

PERBANDINGAN ANTARA *NUTRITION RISK SCREENING 2002*, *SIMPLE NUTRITION SCREENING TOOL*, DAN NUTRISCORE TERHADAP PENILAIAN ANTROPOMETRI DAN BIOKIMIA PADA PASIEN KANKER RAWAT INAP DI RSUP DR. SARDJITO YOGYAKARTA

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### INTISARI

**Latar Belakang:** Risiko malnutrisi perlu diketahui secara dini pada pasien kanker. Hal tersebut dapat diketahui dengan adanya skrining gizi. Alat skrining gizi telah banyak dikembangkan seperti NRS 2002 dan SNST dan khusus pasien kanker Nutriscore. Uji validitas terhadap alat skrining gizi sudah banyak dilakukan, namun belum ada penelitian yang membandingkan skrining gizi dengan metode yang objektif yaitu pengukuran antropometri dan biokimia pada pasien kanker.

**Tujuan:** Mengetahui perbandingan skrining gizi NRS 2002, SNST, dan Nutriscore terhadap pengukuran antropometri dan biokimia pada pasien kanker rawat inap di RSUP Dr. Sardjito Yogyakarta.

**Metode:** Penelitian observasional dengan rancangan *cross-sectional*. Jumlah subjek sebanyak 139 pasien kanker dewasa yang di rawat inap di RSUP Dr. Sardjito Yogyakarta. Semua subjek diskriminasi dengan NRS 2002, SNST dan Nutriscore, kemudian diukur IMT dan LILA. Data biokimia yang diambil berupa albumin, hemoglobin dan *total lymphocyte count* (TLC) dari rekam medis pasien. Perbedaan rata-rata IMT, LILA, albumin, hemoglobin dan TLC pada kelompok berisiko dan tidak berisiko malnutrisi diketahui melalui uji *independent sample t* untuk data normal atau *Mann Whitney u-test* untuk data tidak normal.

**Hasil:** Skrining gizi SNST mendeteksi jumlah pasien kanker yang berisiko lebih banyak dibandingkan dengan NRS 2002 dan Nutriscore yaitu sebesar 50,4%, sedangkan NRS 2002 43,9% dan Nutriscore 36,7%. Pasien kanker yang berisiko malnutrisi berdasarkan NRS 2002, Nutriscore dan SNST memiliki nilai IMT, LILA, albumin, hemoglobin dan TLC yang lebih rendah dibandingkan dengan yang tidak berisiko malnutrisi. Terdapat perbedaan rata-rata IMT, LILA, albumin yang bermakna antara kelompok berisiko dan tidak berisiko ( $p < 0,05$ ), namun tidak ada perbedaan yang bermakna untuk nilai hemoglobin dan rata-rata TLC ( $p > 0,05$ ).

**Kesimpulan:** Pasien yang berisiko malnutrisi berdasarkan skrining NRS 2002, SNST dan Nutriscore memiliki nilai pengukuran antropometri dan biokimia yang rendah dibandingkan dengan yang tidak berisiko malnutrisi.

**Kata kunci:** Skrining gizi, malnutrisi, antropometri, biokimia, kanker

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COMPARISON BETWEEN NUTRITION RISK SCREENING 2001, SIMPLE  
NUTRITION SCREENING TOOL (SNST) AND NUTRISCORE TO ANTHROPOMETRY  
AND BIOCHEMICAL ASSESSMENT FOR ADULT CANCER PATIENTS

HOSPITALIZED IN Dr. SARDJITO HOSPITAL YOGYAKARTA

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ABSTRACT

**Background:** The incidence of malnutrition in cancer patients often occurs during patients are hospitalized so it is important to know it early. This can be known by the presence of nutritional screening. Nutrition screening tools have been developed such as NRS 2002 and SNST and also spesifically has been developed for cancer patients called Nutriscore. Validity testing of nutritional screening tools has been done, but there are no studies comparing nutritional screening with objective methods of anthropometric and biochemical assessment in cancer patients.

**Objective:** Determine comparison of nutritional screening NRS 2002, SNST and Nutriscore in anthropometric and biochemical assessment in hospitalized cancer patients in Dr. Sardjito Hospital Yogyakarta.

**Methods:** This study was an observational study with a cross-sectional study design. Data were collected from 139 patients with cancer who hospitalized in Dr. Sardjito hospital Yogyakarta. All subjects were screened with NRS 2002, SNST and Nutriscore, then assessed BMI, MUAC for the anthropometric data. Biochemical data were albumin, hemoglobin and total lymphocyte count (TLC) form the patient's medical record. Differences in the mean of BMI, MUAC, albumin, hemoglobin and TLC in the risk group and not at risk of malnutrition were known through the independent sample t test for normal data and Mann Whitney U-test for abnormal data.

**Results:** SNST detected the number of cancer patients with more risk malnutrition compared to NRS 2002 and Nutriscore whics was 50,4% while NRS 2002 43,9% and Nutriscore 36,7%. Cancer patients at risk of malnutrition based on NRS 2002, SNST and Nutriscore had lower BMI, MUAC, albumin, hemoglobin and TLC values compared with those who were not at risk of malnutrition. There were significant differences in BMI, MUAC, albumin between two groups (p value <0,05), but there were no significant differences in hemoglobin and TLC value between two groups (p value >0,05).

**Conclusion:** Patients who at risk of malnutrition based on NRS 2002, SNST and Nutriscore had lower anthropometric and biochemical assessment values compared with patients not at risk of malnutrition.

**Keywords:** Nutrition screening, malnutrition, anthropometry, biochemical, cancer

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