

ABSTRACT

PROFILE AND FACTORS RELATED TO NUTRITIONAL STATUS IN CHILDREN WITH CONGENITAL HEART DISEASE IN DR. SARDJITO GENERAL HOSPITAL

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Background: Congenital heart diseases (CHD) are among frequent congenital problem in children with incidence of approximately 8 in every 1000 live births. Abnormalities in CHD compromise the hemodynamic system, causing inadequate nutrient intake, inadequate absorption of nutrients, and increased metabolic requirements, which subsequently lead to malnutrition. Malnutrition in CHD can increase mortality morbidity.

Objective: This study was aimed to determine the profile and factors related to the nutritional status of children with CHD in Dr.Sardjito General Hospital.

Method: This was an analytical observational study with cross sectional design. The data was gathered from medical records of children with CHD in Dr. Sardjito General Hospital in 2018. The nutritional status was assessed WHO growth chart, in term of WAZ, HAZ, WHZ, and BMI indexes. Relationship of age, sex, type of CHD, and defect repair and the nutritional status was analyzed using the chi-square or fisher's exact test.

Results: Ninety subjects were recruited in this study, including 40 (%) boys and 50 (%) girls, with median age of 3.5 years old. The CHD identified were ASD (21,11%), VSD (30%), PDA (20%), PFO (7,78%), AVSD (1,11%), PS (4,44) and ToF (21,11%). Based on WAZ index, with severely underweight 29.63%, underweight 14.81% normal 55.56%, HAZ index with severely stunted number 14.81%, stunted 24.07%, and normal 57, 41% and for the WHZ index the number of patients with severely wasted 20.37%, wasted 22.22%, normal 57.41%, and for the BMI index the number of severely wasted patients was 8.33%, and wasted 12.96%, normal 46.30 and 1.85% overweight. There was no correlation between age ($p = 0.110$), gender ($p = 0.627$), and CHD type (0,925) with nutritional status. There was a relationship between intervention factors and children's nutritional status with CHD ($p = 0.000$)

Conclusion: The most common type of ASD. Pediatric patients aged less than 5 years are more malnourished, while for the sex found most in women. There is no relationship between age, sex and type of CHD with nutritional status. PJB correction interventions have a significant relationship with nutritional status.

Keyword (s): congenital heart disease; nutritional status.

INTISARI

PROFIL DAN FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN STATUS NUTRISI PADA ANAK DENGAN PENYAKIT JANTUNG BAWAAN DI RSUP DR. SARDJITO TAHUN 2018

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Latar Belakang: Penyakit jantung bawaan merupakan kelainan struktural atau fungsi yang sering terjadi pada penyakit kongenital, PJB terjadi pada 8 dari 1000 kelahiran hidup. Kelainan pada PJB akan mengganggu sistem hemodinamik, menyebabkan asupan nutrisi yang tidak memadai, penyerapan nutrisi yang tidak cukup, dan meningkatnya kebutuhan metabolisme sehingga terjadi malnutrisi. Malnutrisi pada PJB dapat meningkatkan morbiditas mortalitas.

Tujuan: Untuk mengetahui profil dan faktor-faktor yang berhubungan dengan status nutrisi anak dengan PJB di RSUP Dr. Sardjito.

Metode: Penelitian ini merupakan penelitian observational analitik dengan desain *cross sectional* menggunakan rekam medis untuk mengetahui gambaran status nutrisi anak dengan PJB di RSUP Dr. Sardjito. Profil status nutrisi subyek dinilai menggunakan kurva pertumbuhan WHO. Hubungan faktor usia, jenis kelamin, jenis PJB, dan intervensi terhadap status nutrisi dianalisis menggunakan uji *chi-square* atau *fisher's exact*.

Hasil: Terdapat sembilan puluh subyek dalam studi, laki-laki 40 (44,44%) dan perempuan 50 (55,56%), dengan median 3,5 tahun. Jenis ASD (21,11%), VSD (30%), PDA (20%), PFO (7,78%), AVSD (1,11%), PS (4,44%) dan ToF (21,11%). Berdasarkan kurva WHO diperoleh indeks BB/U dengan jumlah *severely underweight* 29,63%, *underweight* 14,81% normal 55,56%, indeks TB/U dengan jumlah *severely stunted* 14,81%, *stunted* 24,07%, dan normal 57,41%. untuk indeks BB/TB jumlah pasien dengan *severely wasted* 20,37%, *wasted* 22,22%, normal 57,41%, dan untuk indeks IMT/U jumlah pasien *severely wasted* 8,33%, dan *wasted* 12,96%, normal 46,30 dan *overweight* 1,85%. Tidak terdapat hubungan antara faktor usia ($p=0,110$), jenis kelamin ($p=0,627$), dan jenis PJB ($p=0,925$) dengan status nutrisi. Terdapat hubungan antara intervensi koreksi dan status nutrisi anak dengan PJB ($p=0,000$).

Kesimpulan: Jenis PJB ASD paling banyak ditemukan. Pasien anak usia kurang dari 5 tahun lebih banyak mengalami malnutrisi, sedangkan untuk jenis kelamin ditemukan paling banyak pada perempuan. Tidak terdapat hubungan antara faktor usia, jenis kelamin dan jenis PJB dengan status nutrisi. Intervensi koreksi PJB mempunyai hubungan yang signifikan dengan status nutrisi.

Keyword(s): penyakit jantung bawaan; status nutrisi.