Appropriate Use Of Anti-Diabetic Medicine In Diabetes Mellitus Patients In BPJS Participants In The Outstanding Policy Of Dr H.Soewondo Kendal 2020

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Abstract

Diabetes Mellitus (DM) is a chronic condition that occurs because the body cannot produce insulin normally or insulin cannot work effectively. Indonesia is ranked fourth in the number of people with DM in the world after the United States, India and China. Rational use of drugs requires that patients receive treatment according to clinical needs, in the required dose of each individual within a certain period of time at the lowest cost. This research is a descriptive research. Descriptive research method is a research method that is carried out with the main aim of making a picture or description of a situation objectively. Descriptive research methods are used to solve or answer the problems being faced in the current situation. The profile of the use of antidiabetic drugs in terms of gender is mostly women with a percentage of 57.7%, most patients are in the 40-60 year age group as much as 50.0%. The most use of single antidiabetic drugs is sulfonylurea 33.6%, combination therapy mostly uses 3 classes of drugs by 63.6%, namely Alpha Glucoside Inhibitors, Sulfonylureas and Biguanides. For the administration of combination therapy, the most insulin is a combination of longrapid and85.7 actingacting %.

Keywords: Antidiabetic Drugs For Patients With Diabetes Mellitus.

INTRODUCTION

Diabetes Mellitus (DM) is a chronic condition that occurs because the body cannot produce insulin normally or insulin cannot work effectively (International Diabetes Federation, 2012). Indonesia is ranked fourth in the number of people with DM in the world after the United States, India and China (Tandra, 2008). Rational use of drugs requires that patients receive treatment according to clinical needs, in the required dose of each individual within a certain period of time at the lowest cost (WHO, 2012).

According to the International Diabetes Federation (2013), the latest estimate there were 382 million people living with diabetes in the world in 2013. By 2035 that number is expected to increase to 592 million people. It is estimated that of the 382 million people, 175 million of them have not been diagnosed, so they are in danger of developing progressively into complications without realizing it and without prevention. According to the Basic Health Research (Riskesdas) (2007 and 2013), the results of interviews to calculate the proportion of DM at the age of 15 years and over, are defined as DM if you have been diagnosed with diabetes by a doctor or have never been diagnosed with diabetes by a doctor but in the past month. experience symptoms of frequent hunger, frequent urination in large quantities and weight loss. The results of the interview found that the proportion of diabetes mellitus in Riskesdas 2013 had almost doubled compared to 2007.

The use of antidiabetic drugs is regulated in the Decree of the Minister of Health of the Republic of Indonesia No. HK.01.07/MENKES/659/2020 concerning the National Formulary (Fornas). Fornas as a reference in implementing the National Health Insurance (JKN) for participants in the Social Security Administering Body (BPJS) contains a list of selected drugs needed to improve the quality of health services, ensuring the availability of safe, quality, efficacious, and affordable drugs in sufficient types and quantities. must be available in health care facilities (Depkes RI, 2013).

Regional General Hospital (RSUD) Dr. H. Soewondo Kendal Regency is a type B hospital that plays a role in the success of the JKN program. Hospital Dr. H. Soewondo Kendal Regency uses Fornas BPJS in an effort to improve the quality, efficiency of drug services and ensure the smooth

supply of pharmaceutical services. The choice of DM is due to the increasing number of DM sufferers experienced by all ages, even pregnant women (gestational diabetes).

The reason the author chose DM is because the previous author has also conducted research on DM with the title pattern of using oral hypoglycemic drugs in Type 2 DM patients at the Outpatient Installation of RSUD Dr. Moewardi Surakarta Period January-June 2010. The author is interested in examining BPJS participants with DM, because the researchers see that there are restrictions in the National Social Security Administration Agency which regulates antidiabetic drugs that look complicated, so it is interesting to study.

Based on the background, the authors are interested in conducting research on the evaluation of the suitability of the use of antidiabetic drugs in patients with diabetes mellitus who are BPJS participants at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018.

RESEARCH METHODS

Research Design

This research is a descriptive research. Descriptive research method is a research method that is carried out with the main aim of making a picture or description of a situation objectively. Descriptive research methods are used to solve or answer the problems being faced in the current situation (Notoatmodjo, 2010).

