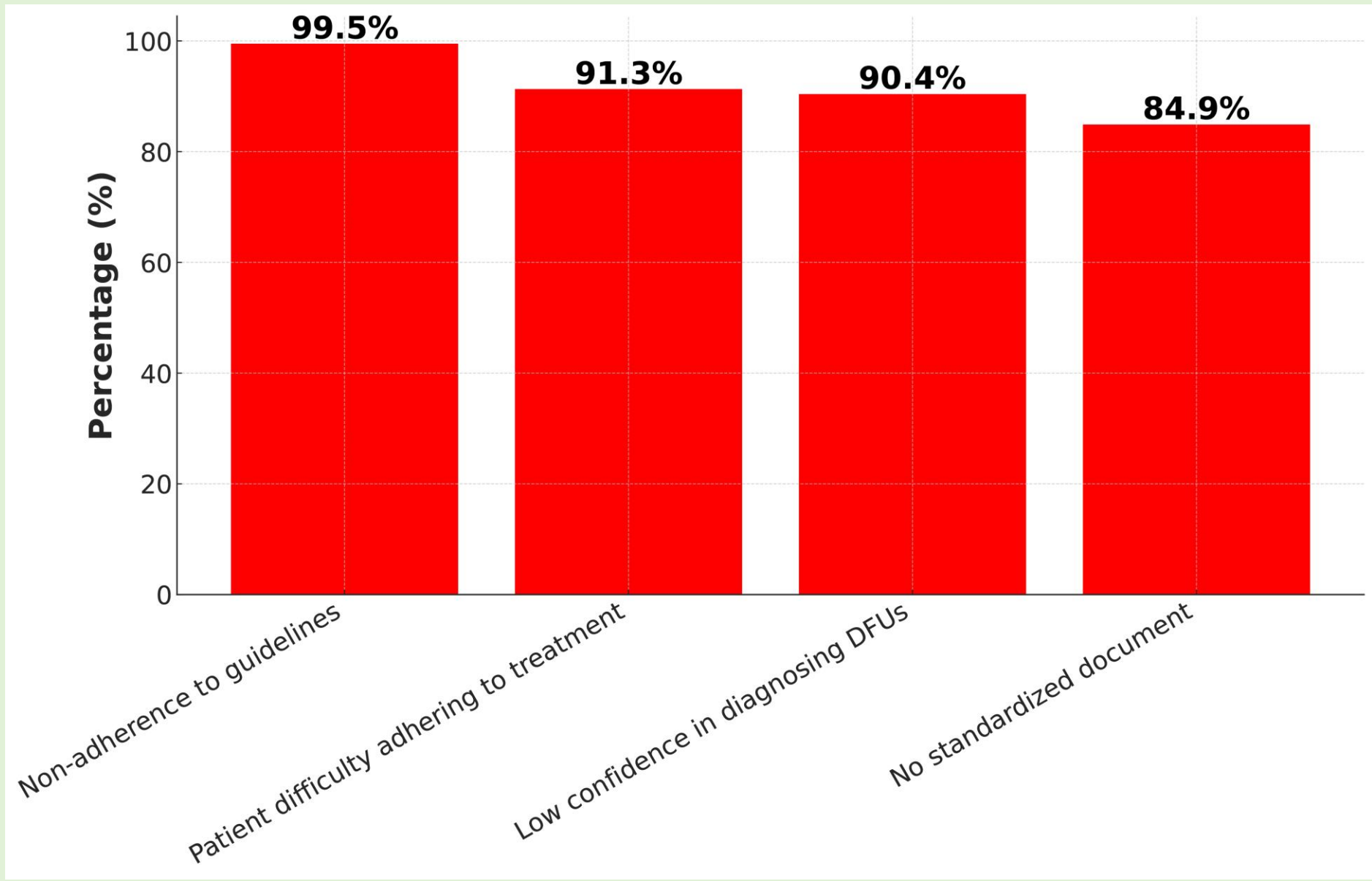Figure 2: Knowledge and Practices in DFU Management

Figure 3: Factors Influencing DFU Management and Practice

Table 1: Relationship between Factors Influencing DFU Management and Practice

Factor	p-value	OR	CI
Non-adherence to guidelines	< 0.001	0.03	0.04-0.22
Patient difficulty in adhering to treatments	< 0.001	0.04	0.02-0.81
Low confidence in diagnosing DFUs	< 0.001	0.65	0.55-0.76
Non-availability of a standardized document	< 0.001	0.45	0.29-0.71

CONCLUSION

The study revealed major gaps in knowledge and adherence to guidelines in DFU management among HCPs in the Bosomtwe District. The study also found that lack of universal protocols, low diagnostic confidence, and patient noncompliance are some of the issues relating to poor DFU management. Standardized protocols, targeted training, and better patient education are needed to improve outcomes according to the study.

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