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Research Article

**ROLE OF NURSES IN HEALTH EDUCATION ABOUT THE  
RISK OF TYPE 2 DIABETES MELLITUS IN PAKISTAN**Momona Anis<sup>1</sup>, Sumaira Safdar<sup>1</sup>, Tahira Shaheen<sup>2</sup><sup>1</sup>Charge Nurse, Lady Willingdon Hospital, Lahore<sup>2</sup>Nursing instructor, Post Graduate College of Nursing Punjab, Lahore**Article Received:** January 2021**Accepted:** January 2021**Published:** February 2021**Abstract:**

**Introduction:** Diabetes has become an increasingly serious health issue on a global scale with the number of people living with diabetes rising significantly over the last 35 years. **Objectives:** The main objective of the study is to find the role of nurses in health education about the risk of type 2 diabetes mellitus in Pakistan. **Material and methods:** This cross sectional study was conducted in Lady Willingdon Hospital, Lahore during March 2020 to July 2020. The data was collected through semi-structured interviews, performed in a private space in the BHU, by two researchers with experience in primary care and who had no link with the institutions surveyed. **Results:** Improvement of patient care and health services are one of the most important challenges for nurses. According to World Health Organization, nurses are one of the largest health groups in the world who are involved in different levels of health. Obviously, there are several reasons for the presence of nurses in the health care team, but in general, the four major goals are included health promotion, prevention of diseases, patients care, and simplify patients' compliance. **Conclusion:** It is concluded that despite the developments and initiatives that have taken place over the last years in order to confront the disease of diabetes, the statistics still highlight the large number of people with diabetes, which is increasing worldwide.

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**INTRODUCTION:**

Diabetes has become an increasingly serious health issue on a global scale with the number of people living with diabetes rising significantly over the last 35 years. According to the International Diabetes Federation, in 2017, approximately 425 million adults (20–79 years) were living with diabetes, and by 2045 this will rise to 629 million. The report also shows that over the past decade the prevalence of diabetes has risen faster in low- and middle-income countries than in high-income countries [1]. Adults who are diagnosed with diabetes have a 3.5 times higher risk of being hospitalized than are those without a history of diabetes, while those with prediabetes are 1.3 times more likely to be hospitalized [2]. Furthermore, national data in the UK confirms that on average a patient with diabetes spends longer in hospital than a patient without diabetes despite being admitted for the same procedure or condition other than diabetes [3]. Direct medical costs associated with diabetes include expenditures for preventing and treating diabetes and its complications and cover outpatient and emergency care, inpatient hospital care, and long-term care. The major diabetes cost drivers are hospital inpatient and outpatient care [4]. However, according to the NHS Institute for Innovation Improvement, less emphasis has been given to how the British NHS can best treat and support people with diabetes when they are admitted to hospital, particularly when the main reason for their admission is not related to their diabetes [5].

Despite the fact that diabetes is a global issue, there is no universal approach to treating patients. For example, there are countries where the health care system allows nurses to have a major role in treating and educating people with diabetes, whereas in other countries doctors have a dominant role in diabetes care [6]. In response to the need for enhanced support of patients with diabetes, multiple changes have occurred in treatment and care of diabetic patients and nurses' role, which aimed to face the increasing rate of diabetes morbidity. Such changes include the establishment of the position of Diabetes Specialist Nurse (DSN), which allows nurses to prescribe medicines in countries like the UK and to be involved in the various levels of the health care system and to not be confined to hospitals. This development has been found to improve clinical outcomes, to reduce inappropriate referrals to secondary care, and to reduce outpatient attendances [7].

**Objectives**

The main objective of the study is to find the role of nurses in health education about the risk of type 2 diabetes mellitus in Pakistan.

**MATERIAL AND METHODS:**

This cross-sectional study was conducted in Lady Willingdon Hospital, Lahore during March 2020 to July 2020. The data was collected through semi-structured interviews, performed in a private space in the BHU, by two researchers with experience in primary care and who had no link with the institutions surveyed. All the interviews transcribed in full were subject to content analysis, thematic modality, following the steps of pre-analysis, material exploration, data processing and inference of the results. In the pre-analysis, the *flutuante* and individual reading of the interviews was carried out, followed by exploration of the material with a thorough and exhaustive reading of the printed content.

