

## Diabetes Educators Can Improve Patient Acceptance and Adherence in Diabetes

Written by Nicola Parry

Robert Powell, MS, University of Pittsburgh Diabetes Institute, Pittsburgh, Pennsylvania, USA, presented results from a study involving patient-centered focus groups demonstrating that the phenomenon of patient psychological insulin resistance (PIR) persists in patients with type 2 diabetes mellitus (T2DM). He also discussed how patients' acceptance of therapies was affected by education about insulin and devices and the cost of the therapy.

According to Powell, although insulin therapy is an important treatment option in patients with T2DM, they often view it in negative terms. This negative perception affects the acceptance of insulin therapy, contributes to PIR, and results in low adherence rates. This can further result in clinical inertia, since providers are reluctant to prescribe insulin for patients who will not use it.

Numerous educational resources are available to guide educators as they instruct patients, yet patients are still often unaware of the available educational resources on insulin therapy and how improving their knowledge can improve their health. With this in mind, Powell conducted focus groups to explore perceptions and reactions to insulin therapy delivery modes among insulin-naïve and insulin-experienced patients with T2DM.

Powell recruited adults with T2DM ( $\geq$  18 years; n = 96; insulin-naïve patients, n = 49). Twelve focus groups were stratified by insulin status (insulin-naïve groups, n = 6), limiting in each group to 10 participants. Focus groups led by certified diabetes educators centered on topics including insulin therapies, acceptance and willingness to take insulin, and barriers to initiation and adherence of insulin therapy. Formal qualitative data analysis confirmed that PIR continues to exist in both insulin-naïve and insulin-experienced patients with T2DM. PIR and educational needs were similar in both insulin groups and across races and ethnicities.

Resistance to taking insulin was frequently related to specific health concerns. Most participants viewed insulin therapy in negative terms and considered the need to use it as a personal failure. Many patients also expressed concerns about side effects and questioned the need for its long-term use. Patients favored shorter needles and preferred pens versus vials and syringes. However, regardless of the tool, cost was the main barrier for device selection and for acceptance of insulin therapy.

Another theme associated with PIR was related to educational resources. Many participants reported having received no demonstration on how, where, and when to inject their insulin. They expressed the importance of learning injection logistics to overcome injection-associated concerns and improve adherence, and those who had received education on injection techniques expressed satisfaction with their health care team.

Powell conducted an additional focus group with health care providers to examine their barriers. Approximately half of the primary care physicians had questions about how to use and store insulin pens, and many were unaware of needle options. Many reported having insufficient time to provide patients with proper diabetes education.

Powell concluded that this study highlights an opportunity for diabetes educators to empower patients to take insulin effectively. Diabetes educators in particular can reduce patients' apprehension toward insulin therapy through demonstrations of the options for insulin administration and through discussions of the potential risks and benefits.

## Collaboration Between Pharmacists and Physicians Can Improve Patient Care

Written by Lynne Lederman

There are currently an estimated 56 million patients in the United States who do not have adequate access to primary health care. As the number of patients with diabetes increases, this number is expected to increase. Teambased care has proven valuable for patients with diabetes and can extend health care to more people through non-physician providers. Pharmacists play an essential role in team-based patient care because of patients' reliance on medications to reduce disease-related complications. It is possible that expanding the role of pharmacists in patient care could improve patient outcomes. In Virginia, pharmacist-physician collaborations were expanded in 2013 to include initiation, modification, continuation, and discontinuation of drug therapy.

Evan M. Sisson, PharmD, MHA, Virginia Commonwealth University, Richmond, Virginia, USA, presented data from an ongoing evaluation of a collaborative practice model among physicians and pharmacists that provides care for patients with chronic disease in an urban safety net clinic. The population in this clinic faces significant barriers to care. Pharmacists provide 20 hours per week of comprehensive management of medications, which is about 70% of the overall care at this clinic. The care model is illustrated in Figure 1.