

Level of awareness regarding diabetes and its management in diabetic population of Pakistan, and highlighting the role of consultant pharmacist

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Today diabetes is one of the major challenges in health sector worldwide. Diabetes is one of the most prevalent disorders, the prevalence for which was estimated (globally), in 2013 to be 382 million diabetic patients which is expected to rise to 592 million by 2035. Most people with diabetes live in developing countries (like Pakistan). According to IDF, currently 6.6 million Pakistanis live with diabetes and in 2025 the total number of people with diabetes is estimated to projected 14.5 million; Pakistan has the tenth largest population of diabetes, and will take the fourth position in 2025.¹

The management of chronic disorders like diabetes not only requires rational therapeutic approaches, but also proper education and counseling by healthcare professionals, because the self care practices of individuals are influenced by their knowledge about diabetes; the more they know about their illness, more they would have self management skills.² The significance of diabetic patient education has been known since the eighteenth century; Dr. E.P.Joslin stated that "the diabetic who knows the most lives the longest".³ So recently it has been evaluated that diabetic patient counseling about the disease state, complications and management, adherence to therapy and medications, clarifying myths and other aspects can reduce and prevent the long term complications and decreases financial burdens and morbidity rates.⁴

But unfortunately in Pakistan many research works published, show that the diabetic population has shockingly poor level of awareness about diabetes, its related complications and management. A study conducted in Quetta concluded that 77.11% of the study population had no knowledge of diabetes and its complications.⁵ Another study in Karachi revealed that majority of individuals with diabetes have never received diabetes education.⁶ Similarly in 2009 a study in investigating the awareness level about diabetes mellitus and associated factors in rural Islamabad showed that out

of the three hundred adults surveyed, only 129 (43%) had any knowledge of Diabetes Mellitus. Awareness of risk factors was present in 42 (14%) while awareness of the complications associated with the disease was 65 (22%). Adults who reported as never going for regular checkups to any clinic or hospital were 232 (77%).⁷ Another study published by Khalid Mahmood et al in 2011 showed that most of the diabetic patients (62.6%) never received any diabetic education.² Other studies conducted on the same subject have given similar results.^{8,9,10} Besides patients, some studies showed that diabetes awareness is also deficient in family members of the patient and even in family physicians.¹¹

So the level of awareness in diabetic population of Pakistan regarding diabetes and its management is found to be poor, due to absence of formal education and counseling programme in public and private sectors. A few centres like Baqai Institute of Endocrinology Karachi have well established structure of diabetes education.¹² No expanded programme has been planned at the National level, although the National Diabetes Advisory Board stated in its 1993 Annual Report that - in the care of diabetes, an ounce of education saves a pound of treatment.¹³ Further the American Diabetes Association, clearly defined, the critical role of diabetes education in quality diabetes care.¹⁴ Similarly DAWN2 study conducted in over 17 countries in 4 continents, by extrapolating global DAWN2 data to Pakistan's diabetes care environment, while focusing on national data from socioculturally similar countries like India, inspire us to initiate reforms in the way we manage diabetes. Enhanced involvement of the person with diabetes and his or her family, following the principles of person centered and family centered care, is an essential aspect.¹⁵

Diabetes mellitus is a metabolic disorder and the patient is on multiple drugs. Along with this strong belief on myths about diet, and medications specially insulin and complications, the need for education is imperative. The role of consultant pharmacist is thus of special importance in many aspects. A consultant pharmacist is a person who is paid to provide the expert advice on multidisciplinary health issues at individual level or within

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institutions, or on the provision of pharmacy services to institutions.¹⁶ A pharmacist as a part of health care system, has an advantage to provide effective counseling and deliver patient education in clinics, hospitals and community, better understanding of the disease, life style modifications and significance of good glycaemic control. Consultant pharmacist can also be involved in patient's adherence to their treatment plan, especially insulin by educating the management of hypoglycaemia and dose titration according to blood glucose levels. Additionally consultant pharmacist may also be involved in educating the patient's family members in special cases as of paediatric and geriatric patients as well as conducting nursing education programmes on diabetes care. The possible risks of multiple drug regimens (poly pharmacy) in a diabetic patient can also be minimized by a pharmacist.¹⁷

In conclusion patient awareness on diabetes and its complications, compliance with medication, dietary restrictions and life style modifications can help to achieve patient specific goals, as effectiveness of medications and decrease in the likelihood of adverse events, in all types of diabetes and in all age groups of people with diabetes. The pharmacist plays a key role in acquiring success.

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