

EFEKTIVITAS BERKUMUR JUS WORTEL (*Daucus Carota L.*) TERHADAP PENURUNAN INDEKS PLAK PADA PASIEN PROLANIS DI PUSKESMAS KEDUNGUMUNDU SEMARANG

Nurul Fitri¹, Retno Kusniati², Saifuddin Ali Anwar³

¹Program Studi SI Pendidikan Kedokteran Gigi, Fakultas Kedokteran Gigi, Universitas Muhammadiyah Semarang. Telepon : (024) 74640230, email : nf290197@gmail.com

²Dosen Program Studi SI Pendidikan Dokter Gigi, Fakultas Kedokteran Gigi, Universitas Muhammadiyah Semarang

ABSTRAK

Pendahuluan: Program pengelolaan penyakit kronis (PROLANIS) berupaya menanggulangi penyakit kronis, seperti Diabetes Melitus dan Hipertensi. Data tahun 2018 Diabetes Melitus di Puskesmas Kedungmundu sebanyak 3.165 kasus dan Hipertensi sebanyak 4.417 kasus. Penderita diabetes melitus bermanifestasi oral seperti *gingivitis*, *periodontitis*, *xerostomia* dan akumulasi plak. Sedangkan penderita hipertensi bermanifestasi oral seperti *hyperplasia gingival* dan *xerostomia*. Tujuan penelitian ini menganalisis efektivitas berkumur jus wortel (*Daucus Carota L.*) terhadap penurunan indeks plak pada pasien prolanis di Puskesmas Kedungmundu Semarang. **Metode:** Jenis penelitian *quasi experimental*, dengan rancangan penelitian *pretest-posttest with control group design*. Teknik *sampling* pada penelitian ini adalah non probability sampling dengan teknik pengambilan sampling *purposive sampling* sebanyak 36 sampel. Kelompok perlakuan menggunakan jus wortel 100% dan kelompok kontrol (klorheksidin 0,2 %). Analisis data *dependent t-test* dengan signifikansi ($p < 0,05$). **Hasil:** Rata-rata indeks plak sebelum berkumur jus wortel adalah $57,54 \pm 27,07$ dan sesudah berkumur jus wortel adalah $33,63 \pm 23,36$. Rata-rata indeks plak pada kelompok kontrol sebelum berkumur dengan klorheksidin adalah $42,31 \pm 16,65$ dan sesudah berkumur dengan klorheksidin adalah $22,70 \pm 14,41$. Indeks Plak pada kelompok perlakuan mengalami penurunan dengan selisih sebesar 23,91 dan kelompok kontrol terdapat peningkatan Indeks Plak dengan selisih sebesar 19,60. Hasil uji statistik menunjukkan terdapat perbedaan yang signifikan terhadap Indeks Plak kelompok perlakuan dan kelompok kontrol dengan *p-value* 0,000 ($p < 0,05$). **Simpulan:** berkumur jus wortel efektif terhadap penurunan indeks plak pada pasien prolanis di Puskesmas kedungmundu Semarang.

Kata kunci : jus wortel, plak, kumur, prolanis

**EFFECTIVENESS OF THE CARROT JUICE (*Daucus carota L.*) TOWARD THE
DECREASE OF PLAQUE INDEX OF THE PROLANIS PATIENT IN
KEDUNGUMUNDU HEALTH CENTER SEMARANG**

Nurul Fitri¹, Retno Kusniati², Saifuddin Ali Anwar³

¹College student Education Program S1 Dentistry, Faculty of Dentistry, University of Muhammadiyah Semarang. Phone: (024) 76740230, email: nf290197@gmail.com

²Lecturer Education Program S1 Dentistry, Faculty of Dentistry, University of Muhammadiyah Semarang

ABSTRACT

Introduction: The chronic disease management program (PROLANIS) seeks to tackle chronic diseases, such as Diabetes Mellitus and Hypertension. Data for 2018 Diabetes Mellitus in Kedungmundu Health Center were 3,165 cases and Hypertension as many as 4,417 cases. People with diabetes have oral manifestations such as gingivitis, periodontitis, xerostomia and plaque accumulation. While hypertension sufferers with oral manifestations such as gingival hyperplasia and xerostomia. objective of this research was to analyze the effectiveness of gargling by using carrot juice (*Daucus Carota L.*) toward decreasing the plaque index in prolanis patients in Kedungmundu Public Health Center Semarang. **Method:** This research is kind of quasi experimental which the research design is pretest-posttest with group design. The sampling technique in this study was non-probability sampling with a purposive sampling technique of 36 samples. The number of samples per group is 18 samples including the control group using 0.2% chlorhexidine and the treatment group using 100% carrot juice. Data analysis dependent t-test. **Result:** The average of decreasing in plaque index before gargling using carrot juice was $57,54 \pm 27,07$. The average of decreasing of in plaque index after gargling using carrot juice was $33,63 \pm 23,36$. Then, the average of plaque index in the control group before gargling using chlorhexidine was $43,75 \pm 17,66$. The average of decreasing of in plaque index after gargling using chlorhexidine was $21,16 \pm 12,59$. The Plaque Index in the treatment group decreased by a difference of 23.91 and the control group had an increase in the Plaque Index by a difference of 19.60. Statistical test results showed that there were significant differences in the Plaque Index of the treatment group and the control group with a p-value of 0,000 ($p < 0.05$). **Conclusion:** Gargling using carrot juice is effective in order to decrease the plaque index of prolanis patients in the Kedungmundu Health Center Semarang.

Key words: carrot juice, plaque, prolanis