

## 论著

高的血糖达标值知晓率可以提高糖化血红蛋白达标率

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摘要:

目的: 探讨和分析影响血糖的可控因素。方法: 采用横断面研究方式, 选择已确诊3个月以上的糖尿病患者430人, 通过调查问卷的形式收集其人口统计学资料、临床及其他可能与血糖控制相关的资料, 同时收集其血液标本测定糖化血红蛋白值(HbA1c)。采用多元线性回归分析与单因素回归分析方法进行统计分析, 分析各因素对HbA1c控制达标的影响。结果: 430例糖尿病患者HbA1c为(8.7±2.6)%, 34%的糖尿病患者HbA1c≤7.0%。单因素回归分析发现年龄越大、参加糖尿病教育、更高频率的血糖监测、对血糖控制目标的知晓、更好的公共卫生环境、拥有血糖仪的患者HbA1c控制较好, 但是升级的治疗方法, 如胰岛素治疗的患者HbA1c控制较差。多元线性回归分析发现年龄越大、参加糖尿病教育、更高频率的血糖监测、对血糖控制目标的知晓是HbA1c的保护因素, 升级的治疗方法是HbA1c的危险因素。结论: 对血糖控制目标的知晓、参加糖尿病教育、更高频率的血糖监测是有利于HbA1c达标的可控因素, 且提高血糖控制目标的知晓率可能是降低患者HbA1c最简单有效的方法。

关键词: 糖尿病教育 自我血糖监测 对血糖控制目标的知晓 糖化血红蛋白

## Knowledge of blood sugar control standard brings the higher attainment rate of HbA1c

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Abstract:

Objective: To analyze the important controllable factors which affect the glycemic control of diabetes. Methods: A cross-sectional study was carried out to examine the role of relevant characteristics in glycemic control by a sampling investigation of 430 diabetic patients in Hunan, China. A questionnaire was designed for personal interviews to collect data. Univariate regression analysis and multiple linear regression analysis were used to evaluate the effects of various factors on glycosylated hemoglobin A1c (HbA1c) control. Results: The level of HbA1c in 430 patients was (8.7±2.6)%, and the value in 34% patients among them was ≤7.0%. Based on univariate regression analysis some factors were associated with good HbA1c control, including age, diabetic education, self monitoring of blood glucose, knowledge of blood sugar control standard, living environment, and self-owned glucometer. However, the upgraded treatment was associated with poor control. Based on multiple linear regression analysis, the first four factors mentioned above were protective factors for HbA1c while upgraded treatment was risk factor for HbA1c. Conclusion: Knowledge of blood sugar control standard, diabetic education and self monitoring of blood glucose are important controllable factors for better glycemic control of diabetes.

Keywords: diabetes education self monitoring of blood glucose knowledge of blood sugar control standard glycosylated hemoglobin A1c

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## 参考文献:

1. Yang W, Lu J, Weng J, et al. Prevalence of diabetes among men and women in China [J]. N Engl J

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1. Med,2010,362(12): 1090-1101.
2. Middleton J.The effect of case management on glycemic control in patients with type 2 diabetes [J] .Case Manager,2003,14(6): 43-47.
3. Bevan JL.Diabetes mellitus: a review of select ADA standards for 2006 [J] .J Nurse Pract,2006,2(10): 674-679.778
4. American Diabetes Association.Standards of medical care in diabetes-2009 [J] .Diabetes Care,2009,32(Suppl 1): S13-S61.
5. Stratton IM,Adler AI,Neil HA,et al.Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35):prospective observational study [J] .BMJ,2000,321(7258): 405-412.
6. Saaddine JB,Cadwell B,Gregg EW,et al.Improvements in diabetes processes of care and intermediate outcomes: United States,1988-2002 [J] .Ann Intern Med,2006,144(7): 465-474.
7. UK Prospective Diabetes Study(UKPDS)Group.Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33) [J] .Lancet,1998,352(9131): 837-853.
8. Karter AJ,Moffet HH,Liu J,et al.Achieving good glycemic control: initiation of new antihyperglycemic therapies in patients with type 2 diabetes from the Kaiser Permanente Northern California Diabetes Registry [J] .Am J Manag Care,2005,11(4): 262-270.
9. Khattab M,Khader YS,Al-Khawaldeh A,et al.Factors associated with poor glycemic control among patients with type 2 diabetes [J] .J Diabetes Complications,2003,24(2): 84-89.
10. Hartz A,Kent S,James P,et al.Factors that influence improvement for patients with poorly controlled type 2 diabetes [J] .Diabetes Res Clin Pract,2006,74(3): 227-232.
11. Goudswaard AN,Stolk RP,Zuithoff P,et al.Patient characteristics do not predict poor glycaemic control in type 2 diabetes patients treated in primary care [J] .Eur J Epidemiol,2004,19(6): 541-545.
12. Wallace TM,Matthews DR.Poor glycaemic control in type 2 diabetes: a conspiracy of disease,suboptimal therapy and attitude [J] .QJM,2000,93(6): 369-374.
13. Wang JQ,Tak-Ying Shiu A.Diabetes self-efficacy and self-care behaviour of Chinese patients living in Shanghai [J] .J Clin Nurs,2004,13(6): 771-772.
14. He CY,Shiu AT.Sense of coherence and diabetes-specific stress perceptions of diabetic patients in central Mainland China [J] .J Clin Nurs,2006,15(11): 1460-1462.
15. Hartz A,Kent S,James P,et al.Factors that influence improvement for patients with poorly controlled type 2 diabetes [J] .Diabetes Res Clin Pract,2006,74(3): 227-232.
16. Selea A,Sumarac-Dumanovi M,Pesi M,et al.The effects of education with printed material on glycemic control in patients with diabetes type 2 treated with different therapeutic regimens [J] .Vojnosanit Pregl,2011,68(8): 676-683.
17. Salinero-Fort MA,Carrillo-de Santa Pau E,Arrieta-Blanco FJ,et al.Effectiveness of PRECEDE model for health education on changes and level of control of HbA1c,blood pressure,lipids,and body mass index in patients with type 2 diabetes mellitus [J] .BMC Public Health,2011,11: 267.
18. Klein HA,Jackson SM,Street K,et al.Diabetes self-management education: miles to go [J] .Nurs Res Pract,2013,2013: 581012.
19. Marcovecchio ML,Lucantoni M,Chiarelli F.Role of chronic and acute hyperglycemia in the development of diabetes complications [J] .Diabetes Technol Ther,2011,13(3): 389-394.
20. Blevins T.Value and utility of self-monitoring of blood glucose in non-insulin-treated patients with type 2 diabetes mellitus [J] .Postgrad Med,2013,125(3): 191-204.

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2. 李雪兵, 周秋红, 邹富珍, 吴辽芳, 陈慧玲, 刘泽灏. 系统性自我管理教育模式对社区2型糖尿病患者血糖水平的影响[J]. 中南大学学报(医学版), 2012,37(4): 355-358