The data was collected and analysed using SPSS version 17. All the values were expressed in mean and standard deviation.

**RESULTS:****Goals of nursing intervention in diabetic foot care**

Improvement of patient care and health services are one of the most important challenges for nurses. According to World Health Organization, nurses are one of the largest health groups in the world who are involved in different levels of health. Obviously, there are several reasons for the presence of nurses in the health care team, but in general, the four major goals are included health promotion, prevention of diseases, patients care, and simplify patients' compliance. To achieve these goals, nurses can play different roles. There are seven main roles for nurses including: 1. providing health care, 2. care connector, 3. educator, 4. consultant, 5. leader, 6. researcher, 7. supporting the rights of patients [8].

**Nursing role in diabetic foot care at home**

Diabetic patients follow up at specified intervals is part of the care plan which should be considered first. Accordingly, all diabetics should be referred to the diabetes clinic in order to have been evaluated for diagnostic and comprehensive foot care every year [9]. Daily foot care for some diabetic patients, especially patients with limited vision due to diabetes and other chronic diseases are difficult because they could not be able to evaluate their feet. Peripheral vascular disease, decreased foot sensation in combination with delay wound healing cause difficulty in foot care. These complications should be evaluated by nurses in both clinic and home visit.

**DISCUSSION:**

In our country, despite the increased number of diabetic patients, the training of specialist nurses such

as diabetes or diabetic foot specialist nurses has not been considered effectively. It seems that developing short term training courses for nurses, use of diabetic foot clinical guidelines and algorithms in clinics and hospitals along with continues training about novel approaches in diabetic foot care could be temporarily increased the focus on diabetes and foot care. Moreover, the wide spectrum of programs includes the Master of Sciences in Nursing for developing diabetes specialist nurse and development of electronic health can be diminished this global problem [7].

Although education alone is not a cure for the disease, the type 2 diabetes patient is not able to achieve metabolic regulation, if does not know the basic principles of nutrition, physical activity, care of the lower extremities, as well as specific skills related to the administration of subcutaneous injection of insulin, control of blood sugar levels, and other necessary parameters [8]. The teaching of the technique of injection of insulin by the patient and a family member is the most important part of the educational program. Initially, the technique of injection is taught and then the calculation of the required units of insulin, the selection of sites, and the way of handling the equipment in order to prevent contamination and injuries. Afterwards, basic principles regarding diet, maintenance of body weight, resting, and prevention of hypoglycemia or deregulation of blood sugar are taught [11].

The design of the educational program should be focused on each patient's needs individually (patient-centred approach). It is crucial that the design of the educational program includes other factors such as the priorities, the feelings, the expectations of the patient, and the changes in lifestyle following the disease. Moreover, the education of type 2 diabetes patients should be constant because there is a tendency for knowledge to decline over time and consequently the long-term maintenance of the beneficial effect of the intervention [3-6].

Given that the patients themselves are responsible on a daily basis for regulating the blood sugar levels (self-monitoring of blood glucose, SMBG), encouragement and support are main aspects of the educational program. However, very often, due to the successful regulation of blood sugar levels with medication, such as anti-diabetic tablets or subcutaneous insulin injections, the patients do not comply to the instructions received from health professionals or refuse to comply with the long-term instructions from the educational program and the practical application of the knowledge acquired (low compliance). In such cases, enhancement of self-esteem and evaluating

patients' needs is a key point for the acceptance and adaptation to the disease [2].

### CONCLUSION:

It is concluded that despite the developments and initiatives that have taken place over the last years in order to confront the disease of diabetes, the statistics still highlight the large number of people with diabetes, which is increasing worldwide. Therefore, since nurses have an important role in being involved in diabetes care, it is of great importance to clearly identify their multiple and sometimes complicated roles in diabetes care, to eliminate any barriers that prevent them from providing adequate care, and to enhance any facilitators that allow them to provide the best quality care.

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