

**PROGRAM STUDI S1 KEPERAWATAN  
FAKULTAS ILMU KEPERAWATAN  
UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG  
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**ABSTRAK**

**Ma'rifah Guntata S.B**

**GAMBARAN NILAI *GLOMERULAR FILTRATION RATE* (GFR) PADA PASIEN HIPERTENSI DAN DIABETES MELLITUS TIPE II SEBAGAI DETEKSI DINI FAKTOR RESIKO *CHRONIC KIDNEY DISEASE* (CKD) DI RSUD DR. SOEWONDO KENDAL**

52 halaman + 9 tabel + 2 gambar + xv

**Latar Belakang:** GFR sangat penting dalam efisiensi pembuangan zat sisa metabolisme pada ginjal. CKD dengan stadium 5 (*End Stage Renal Disease*, ESRD) dapat dipertahankan dengan dialisis dan membutuhkan biaya mahal yang terus berlangsung seumur hidup atau dengan dilakukannya transplantasi organ demi menunjang kelangsungan hidup penderita. Oleh karena itu, perlu dilakukan deteksi dini untuk mencegah peningkatan angka morbiditas dan mortalitas karena CKD. Penelitian ini bertujuan untuk mengetahui gambaran nilai GFR pada pasien hipertensi dan diabetes mellitus tipe II Sebagai Deteksi Dini Faktor Resiko CKD di RSUD dr. Soewondo Kendal.

**Metode:** Penelitian dengan observasi analitik dan desain *cross sectional*. Sampel dalam penelitian ini yaitu 40 responden hipertensi dan 26 responden diabetes mellitus tipe II. Data dianalisis dengan statistika inferensial berdasarkan distribusi frekuensi.

**Hasil:** Pada pasien hipertensi, stadium 1 (30%) dengan nilai GFR >90 ml/menit/1,73 m<sup>2</sup>; stadium 2 (22,5%) dengan nilai GFR 60-89 ml/menit/1,73 m<sup>2</sup>; stadium 3a (15%) dengan nilai GFR 45-59 ml/menit/1,73 m<sup>2</sup>; stadium 3b (20%) dengan nilai GFR 30-44 ml/menit/1,73 m<sup>2</sup>; stadium 4 (2,5%) dengan nilai GFR 15-29 ml/menit/1,73 m<sup>2</sup>; stadium 5 (10%) dengan nilai GFR <15 ml/menit/1,73 m<sup>2</sup>. Pada pasien diabetes mellitus tipe II, Stadium 1 (23,1%) dengan nilai GFR >90 ml/menit/1,73 m<sup>2</sup>, stadium 2 (26,9%) dengan nilai GFR 60-89ml/menit/1,73 m<sup>2</sup>; stadium 3a (19,20%) dengan nilai GFR 45-59 ml/menit/1,73 m<sup>2</sup>, stadium 3b (15,4%) dengan nilai GFR 30-44ml/menit/1,73 m<sup>2</sup>, stadium 4 (13,5%) dengan nilai GFR 15-29 ml/menit/1,73 m<sup>2</sup>; stadium 5 (3,8%) dengan nilai GFR <15 ml/menit/1,73 m<sup>2</sup>.

**Kesimpulan:** Terjadi penurunan nilai GFR pada pasien hipertensi dan diabetes mellitus tipe II.

**Kata Kunci:** GFR, hipertensi, diabetes mellitus tipe II, deteksi dini.

**Daftar Pustaka:** 36 (2000-2016)

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**ABSTRACT**

**Ma'rifah Guntata S.B**

**THE DESCRIPTION OF GLOMERULAR FILTRATION RATE (GFR)  
VALUE ON PATIENTS WITH HYPERTENSION AND TYPE II  
DIABETES MELLITUS AS EARLY DETECTION OF CHRONICAL  
KIDNEY DISEASE (CKD) RISK FACTORS INDR.  
SOEWONDOHOSPITAL KENDAL**

52 pages + 9 tables + 2 pictures + xv

**Background:** GFR is very important in the efficiency of the disposal of waste products in the kidneys. CKD with stage 5 (*End Stage Renal Disease*, ESRD) can be maintained by means of dialysis and costly ongoing lifetime of the patient or the transplantation of organs in order to support patients survival. Therefore, it needs to be detected early to prevent an increase on numbers of morbidity and mortality due to CKD. This study aims to describe the value of GFR in patients with hypertension and type II diabetes mellitus as risk factors for early detection of CKD in dr. Soewondohospital Kendal.

**Method:** This study belongs to observational analytic with cross sectional design. Samples in this study were 40 respondents suffering from hypertension and 26 respondents suffering from type II diabetes mellitus. The obtained data were analyzed using inferential statistics based on the frequency distribution.

**Result:** In patients with hypertension, it obtained stage 1 (30%) with a value of GFR  $>90$  ml/min/1.73 m<sup>2</sup>; stage 2 (22.5%) with a value of GFR 60-89 ml/min/1.73 m<sup>2</sup>; stage 3a (15%) with a value of GFR 45-59 ml/min/1.73 m<sup>2</sup>; stage 3b (20%) with a value of GFR 30-44 ml/min/1.73 m<sup>2</sup>; stage 4 (2.5%) with a value of GFR 15-29 ml/min/1.73 m<sup>2</sup>; stage 5 (10%) with a value of GFR  $<15$  ml/min/1.73 m<sup>2</sup>. In patients with type II diabetes mellitus, it resulted Stage 1 (23.1%) with a value of GFR  $>90$  ml/min/1.73 m<sup>2</sup>, stage 2 (26.9%) with a value of GFR 60-89ml/min /1.73 m<sup>2</sup> ; stage 3a (19.20%) with a value of GFR 45-59 ml/min/1.73 m<sup>2</sup>, stage 3b (15.4%) with a value of GFR 30-44ml/min/1.73 m<sup>2</sup>, stage 4 (13, 5%) with a value of GFR 15-29 ml/min/1.73 m<sup>2</sup>; stage 5 (3.8%) with a GFR  $<15$  ml/min /1.73 m<sup>2</sup>.

**Conclusion:** There was a decrease on GFR valueof patients with hypertension and diabetes mellitus type II.

Keywords: GFR, Hypertension, Mellitus Type II Diabetes, Early Detection.

**References:** 36 (2000-2016)