

ABSTRAK

PENGEMBANGAN MODEL KEJADIAN HIPERTENSI BERBASIS SOSIAL EKONOMI, RIWAYAT HIPERTENSI KELUARGA, PELAYANAN KESEHATAN, KETAHANAN TERHADAP LINGKUNGAN DAN GAYA HIDUP: KOMPARASI WILAYAH URBAN DENGAN RURAL

Oleh

SRI ARYANTI

Hipertensi merupakan *the silent killer* karena faktor risiko dari infark miokard, stroke, gagal ginjal akut, dan dapat menyebabkan kematian 10,4 juta jiwa per tahun. Prevalensi hipertensi di Indonesia tahun 2013 dan 2018 naik dari 25,8% menjadi 34,1%. Intervensi selama ini fokus pada upaya kuratif dan rehabilitatif sehingga perlu strategi upaya pengendalian preventif/pencegahan agar kejadian hipertensi dan dampaknya bisa terkendali. Pada wilayah urban kepadatan penduduk lebih tinggi dari wilayah rural, umumnya bekerja di sektor industri dan perkantoran, sehingga jarang melakukan aktifitas fisik. Sementara penduduk rural lebih banyak bekerja di sektor pertanian, sehingga lebih banyak melakukan aktifitas fisik. Penduduk urban pola gaya hidupnya banyak mengonsumsi makanan padat kalori, sehingga indeks massa tubuh lebih tinggi dan berisiko mengalami kejadian hipertensi. Sementara di wilayah urban pola gaya hidup makan sayur dan buah. Tujuan penelitian adalah mengembangkan model kejadian hipertensi berbasis sosial ekonomi, riwayat hipertensi keluarga, pelayanan kesehatan, ketahanan terhadap lingkungan dan gaya hidup : komparasi wilayah urban dengan rural secara simultan. Penelitian ini adalah penelitian survey kuantitatif, dengan desain case control. Populasi pada penelitian ini adalah penduduk usia $\geq 18-65$ tahun di Kabupaten Lampung Utara, besar sampel adalah 300 kasus dan 300 kontrol dengan kriteria inklusi pasien baru hipertensi 1 tahun terakhir, tinggal di wilayah penelitian minimal 5 tahun, tidak dengan komplikasi. Variabel penelitian terdiri dari variabel laten eksogen (riwayat hipertensi pada keluarga dan sosial ekonomi), variabel mediasi (gaya hidup, pelayanan kesehatan, ketahanan terhadap lingkungan), dan variabel laten endogen (kejadian hipertensi). Teknik sampling *multystage random sampling*. Hasil: di wilayah urban 27 indikator (14 valid melalui 3 kali eliminasi), daerah rural 27 indikator (10 valid melalui 4 kali eliminasi) di daerah, validitas dan realibilitas terpenuhi. Pada penelitian ini didapatkan hasil sosial ekonomi melalui

pelayanan kesehatan terhadap kejadian hipertensi di wilayah urban ($p\ value=0,151$) tidak berpengaruh signifikan, wilayah rural ($p\ value=0.000$) berpengaruh dan signifikan. Sosial ekonomi melalui ketahanan terhadap lingkungan terhadap kejadian hipertensi wilayah urban ($p\ value=0,097$) dan rural ($p\ value=0.101$) tidak berpengaruh signifikan. Sosial ekonomi melalui gaya hidup terhadap kejadian hipertensi di wilayah urban ($p\ value=0.000$) dengan rural ($p\ value=0.004$) memiliki pengaruh signifikan. Riwayat hipertensi keluarga melalui ketahanan terhadap lingkungan terhadap kejadian hipertensi di wilayah urban ($p\ value=0.009$) dan rural ($p\ value=0.011$) memiliki pengaruh signifikan. Riwayat hipertensi keluarga melalui gaya hidup terhadap kejadian hipertensi di wilayah urban ($p\ value=0.000$) dan rural ($p\ value=0.000$) memiliki pengaruh signifikan. Riwayat hipertensi keluarga terhadap kejadian hipertensi di wilayah urban ($p\ value=0.000$) dan rural ($p\ value=0.009$) ada pengaruh signifikan. Secara simultan sosial ekonomi melalui pelayanan kesehatan, ketahanan terhadap lingkungan, dan gaya hidup terhadap kejadian hipertensi di wilayah urban ($p\ value=0.000$) dengan rural ($p\ value=0.000$) memiliki pengaruh signifikan. Secara simultan riwayat hipertensi keluarga melalui ketahanan terhadap lingkungan dan gaya hidup terhadap kejadian hipertensi di wilayah urban ($p\ value=0.000$) dengan rural ($p\ value=0.000$) berpengaruh signifikan. Di wilayah urban kejadian hipertensi berpengaruh kuat sebesar ($R\ square$) 73,8% dengan prediksi kuat ($Q\ square$) 72,7%. Hasil persamaan model didapatkan sosial ekonomi melalui gaya hidup dapat menurunkan kejadian hipertensi sebesar 73.28% sedangkan riwayat hipertensi keluarga melalui gaya hidup menurunkan kejadian hipertensi sebesar 78.92%. Di wilayah rural kejadian hipertensi berpengaruh kuat sebesar ($R\ square$) 81,8% dengan prediksi kuat ($Q\ square$) 79,9%. Hasil persamaan model sosial ekonomi melalui pelayanan kesehatan dapat menurunkan kejadian hipertensi sebesar 82.75%. Riwayat hipertensi keluarga melalui gaya hidup dapat menurunkan kejadian hipertensi sebesar 69.27%. Nilai *Goodness of Fit Index* (GoF Index) membuktikan bahwa model penelitian secara kualitas terbukti secara empiris dan fakta bisa diterapkan sebagai model dalam upaya intervensi dan pengendalian kejadian hipertensi. Saran pada wilayah urban perlu perbaikan sosial ekonomi, riwayat hipertensi pada keluarga dan gaya hidup, sementara di wilayah rural perlu perbaikan sosial ekonomi dan perbaikan utility yankes dan mengetahui riwayat hipertensi keluarga lewat skrining deteksi serta memperbaiki gaya hidup dengan cara membuat regulasi kebijakan dan pelaksanaan program yang lebih efektif dalam upaya intervensi preventif/pencegahan dengan berkolaborasi melibatkan stakeholder terkait, mulai dari kegiatan promosi/edukasi, screening deteksi untuk mengembalikan kepada gaya hidup yang lebih sehat dengan mempertimbangkan faktor sosial ekonomi, riwayat hipertensi pada keluarga, ketahanan terhadap lingkungan, pelayanan kesehatan dengan menggunakan model pada penelitian ini.

