Analysis of consumption of insulin in the municipality of Stip from 2011 to 2014

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Introduction

Diabetes mellitus is a syndrome characterized by chronic hyperglycemia and disorder of the metabolism of carbohydrates, protein and fat associated with a relative or absolute lack of insulin secretion and insulin action. Diabetes is one of the most common endocrine disorders, with a tendency of increased growth. Diabetes is not only medical but also economic and social problem.

Aim

The aim of this paper is to realize the changes in the variety and number of consumed units of insulin PHI Clinical Hospital Stip given the type of mostly used insulin per producer, strips to measure blood sugar, insulin needles, pens and whales in Stip diabetes center in the period from 2011 to 2014.

Materials and methods

The research and evaluation of the spent insulin's is based on the data of the consumption of insulin in the period from 2011 to 2014 received from the Hospital pharmacy in PHI Clinical Hospital Stip.   The data is arranged by type and origin of insulin preparations, summed by year and made a comparison of consumption and variety. The results are expressed in number of package

Descriptive method was used in data processing

Results and Discussion

According to data from the Diabetes Centre in Stip, insulin's consumption in 2011, 2012, 2013 and 2014 continues to grow. The hospital has purchased various types of insulin, according to the events, and generics manufacturer

The rising use of bands for measuring glucose in the blood and needle aparats for measuring the sugar is partly due to the growing number of diabetics, and it is a part of a program of measures introduced by the Government of the Republic of Macedonia by introducing centralized procurement of insulin and stripes for measuring blood sugar
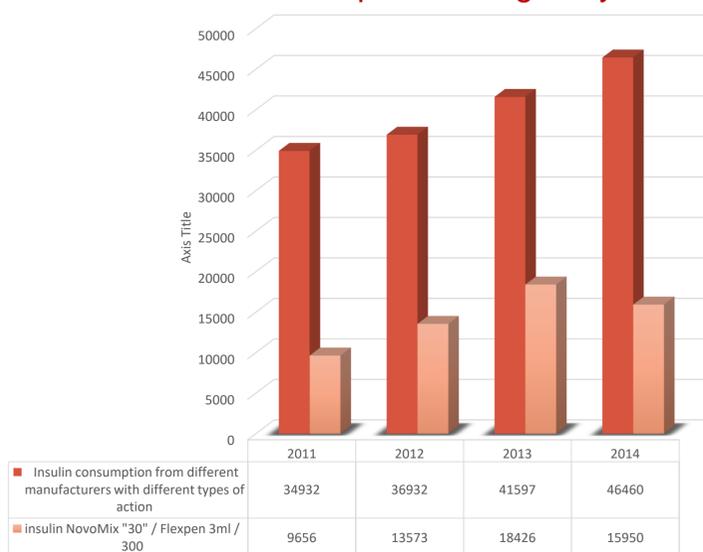
The consumption of insulins units from different manufacturers with different types of action   over the years increased

The highest consumption in all four years has insulin NovoMix "30" / Flexpen 3ml / 300, which is a generic Insulin aspart,
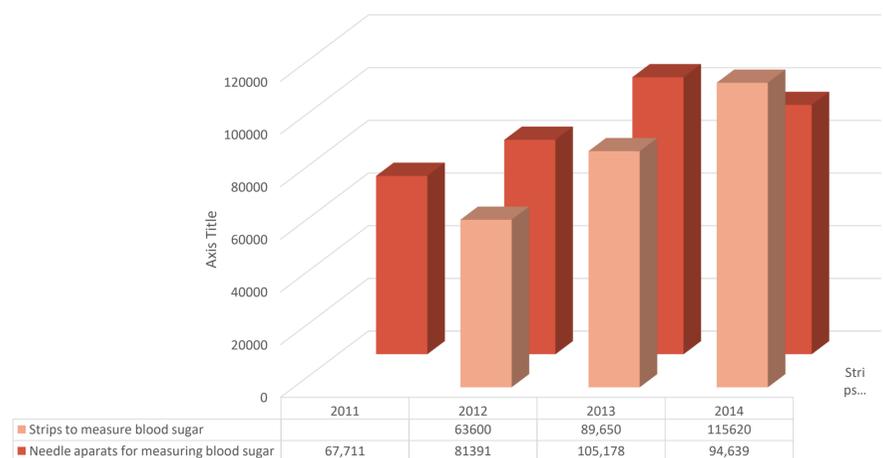
Strips to measure blood sugar In 2012 there are issued 63 600 boxes of strips to measure blood sugar, while in 2013 consumption increased by 29% and in 2014 the consumption increased by 22%. The highest consumption of strips to measure blood sugar levels in 2012 are from Roche Accucheck Nano 1/50 and it was 28.250.

Consumption needle aparats for measuring blood sugar was increased till 2014. In 2014 we have reduced the use of needles by about 10%

Insulin consumption during the years

	2011	2012	2013	2014
Insulin consumption from different manufacturers with different types of action	34932	36932	41597	46460
insulin NovoMix "30" / Flexpen 3ml / 300	9656	13573	18426	15950

Measuring glucose in the blood

	2011	2012	2013	2014
Strips to measure blood sugar		63600	89,650	115620
Needle aparats for measuring blood sugar	67,711	81391	105,178	94,639

Conclusion

Consumption of insulin in 2011, 2012, 2013 and 2014 PHI Clinical Hospital Stip continues to grow. The highest consumption of fast-acting insulin, while the consumption of insulins intermediate - long action in the last two years completely replaced with insulins medium - long-acting combined with long-acting

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