This study was conducted to determine the evaluation of the suitability of the use of antidiabetic drugs in DM patients BPJS participants at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018.

Location and Time of Research

This research was conducted at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal 2018. The time of the study was carried out from April to June 2019.

Research Subject

The research subjects were DM patients who were BPJS participants who received antidiabetic drugs as therapy based on BPJS Fornas at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018.

1. Population

    The population in this study were all DM patients who were BPJS participants who received antidiabetic drugs as therapy based on BPJS Fornas at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018

2. Sample

    The sample is part or representative of the population to be studied (Sugiyono, 2012). The sample in this study were DM patients without a secondary diagnosis of BPJS participants who received antidiabetic drugs as therapy based on BPJS Fornas at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018, and met the inclusion criteria and exclusion criteria. The data was taken by the total sampling method, namely the samples taken were all samples that met the inclusion criteria.

3. Inclusion criteria

    DM patients without secondary diagnosis of BPJS participants who received antidiabetic drugs as therapy based on BPJS Fornas at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018.

4 . Exclusion criteria

    a. DM patients without secondary diagnosis who did not receive antidiabetic drugs as therapy at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal in 2018 who is not a BPJS participant

b. DM patients who are BPJS participants who receive antidiabetic drugs at the Outpatient Polyclinic of RSUD Dr. H. Soewondo Kendal Year 2018 with secondary diagnosis

Data Source

The data used in this study is secondary data obtained from patient prescription sheets. Then the data will be recorded on the data collection sheet.

Result Analysis

The data that has been collected is recorded, processed and analyzed qualitatively and quantitatively to determine the percentage of accuracy in the use of antidiabetic drugs based on Fornas BPJS. The results of the research are presented descriptively in the form of tables and diagrams with the 2014 descriptive SPSS.

RESULTS AND DISCUSSION

Distribution of patients by gender

The distribution of DM patients to BPJS participants
can be seen in table 1. and figure 1.

Table 1. Distribution of DM Patients BPJS Participants by Gender

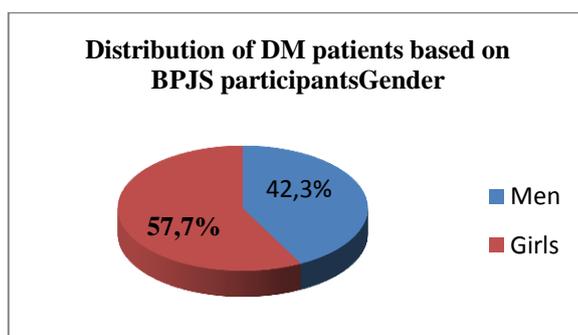| No	Gender	Amount	Percentage (%)
1	Girls	30	**57,7**
2	Men	22	42,3
	Total	52	100

Figure 1. Distribution of DM patients BPJS participants

Based on table 1 and Figure 1, it is known that DM patients are mostly experienced by female patients. This is because the level of sensitivity to insulin action on the muscles and liver. Estrogen is a hormone that is owned by women. According to Brunner & Suddart (2014), increased and decreased levels of the hormone estrogen can affect blood glucose levels, this is because when levels of the hormone estrogen increase, the body becomes resistant to insulin.

The National Health and Nutrition Evaluation Survey (NHANES) reports that the trend of diabetes prevalence increases with age and is more common in women than men (Dipiro et al., 2005).

Distribution of patients by age

The age distribution according to the demographics of DM patients BPJS participants who use antidiabetic drugs can be seen in table 2 and figure 2.

