Prevalence and factors affecting opposition of insulin initiation among type 2 DM patients at Ain Shams University Hospitals

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Background: Despite the rapid development of new antidiabetic medications, glycemic control is not improved. One of the obstacles to diabetes management is delayed initiation of insulin therapy in poorly controlled type 2 DM patients.

Objectives: To measure the prevalence of insulin opposition among Egyptian type 2 diabetes patients, uncontrolled, on two or more oral hypoglycaemic combination therapy and to assess factors associated with insulin opposition.

Methodology: A cross sectional study was conducted in outpatient clinics at Ain Shams University Hospitals using a purposive sample of 103 type 2 diabetic patients (on two or more oral hypoglycaemic combination therapy, and with HbA1c >9% in the last 6 months or random blood glucose ≥300–350 mg/dL), using a structured interview questionnaire.

Results: About half (55.3 %) of the study sample were unwilling to start insulin in spite of poor glycemic control. Comparing unwilling and willing participants, the negatively stated items that differed significantly between the 2 groups were keeping insulin as a last resort (unwilling 77.2% vs. willing 50%, p = 0.002), belief that taking insulin is a sign that diabetes had become worse (unwilling 75.4% vs. willing 63 %, p = 0.007), feelings of personal failure in diabetes self-management (unwilling 71.9 %vs. willing 63%, p = 0.016), concerns about less flexible life (unwilling 59.6 %vs. willing 52.2%, p = 0.028), concerns about time & effort with daily injections (unwilling 29.8% vs. willing 13 %, p = 0.006) and expected harm from insulin therapy (unwilling 28.1% vs. willing 13 %p = 0.021).

The positively stated items that differed significantly between unwilling and willing participants were about the role of insulin in improving energy level (unwilling 22.8% vs. willing 50%, p = 0.026), improving health (unwilling 28.1% vs. willing 60.9%, p = 0.007) and preventing complications of diabetes (unwilling 42.1% vs. willing 67.4%, p = 0.03). Mean total Insulin Therapy Appraisal scale (ITAS) score was higher in unwilling participants compared to those willing (unwilling 47.2 vs. willing 41.6, p = 0.000), which reflects a higher degree of negative appraisal towards insulin therapy among unwilling participants.

In univariate analysis, factors associated with lower prevalence of opposition to initiate insulin therapy included family history of insulin use, previous physicians’ recommendations on insulin within the previous 6 months, history of hypoglycemic attacks, longer duration of diabetes disease, and less objection to the idea of lifelong insulin therapy.

Conclusions: Unwilling participants have many negative attitudes concerning initiating insulin therapy. Exploring these attitudes can help address participants’ concerns and promote the timely initiation of insulin.

Recommendations: There should be a physicians’ training program to look beyond the initial refusal to the initiation of insulin therapy by assessing the knowledge and underlying beliefs of the participants regarding insulin. A collaborative doctor patient relationship can help patients begin insulin treatment sooner and maintain target levels of glycemic control.

Rate of minor injuries patients’ attendance at surgical emergency departments, Ain Shams University Hospitals

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Introduction: Minor injuries contribute to the majority of injuries presenting to medical facilities, contributing globally to 37.3% of disability adjusted years. Treatment of minor injuries places an enormous burden on hospital emergency departments and trauma care systems.

Objectives: To measure the rate of attendance for minor injuries in the emergency departments (EDs) of El Demerdash university hospital in Cairo for nine months duration and To describe the characteristics of patients with minor injuries who attend the hospital emergency departments.

Methodology: Data were extracted from hospital data records where all cases of minor injuries (contusions, cut wounds, simple fractures, burn, sprain/stain, foreign body in the skin, partial dislocation and abrasions) fulfilling the inclusion criteria were recorded and divided by the total number of patients attending the ED, from the duration first of March to November 2017 retrospectively. The work sheet included: the age, gender, residency, date, time of arrival, and diagnosis.

Results: The rate of attendance for minor injuries patients for 9 months duration at 2017 was 24.7% (8, 615 cases of minor injuries out of 34, 838 of patients attending the surgical EDS). The majority of the recorded cases were males (67.2%), at the adult age groups (59.7%). contusions were the most common cause for attendance (51.9%). Among infants simple fractures were the most common reported injuries while burns were the most common among elderly.

Conclusion: Overcrowding of EDs is a major health problem, minor injuries play a significant role as the study showing that minor injuries represent nearly one quarter of the total attendees of the ED.

Recommendations: Establishment of a triage area or minor injury unit near the emergency department will help in better management of ED cases; public awareness to the community about different levels of health care system will provide better utilization of health resources.