

Overcoming the Barriers to Insulin Initiation in Type II Diabetic Patients: Clinical Evidence Available to Nurses

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The prevalence of diabetes has been on a growing trend worldwide; accordingly, it has increased from 4.5% in 1980 to 8.5% in 2014 (1). The aim of controlling diabetes is to achieve a hemoglobin a1c (HbA1c) level of lower than 7%. However, this target cannot be fulfilled in almost 50% of the diabetic patients. Poor blood glucose control is a risk factor for the complications associated with diabetes mellitus (2, 3).

Oral hypoglycemic drugs are typically used to control this disease. In case of failure in achieving the normal blood glucose level, another oral drug or insulin may be required (4).

According to the literature, only 20% of the diabetic patients are interested in insulin initiation. Furthermore, insulin initiation in these patients is challenging for the health care providers (5).

The barriers to insulin initiation can be categorized in terms of their relationship with the health care providers and patient.

According to the previous studies, the barriers related to the health care providers include the fear of hypoglycemia, lack of sufficient time to educate the patients, patient's low socioeconomic status, lack of sufficient knowledge and experience, absence of a common language with the patients, and poor patient-staff relationship.

On the other hand, the barriers related to the patients entail inconvenience and limitation in lifestyle, loss of independence, social embarrassment, poor self-efficacy, needle phobia, depression, failure to receive convincing answers from the health care providers about the benefits and risks of insulin, incomplete conceptualization of diabetes, use of traditional herbal treatments, and fear of weight gain due to using insulin (3, 4, 6-9). Regarding this, delay in insulin initiation is a common practice.

Research has shown that around 50% of the patients with poor diabetes control do not initiate insulin therapy timely, and that even insulin initiation is delayed for 3-5 years after receiving no response from oral hypoglycemic drugs. Therefore, this issue requires the direction of special attention because except for a few barriers, including low socioeconomic status, the rest of the aforementioned barriers can be altered and resolved by the health care providers (8).

Nurses are among the most important members of the health care providers, who are in contact with patients.

They are the ones who should provide the diabetic patients with knowledge and specialized skills to educate and motivate the patients regarding insulin consumption.

In this respect, they can contribute to the fulfillment of treatment objectives, which include the reduction of complications and achievement of a suitable HbA1c level (10).

In addition, there is a need for evidence-based scientific documents as a basis for delivering essential education to the patients.

In order to achieve this evidence, an electronic search was conducted using the international databases, including the web of science (ISI), Pubmed, Scopus, and Google Scholar, with the keywords of "initiate or starting", type II diabetes", and "insulin". The search results indicated that the number of interventional studies investigating the field of nursing and "insulin initiation" was very limited.

Accordingly, among the Persian electronic databases, such as SID (Scientific Information Database) and Magiran, only one "descriptive, cross-sectional" study was found (11).

Using various studies, the barriers to insulin initiation were listed and investigated. The review was indicative of the implementation of only a few nursing interventions to overcome these barriers. Considering the importance of insulin initiation and the significant role of nurses as the facilitators of this process, there was a gap in the interventional studies targeted toward guiding the nurses in the clinical practice in this regard.

Consequently, the researchers are suggested to give more attention to this dimension of diabetes management and take more effective and practical steps to overcome the barriers to insulin initiation in type II diabetic patients.

Keywords:

Barriers; Initiating insulin; Nursing, Overcome; Type 2 diabetes

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