

THE ASSOCIATION BETWEEN TOOTH MOBILITY DUE TO CHRONIC  
PERIODONTITIS AND HYPERTENSION DISEASE  
AT RSUD DR.MOEWARDI SURAKARTA

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**ABSTRACT**

**Background:** Based on data from Riskesdas 2018, 34,1% of Indonesian's population has hypertension. Hypertension or high blood pressure is characterized by systole measurement  $\geq 140$  mmHg and diastole measurement  $\geq 90$  mmHg. Riskesdas 2018 data, prevalence of periodontitis was 74,1%. Tooth mobility is one of symptom of chronic periodontitis characterized by loss of adhesions and bone damage. The preliminary study showed 80% patients had tooth mobility by chronic periodontitis and some had high blood pressure.

**Objective:** To determine the relationship between tooth mobility due to chronic periodontitis and hypertension in Dr.Moewardi Hospital Surakarta.

**Methods:** This research method using analytic observational type with cross sectional approach. The population of this study were chronic periodontitis patients who treated with specialist periodontist dentist at Dental Clinic of Dr.Moewardi Hospital Surakarta during the examination period June until December 2019. This study got the data from medical record (secondary data). Sampling collected by using purposive sampling amounted 84 patients. Analysis of data using Chi-Square analysis test.

**Result:** The study showed that respondents encountered were women with a percentage of 59,5%. Respondents with age group 46 – 60 years old 54,8%. Tooth mobility criteria, women was 74,0% and while the age of 46 – 60 years 87%. In the criteria for hypertension, male was found 58,8% and those aged 46 – 60 years who experienced hypertension were 63,0%. Respondents with tooth mobility were 82,1% and respondents with hypertension were 50,0%. The results of the analysis obtained p value 0,010 ( $p < \alpha$ ) and a Chi-Square value of 6,563 which is greater than the  $X^2$  table value.

**Conclusion:** In this study it can be concluded that tooth mobility due to chronic periodontitis is significantly associated with hypertension with sufficient correlation value.

**Keywords :** Tooth Mobility, Chronic Periodontitis, Hypertension.

HUBUNGAN KEGOYAHAN GIGI AKIBAT PERIODONTITIS KRONIS  
DENGAN PENYAKIT HIPERTENSI DI RSUD DR.MOEWARDI  
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**ABSTRAK**

**Latar Belakang:** Berdasarkan data dari Riskesdas 2018, sebanyak 34,1% penduduk Indonesia mengalami hipertensi. Hipertensi atau tekanan darah tinggi ditandai dengan pengukuran sistolik  $\geq 140$  mmHg dan diastolik  $\geq 90$  mmHg. Data Riskesdas 2018 prevalensi periodontitis sebesar 74,1%. Periodontitis kronis dapat mengakibatkan kegoyahan gigi hingga terlepasnya gigi dari soket. Pada studi pendahuluan di dapatkan pasien dengan gigi goyah sebesar 82,1% dari total keseluruhan pasien periodontitis kronis.

**Tujuan:** Mengetahui hubungan antara kegoyahan gigi akibat periodontitis kronis dengan penyakit hipertensi di RSUD Dr. Moewardi Surakarta.

**Metode:** Penelitian ini menggunakan jenis observasional analitik dengan pendekatan *cross-sectional*. Populasi penelitian ini adalah pasien periodontitis kronis yang mendapatkan tatalaksana dengan dokter gigi spesialis periodonsi di Klinik Gigi dan Mulut RSUD Dr.Moewardi Surakarta periode pemeriksaan bulan Juni – Desember tahun 2019. Penelitian ini mengambil data dari SIM RS (data sekunder). Pengambilan sampel dengan *purposive sampling* berjumlah 84 orang. Analisa data dengan uji analisis *Chi Square*.

**Hasil:** Penelitian menunjukkan responden yang paling banyak ditemui adalah perempuan dengan prosentase 59,5%. Responden dengan kelompok usia 46-60 tahun sebesar 54,8%. Jenis kelamin perempuan yang mengalami kegoyahan gigi sebesar 74,0% sedangkan usia 46-60 tahun yang mengalami kegoyahan gigi sebesar 87,0% . Pada kriteria hipertensi jenis kelamin laki-laki lebih banyak ditemukan yaitu sebesar 58,8% dan usia 46-60 tahun yang mengalami hipertensi sebesar 63,0%. Responden dengan kegoyahan gigi sebesar 82,1% dan responden yang mengalami hipertensi sebesar 50,0%. Hasil analisis diperoleh nilai  $p < 0,010$  ( $p < \alpha$ ) dan nilai *Chi-Square* 6,563 lebih besar dari nilai  $X^2$  tabel.

**Kesimpulan:** Penelitian ini dapat ditarik kesimpulan bahwa kegoyahan gigi akibat periodontitis kronis berhubungan secara signifikan dengan penyakit hipertensi dengan nilai korelasi cukup.

**Kata kunci :** Kegoyahan gigi, periodontitis kronis, hipertensi.