



INTISARI

PENGARUH PENDAMPINGAN AHLI GIZI TERHADAP STATUS HIDRASI, JUMLAH CAIRAN, DAN POLA KONSUMSI CAIRAN ATLET VOLI PANTAI DI SMAN OLAHRAGA JAWA TIMUR

Veronika Dewi Pratanjani Prasasta¹, Mirza Hapsari S.T.P², Zaenal M. Sofro³

Latar Belakang: Voli pantai merupakan olahraga ekstrim yang berlangsung di lapangan *outdoor* berpasir dengan cuaca panas dan durasi lama sehingga atlet berisiko tinggi mengalami dehidrasi. Terlebih lagi, pemenuhan asupan cairan harian, terutama selama latihan seringkali diabaikan atlet padahal 60% komponen tubuh adalah air. Apabila penurunan berat badan mencapai lebih dari 2%, risiko dehidrasi yang dapat terjadi adalah pusing, kelelahan berlebihan, kram, dan mual. Ahli gizi merupakan seseorang berkompeten dalam melakukan asuhan gizi yang meliputi asesmen, diagnosis, intervensi, monitoring, dan evaluasi. Oleh karena itu, ahli gizi diharapkan mampu mengupayakan optimalisasi status hidrasi atlet melalui intervensi berupa edukasi, konseling, serta rekomendasi cairan periodisasi latihan.

Tujuan Penelitian: Mengetahui pengaruh pendampingan ahli gizi terhadap status hidrasi, jumlah cairan, dan pola konsumsi cairan atlet voli pantai di SMAN Olahraga Jawa Timur.

Metode Penelitian: Jenis penelitian adalah *quasi-eksperimental* dengan pendekatan *one group pre-posttest without control group*. Subjek penelitian adalah 13 atlet remaja voli pantai. Program intervensi adalah pendampingan ahli gizi meliputi edukasi hidrasi (1x), konseling (1x), dan pendampingan latihan (9x) selama 4 minggu. Pengumpulan data sampel urin pagi hari serta jumlah dan jenis cairan dengan kuesioner frekuensi cairan semi-kuantitatif dilakukan pada awal dan akhir penelitian.

Hasil: Setelah 4 minggu intervensi, perbaikan status hidrasi dengan berat jenis urin dari $1,029 \pm 0,002$ menjadi $1,018 \pm 0,006$ ($p=0,00$). Total asupan cairan dalam sehari tidak mengalami peningkatan dengan rerata awal $2237,34 \pm 1075,01$ mL menjadi $2165,28 \pm 829,21$ mL ($p=0,081$). Tidak ditemukan perubahan pola konsumsi cairan secara keseluruhan, namun perbedaan secara signifikan ditemukan pada asupan sari kacang hijau ($p= 0,03$). Selama pendampingan latihan, atlet terhidrasi baik dengan perubahan berat badan 0,55% dengan asupan cairan saat latihan sparing $1202,13 \pm 122,47$ mL, latihan beban $261,22 \pm 115,43$, dan latihan teknik $530,76 \pm 231,88$ mL.

Kesimpulan: Pendampingan ahli gizi selama 4 minggu berpengaruh terhadap perbaikan status hidrasi, tetapi tidak berpengaruh terhadap peningkatan jumlah cairan serta pola konsumsi cairan atlet voli pantai.

Kata Kunci: Pendampingan ahli gizi, status hidrasi, jumlah cairan, jenis cairan, voli pantai

¹Mahasiswa Program Studi S1 Gizi Kesehatan Fakultas Kedokteran, Kesehatan Masyarakat UGM

² Program Studi S1 Gizi Kesehatan Fakultas Kedokteran, Kesehatan Masyarakat UGM

³Departemen Fisiologi Fakultas Kedokteran, Kesehatan Masyarakat UGM



ABSTRACT

EFFECT OF NUTRITIONIST ASSISTANCE ON HYDRATION STATUS, FLUID INTAKE, AND FLUID CONSUMPTION PATTERN OF BEACH VOLLEYBALL ATHLETES AT SMAN OLAHRAGA JAWA TIMUR

Veronika Dewi Pratanjani Prasasta¹, Mirza Hapsari S.T.P², Zaenal M. Sofro³

Background: Beach volleyball is an extreme sport that held on a sandy outdoor field with hot weather and long duration so the athletes are at high risk of becoming dehydrated. Moreover, the daily water compliance, especially during exercise is often neglected by athletes where as 60% of the body's component is water. If the weight loss reaches more than 2%, the risk of dehydration that can occur is dizziness, loss of focus, excessive fatigue, cramps, and nausea. A nutritionist is someone who is competent in carrying out nutritional care which includes assessment, diagnosis, intervention, monitoring, and evaluation. Therefore, they are expected to optimize the hydration status of athletes through interventions such as education, counseling, and recommendations of exercise periodization fluids.

Objectives: To determine the effect of nutritionist assistance on hydration status, amount of fluid, and fluid consumption patterns of beach volleyball athletes at SMAN Olahraga Jawa Timur.

Methods: This research was conducted quasi-experimental with one group pre-posttest without control group design. Thirteen beach volleyball youth athletes participated in this study. The intervention programs that held were included hydration education (1x), counseling (1x), training assistance by nutritionist (9x) for 4 weeks. Morning urine samples as well as the amount and type of fluid by semi-quantitative fluid frequency questionnaire were collected at the beginning and end of the study.

Results: After 4 weeks of intervention, hydration status improved with urine specific gravity decreased from 1.029 ± 0.002 to 1.018 ± 0.006 ($p=0.00$). The total daily fluid intake did not increase which was from 2237.34 ± 1075.01 mL to 2165.28 ± 829.21 mL ($p=0.081$). Also, there was no change in overall fluid consumption pattern, but a significant difference was found in the intake of mung bean juice ($p = 0.03$). During training assistance, athletes were well hydrated with 0.55% of weight change and fluid intake during sparring exercise was 1202.13 ± 122.47 mL, weight training was 261.22 ± 115.43 , and technical training was 530.76 ± 231.88 mL.

Conclusions: Nutritionist assistance for 4 weeks had an effect on improving hydration status, but had no effect on increasing the amount of fluid and fluid consumption patterns of beach volleyball athletes.

Keywords: Nutritionist assistance, hydration status, amount fluid, types of fluids, beach volleyball

¹Student of Health Nutrition Program, Faculty of Medicine, Public Health, and Nursing UGM

²Health Nutrition Program, Faculty of Medicine, Public Health, and Nursing UGM

³Departement of Physiology, Faculty of Medicine, Public Health, and Nursing UGM