Kata Kunci: model hipertensi, determinan faktor risiko, urban rural, SEM SmartPLS

ABSTRACT

DEVELOPMENT OF A HYPERTENSION OCCURRENCE MODEL BASED ON SOCIOECONOMIC FACTORS, FAMILY HYPERTENSION HISTORY, HEALTH SERVICES, ENVIRONMENTAL RESILIENCE, AND LIFESTYLE: A COMPARISON BETWEEN URBAN AND RURAL AREAS

By

SRI ARYANTI

Hypertension is known as the silent killer due to its association with the risk factors of myocardial infarction, stroke, acute kidney failure, resulting in approximately 10.4 million deaths annually. The prevalence of hypertension in Indonesia increased from 25.8% in 2013 to 34.1% in 2018. Current interventions have primarily focused on curative and rehabilitative efforts, necessitating a preventive control strategy to manage hypertension occurrences and their impacts. In urban areas, where population density is higher than in rural areas, individuals often work in industrial and office sectors, leading to limited physical activity. Meanwhile, rural inhabitants are more engaged in agricultural activities, resulting in higher levels of physical activity. Urban dwellers tend to consume high-calorie foods, leading to higher body mass indexes and an increased risk of hypertension, whereas rural residents often follow healthier dietary patterns, incorporating fruits and vegetables. The research aims to develop a comprehensive model of hypertension occurrence based on socioeconomic status, family history of hypertension, health services, environmental resilience, and lifestyle, with a simultaneous comparison between urban and rural regions. This quantitative survey employs a case-control design, with a sample size of 300 cases and 300 controls, focusing on individuals aged ≥ 18 -65 years in North Lampung Regency. Inclusion criteria include newly diagnosed hypertension within the last year, residing in the research area for a minimum of 5 years, and no complications. The research variables consist of exogenous latent variables (family history of hypertension and socioeconomic status), mediating variables (lifestyle, health services, environmental resilience), and endogenous latent variables (hypertension occurrence). The multistage random sampling technique is applied. Results indicate that in urban areas, 27 indicators (validated through three eliminations) and in rural areas, 27 indicators (validated through four eliminations) met the criteria of validity

and reliability. In this study, socioeconomic status through health services in urban areas (p value=0.151) showed no significant influence, whereas in rural areas (p value=0.000), it had a significant effect. Socioeconomic status through environmental resilience on hypertension occurrence in urban (p value=0.097) and rural (p value=0.101) areas had no significant impact. Socioeconomic status through lifestyle on hypertension occurrence in urban (p value=0.000) and rural (p value=0.004) areas demonstrated a significant influence. Family history of hypertension through environmental resilience on hypertension occurrence in urban (p value=0.009) and rural (p value=0.011) areas had a significant impact. Family history of hypertension through lifestyle on hypertension occurrence in urban (p value=0.000) and rural (p value=0.000) areas had a significant influence. Family history of hypertension-on-hypertension occurrence in urban (p value=0.000) and rural (p value=0.009) areas showed a significant effect. Simultaneously, socioeconomic status through health services, environmental resilience, and lifestyle on hypertension occurrence in urban (p value=0.000) and rural (p value=0.000) areas had a significant impact. Simultaneously, family history of hypertension through environmental resilience and lifestyle on hypertension occurrence in urban (p value=0.000) and rural (p value=0.000) areas had a significant effect. In urban areas, the hypertension occurrence had a strong effect with an R-square of 73.8% and a strong prediction with a Q-square of 72.7%. The model equation revealed that socioeconomic status through lifestyle could reduce hypertension occurrence by 73.28%, while family history of hypertension through lifestyle could reduce hypertension occurrence by 78.92%. In rural areas, the hypertension occurrence had a strong effect with an R-square of 81.8% and a strong prediction with a Q-square of 79.9%. The model equation indicated that socioeconomic status through health services could reduce hypertension occurrence by 82.75%, and family history of hypertension through lifestyle could reduce hypertension occurrence by 69.27%. The Goodness of Fit Index (GoF Index) values confirm that the research model is empirically validated and can be applied as an intervention and control model for hypertension occurrences. Suggestions for urban areas include improving socioeconomic status, family history of hypertension, and lifestyle, while in rural areas, it is essential to enhance socioeconomic status, health service utility, and awareness of family history of hypertension through screening detection. Improving lifestyle can be achieved by implementing more effective policy regulations and programs in preventive interventions, involving relevant stakeholders. These efforts should span from promotional/educational activities to screening detection, aiming to encourage healthier lifestyles while considering socioeconomic factors, family history of hypertension, environmental resilience, and health services, utilizing the model established in this research.

Keywords: hypertension model, determinan risk factors urban rural, SEM SmartPLS.