

## INTISARI

### Perbandingan Penggunaan Metode Observasi Langsung dan Foto Digital Terhadap Pemantauan Asupan Makan Pasien Geriatri di RSUP Dr. Sardjito Yogyakarta

Rosita Elisabeth<sup>1</sup>, R. Dwi Budiningsari<sup>2</sup>, Fasty Arum Utami<sup>2</sup>

**Latar Belakang:** Pasien geriatri memiliki kecenderungan mengalami malnutrisi. Pemantauan asupan makan menjadi salah satu hal penting untuk pencegahannya. Metode yang umum digunakan yaitu Comstock (observasi langsung). Penelitian sebelumnya menunjukkan bahwa metode foto digital memiliki banyak kelebihan dan dapat digunakan di rumah sakit, namun hal ini belum pernah diujikan di Indonesia.

**Tujuan Penelitian:** Membandingkan metode Comstock (observasi langsung) dan foto digital (*post-meal* dan *pre-post meal*) dengan penimbangan sebagai *gold standard* dalam menilai asupan makan pasien geriatri di RSUP Dr. Sardjito.

**Metode:** Pasien geriatri sebanyak 48 orang diambil plato sisa makanannya pagi dan siang, sehingga diperoleh total 96 plato pasien geriatri. Sisa makanan pasien geriatri yang berbeda dinilai oleh Ahli Gizi untuk metode Comstock (observasi langsung) dan foto digital (*post-meal* dan *pre-post meal*), sedangkan penimbangan (*gold standard*) dilakukan oleh peneliti.

**Hasil:** Kappa menunjukkan bahwa derajat persetujuan metode comstock ( $\kappa=0,644$ ;  $p<0,001$ ), foto digital *post-meal* ( $\kappa=0,653$ ;  $p<0,001$ ) dan *pre-post meal* ( $\kappa=0,616$ ;  $p<0,001$ ) besar/kuat (*substantial*). ICC, menunjukkan derajat persetujuan yang tinggi (*excellent reliability*) antara Comstock (ICC: 0,966), *post-meal* (ICC: 0,959), dan *pre-post meal* (ICC: 0,936) dibandingkan dengan penimbangan. *Limits of agreement* dari Bland-Altman plot antar metode dibandingkan dengan penimbangan adalah -31,07 sampai 34,10 g (Comstock), -35,88 sampai 36,60 g (*post-meal*), dan -37,77 sampai 39,90 gram (*pre-post meal*) dengan bias kurang dari 1,5 g.

**Kesimpulan:** Metode foto digital (*post-meal* dan *pre-post meal*) berpotensi untuk dapat digunakan untuk penilaian asupan makan geriatri di rumah sakit.

**Kata Kunci:** Metode comstock, metode foto digital, metode penimbangan, asupan, geriatri.

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<sup>1</sup> Mahasiswa Program Studi S1 Gizi Kesehatan FK-KMK UGM

<sup>2</sup> Dosen Program Studi S1 Gizi Kesehatan FK-KMK UGM

## ABSTRACT

### Comparison of the Use of Direct Observation Methods and Digital Photography for Monitoring the Food Intake of Geriatric Patients in RSUP Dr. Sardjito Yogyakarta

Rosita Elisabeth<sup>1</sup>, R. Dwi Budiningsari<sup>2</sup>, Fasty Arum Utami<sup>2</sup>

**Background:** Geriatric patients have a tendency to experience malnutrition. Monitoring food intake is one of the important things to prevent it. The commonly used method is Comstock (direct observation). Previous research shows that the digital photo method has many advantages and can be used in hospitals, but this has never been tested in Indonesia.

**Objective:** To compare the Comstock method (direct observation) and digital photography (post-meal and pre-post meal) with weighing as a gold standard in assessing the intake of geriatric patients in RSUP Dr. Sardjito.

**Methods:** Forty-eight geriatric patients' plate of leftover food were taken in the morning and afternoon, the total is 96 plates of geriatric patients. The remaining food of different geriatric patients was assessed by a Nutritionist by Comstock method (direct observation) and digital photography (post-meal and pre-post meal) method, while the weighing (gold standard) was performed by researchers.

**Results:** Kappa showed that the degree of agreement of Comstock method ( $\kappa = 0.644$ ;  $p < 0.001$ ), post-meal digital photography ( $\kappa = 0.653$ ;  $p < 0.001$ ) and pre-post meal ( $\kappa = 0.616$ ;  $p < 0.001$ ) is large / substantial). ICC, shows a high degree of agreement (excellent reliability) between Comstock (ICC: 0.966), post-meal (ICC: 0.959), and pre-post meal (ICC: 0.936) compared to food weighing. Limits of agreement from Bland-Altman plots between methods compared to food weighing are -31.07 to 34.10 g (Comstock), -35.88 to 36.60 g (post-meal), and -37.77 to 39, 90 grams (pre-post meal) with a bias less than 1.5 g.

**Conclusion:** Digital photography methods (post-meal and pre-meal) have the potential to be applied for assessing geriatric food intake in hospitals.

**Keywords:** Comstock method, digital photography method, food weighing method, intake, geriatrics.

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<sup>1</sup> Student of Nutrition and Health Undergraduate Program, Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada

<sup>2</sup> Lecturer of Nutrition and Health Undergraduate Program, Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada