

## ABSTRAK

**Latar Belakang :** Penyakit utama yang berpengaruh pada penyakit ginjal kronik adalah diabetes sebesar 33-40 persen. Biaya besar merupakan beban yang sangat berat untuk pengobatan dan perawatan kesehatan, khususnya di negara berkembang. Hasil survey komunitas yang dilakukan oleh Perhimpunan Nefrologi Indonesia (Pernefri) bahwa 12,5% dari populasi sudah mengalami penurunan fungsi ginjal (18 juta penduduk di Indonesia). Tahun 1999-2010 sebesar 10% (lebih dari 20 juta penduduk dewasa Amerika Serikat) menderita ginjal kronik, peningkatan ini disebabkan beberapa faktor risiko seperti usia diatas lebih dari 50 tahun. Laki-laki lebih cenderung terkena gagal ginjal sebesar 50% dibandingkan perempuan.

**Metode:** Penelitian ini adalah *analitik observasional* dengan rancangan *case control study*. Populasi adalah pasien PGK RSUD Tidar Kota Magelang. Kriteria kasus: pasien PGK mendapat terapi hemodialisis pertama kali tahun 2014, kriteria kontrol: pasien tahun 2014 diagnosis PGK belum pernah mendapatkan terapi hemodialisis. Rekam medis terdapat catatan hasil laboratorium: gula darah 2 jam postprandial, trigliserida, kolesterol, ureum, kreatinin, bersedia menjadi responden dan hasil pemeriksaan tekanan darah, usia antara 20-70 tahun.

**Hasil :** Berdasarkan analisa bivariabel faktor risiko pendidikan OR:2,84 (CI95%:0,77-10,37;*p*:0,09), pekerjaan OR:3,25 (CI95%:0,55-19,06; *p*:0,17), hipertensi OR:2,62 (CI95%:1,09-6,42;*p-value*:0,017), lama DM OR:3,23:CI95%:1,35-7,87;*p*:0,00) dan gula darah dua jam postprandial OR:1,88 (CI95%:0,79-4,49 *p*:0,113). Analisa multivariabel yang sama-sama berpengaruh lama DM OR:3,2 (CI95%:0,47-2,18), Hipertensi OR:2,1 (CI95%:0,28-2,01) terhadap hemodialisis pada penderita ginjal kronik.

**Kesimpulan:** Lama menderita diabetes mellitus atau hipertensi merupakan faktor risiko terhadap hemodialisis pada penderita ginjal kronik. Rumah sakit dapat memberikan penyebaran informasi tentang pencegahan ginjal kronik. Masyarakat dapat mengontrol dan pemeriksaan skrining laboratorium di tempat-tempat pelayanan kesehatan agar terhindar dari penyakit kronis.

**Kata Kunci :** Hemodialisis, Faktor risiko, diabetes mellitus, hipertensi

## ABSTRACT

**Background:** Chronic kidney disease (CKD) into a global public health problem, this situation is influenced by several factors. The increasing prevalence in urban areas in 1999-2010, this increase resulting from a wide variety of risk factors such as age, increasing at the age of over 50 years, patients with CKD in men more prone to renal failure 50% when compared to women. Other risk factors for CKD include heart disease, obesity, high cholesterol, lupus, and family history of CKD. Low and middle-income regions including South Asian countries, the elderly population and urbanization, obesity and type 2 diabetes mellitus (type 2 diabetes) even override the proportion of adults with type 2 diabetes already affects nearly 10% of the population of South Asia. Based on the Indonesian report Renal Registry (IRR) of 2011 patients reported the most common cause of chronic kidney disease caused by hypertension 34%, 27% diabetic nephropathy, primary glomerulopati (GNC) 14%, 8% obstruction nephropathy, other 6%.

**Methods:** This study is analytic observational with case control study design. CKD patient population is Hospital Tidar Country Magelang. Criteria case: CKD patients by creatinin  $\geq 5$ mg/dl on dialysis therapy were first in 2014, the control criteria: patients with diagnosis CKD by creatinin  $< 5$ mg/dl in 2014 had not received dialysis therapy. Medical records and laboratory (blood glucose two our postprandial, triglyceride, cholesterol, ureum, creatinin) and records blood pressure checks, aged between 20-70 years.

**Results:** Based on the analysis of risk factors for educational bivariable p: 0:09: OR: 2.84 (CI95%: 0.77-10.37), p occupation: 0:16 OR: 3:25 (CI95%: 0:55 to 19:06), hypertension p-value: 0:17; OR: 2.2 (CI95%: 0.63-8.78), duration of DM p: 0.00 (OR: 2.61: CI95%: 1.35-7.87) and GD2JPP p: 0:35; OR: 0.70 (CI95%: 0:32 to 1:56). Multivariable analysis were equally influential  $\geq 10$  years old DM p: 0.00: OR: 3.1 (CI95%: 1:39 to 7:07), Hypertension  $\geq 140 / 90$ mmHg p: 0:22: OR: 3.2 (CI95%: 1:41 to 7:11) on the incidence dialysis in patients with CKD.

**Conclusions:** Hypertension risk factors  $\geq 140/90$  mmHg at risk by 2.1 times the incidence and duration of dialysis diabetes mellitus  $\geq 10$  years had a risk of 3.2 times the incidence in patients with chronic kidney dialysis. Diabetes mellitus is a risk factor greater than for patients with chronic renal hypertension.

**Keywords:** Dialysis, diabetes mellitus, hypertension.