Table 2. Distribution of DM Patients BPJS Participants by Age

No	Age (Year)	Total	Persentase (%)
1	0 – 1 year	0	0 %
2	1 – 6 year	0	0 %
3	6 – 10 year	0	0 %
4	10 – 20 year	0	0 %
5	20 – 40 year	5	9,6%

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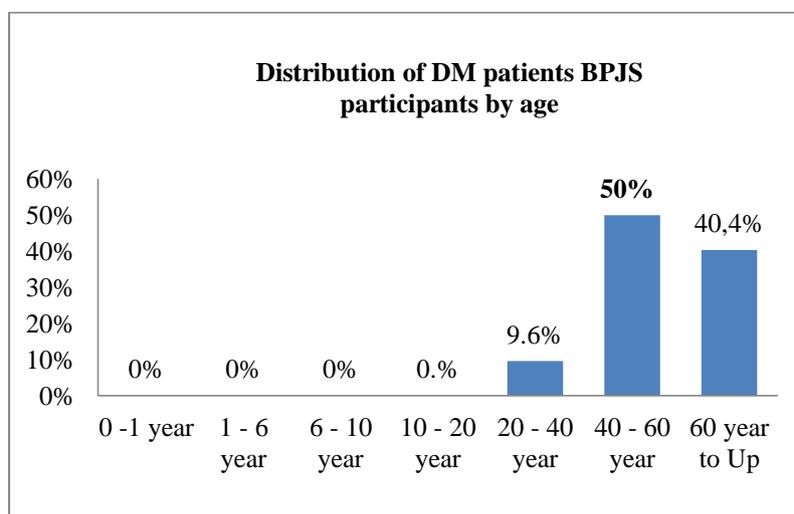| 6	40 – 60 year	26	**50,0 %**
7	60 years and up	21	40,4%
	Total	52	100 %

Figure 2. Distribution of DM Patients BPJS Participants

CONCLUSION

The profile of the use of antidiabetic drugs in terms of gender is mostly women with a percentage of 57.7%, most patients are in the 40-60 year age group as much as 50.0%. The highest use of single antidiabetic drugs is sulfonylurea 33.6%, combination therapy mostly uses 3 classes of drugs by 63.6%, namely Alpha Glucoside Inhibitors, Sulfonylureas and Biguanides. For the administration of combination therapy, the most insulin is a combination of long-acting and rapid-acting insulin, which is 85.7%. Evaluation of the use of antidiabetic drugs in DM patients BPJS participants at the Outpatient Installation of RSUD Dr. H. Soewondo during 2018 according to Fornas BPJS showed that 91.33% or 274 drug items were written in accordance with National Fornas and 8.67% or 26 drug items were not appropriate.

REFERENCES

Anugraeni, DS, Herniyatun, & Santoso, D. (2020). *Overview of dysmenorrhea pain management in Muhammadiyah junior high school students in Kebumen*.

Bobak, (2015). *Textbook of Maternity Nursing 4th edition* Jakarta: EGC

Danim, S. (2003). *nursing research history & methodology*.

Dianawati (2013). Teen*Popular Knowledge.* Jakarta: Gramedia Pustaka Utama.4

Farisa. Princess. (2012). The Effect*of Massage Technique on Reducing Pain During Menstruation in Student 2 of SMAN Surabaya*. Surabaya: Airlangga University. Website://digilib.unair.ac.id accessed on June 16, 2020

Larasati, TA, & Alatas, F. (2016). *Primary dysmenorrhea and risk factors for primary dysmenorrhea in adolescents*. 5.

Manarung, FM, Utami, S., & HD, RS (2015). *the effectiveness of yoga against dysmenorrhea pain in adolescents*. 2.

Marvia, Eva. 2008. *The Effect of Distraction Techniques (Listening to Music) on Reduction of Pain During Menstruation Day 1 in PSIK UMY Students*. Yogyakarta: University of Muhammadiyah Yogyakarta. Website: http://digilib. ummy. air conditioning. en. Retrieved June 16, 2020

Nik Sugiharti, KR, & Ririn, IS (2018). *effectiveness of sour turmeric drink and tamarind ginger spice to decrease primary pain scale*. 6.

Taruna, (2013). *Hypotherapy*. Website: http://www.medikaholistik.com/. Retrieved June 16, 2020

Rohmaniah, I. N. S. (2014). a description of the knowledge and attitudes of young women in dealing with physical changes during puberty at the Al-Baqiyatussholihat Islamic boarding school.

Rustam, E. (2014). Description of knowledge of adolescent girls on menstrual pain (dysmenorrhea) and how to overcome it.