University of Charleston SCHOOL OF PHARMACY

Pharmacist Involvement in Management of Challenging Diabetes Patients in a Rural Clinic Group

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BACKGROUND

Diabetes mellitus is a chronic disease which is common, especially in rural areas of the United States. West Virginia is a rural state with consistently bad health statistics relative to the rest of the nation. The latest Gallup polls show West Virginia leading the country in incidence of diabetes at 17.4% of surveyed population. Coincidentally, WV also leads in obesity, hypertension, high cholesterol and heart attacks.¹ Pharmacists are educationally prepared to help with each of these problems and if strategically positioned in the health care system, can impact care significantly.

OBJECTIVES

An ambulatory clinical pharmacist received patient consultations from physicians within a multisite group medical practice for their new diagnosis and difficult to control diabetic patients. AccessHealth is a teaching health center with a service area spanning 3 rural counties in southern WV. Customized therapy plans were designed for each participating patient with the goals of achieving normoglycemia and patient selfsufficiency.

METHODS

Medication initiations, discontinuations and adjustments were achieved through collaboration with the primary care physician. Choices of optimal medication therapies were based on case specifics, costs and patient preferences. Comorbidities, especially those which increase cardiovascular risk along with diabetes, were assessed and addressed as appropriate. A common electronic health record facilitated high quality communication between pharmacist and physician, as well as phone or live discussions for efficiency in frequent instances. Psychosocial factors were considered and accommodated during the focused medication therapy managment visits with the pharmacist. Progress was monitored from August 2010 to July 2011.





RESULTS

All patients completing the series of pharmacist visits improved. Many were able to achieve a HbA1c less than 7. Mean HbA1c was 10.64% at basesline and 7.72% at the end of the project year. Patients learned to quantify and restrict carbohydrate intake and self-monitor blood glucose at strategic times to facilitate medication effectiveness assessment. They learned why long term diabetes complications develop and how to avoid them.

LIMITATIONS

Those patients entering the program several months into the year of data collection did not have as much time to improve as those entering early. Other factors such as transportation and financial hardships also inhibited program involvement as expected in this rural, economically disadvantaged location.

CONCLUSIONS

This ambulatory clinical pharmacist program for the management of uncontrolled diabetics involves not only diabetes education but also collaborative medication adjustment with a high rate of success with rural patients being referred from affiliated clinics in the area. This disease model of chronic state management provides an example of improved health status that pharmacists can help achieve with a systematic approach and the cooperation and support of a committed medical provider group.