

## INTISARI

### Pengaruh Pemberian Suplementasi Taburia (*Sprinkle*) + Telur Terhadap Kemampuan Verbal Anak Balita *Stunting*

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**Latar belakang:** *Stunting*/pendek merupakan masalah gizi kronis akibat permasalahan gizi di masa lalunya dan berlangsung lama sehingga dapat mengganggu perkembangan kognitif, motorik, dan verbal/bahasa anak, serta dapat mempengaruhi kinerja sistem saraf sehingga dapat menurunkan kecerdasan anak. Pemberian beberapa suplementasi zat gizi mikro dapat meningkatkan kemampuan kognitif pada anak. Pemberian taburia dapat meningkatkan perkembangan motorik anak balita. Selain taburia, pemberian telur serta kombinasi telur dengan yodium dan zat besi juga dapat meningkatkan kognitif anak dilihat dari skor IQ.

**Tujuan:** Menganalisis pengaruh pemberian suplementasi taburia (*sprinkle*) + telur terhadap kemampuan verbal anak balita *stunting*.

**Metode:** *Randomized controlled trial* dengan rancangan *cross-over design* serta *pre* dan *post-test*. Intervensi yang diberikan berupa suplementasi taburia dan telur selama 2 bulan, periode *wash out* 1 bulan, dan dilanjutkan intervensi kedua berupa suplementasi taburia saja selama 2 bulan. Subjek penelitian adalah 31 anak balita *stunting* di Kecamatan Seyegan dan Mlati, Kabupaten Sleman. Pengambilan data dilakukan dengan pengukuran antropometri, pengukuran kemampuan verbal oleh psikolog, dan pengisian kuesioner. Data dianalisis secara univariat, bivariat, dan multivariat menggunakan *software* STATA.

**Hasil:** Pemberian intervensi baik berupa taburia maupun taburia dan telur dapat meningkatkan kemampuan verbal anak balita *stunting*. Peningkatan kemampuan verbal yang signifikan terjadi pada periode intervensi taburia dan telur dengan *p-value* <0,05, sedangkan pada periode intervensi taburia saja peningkatan kemampuan verbal sebelum dan sesudah intervensi tidak berbeda signifikan dengan *p-value* >0,05. Hasil analisis regresi linier berganda menunjukkan intervensi yang diberikan tidak dipengaruhi oleh *confounder* atau variabel luar berupa infeksi, pola asuh, dan asupan zat gizi.

**Kesimpulan:** Intervensi yang lebih baik dalam meningkatkan kemampuan verbal anak balita *stunting* adalah pemberian taburia dan telur.

**KATA KUNCI :** Balita, *stunting*, taburia, telur, kemampuan verbal

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## ABSTRACT

### EFFECT OF SPRINKLE SUPPLEMENT WITH EGG ADMINISTRATION ON VERBAL ABILITY OF STUNTED CHILDREN

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**Background:** Stunting is a chronic nutritional condition caused by nutritional problem in the past and takes place in a long term that it could impair the cognitive, motoric, and verbal growth of children. It could also affect the performance of their nerve sistem and degrade their level of intelligence. The administration of some micronutrient supplement could enhance children's cognitive ability. Sprinkle supplementation could enhance children's motoric development. Besides sprinkle supplement, the administration of egg and the combination of egg with iodine and iron could also enhance children's cognitive ability based on their IQ score.

**Objective:** To analyze the effect of sprinkle supplement with egg administration on the verbal ability of stunted children.

**Methods:** This study was a randomized controlled trial with a cross-over design using pre and post-test. The interventions given were sprinkle supplement with egg which administered for 2 months, wash-out period for a month, and then followed up with the second intervention with only sprinkle supplement for 2 months. The study subject was 31 stunted children included in the working area of Puskesmas Mlati 2 and Puskesmas Seyegan, Sleman District. The data were collected by doing anthropometry measurement, verbal ability measurement done by a psychiatrist, and filling a form. Data were analyzed in univariate, bivariate, and multivariate using STATA software.

**Results:** Both interventions, sprinkle supplement and sprinkle supplement with egg, could increase the verbal ability of stunted children. The significant escalation of verbal ability occurred during the intervention period of sprinkle supplement with egg with p-value <0.05, while during the intervention period of sprinkle supplement only there is no significant change before and after the intervention with p-value >0.05. The result of multiple linear regression analysis showed that the interventions given were not affected by confounder or any external variables such as infection, parenting, and nutrient intake.

**Conclusion:** The administration of sprinkle supplement with egg is the better intervention in enhancing verbal ability on stunted children.

**Keywords:** children, stunting, sprinkle, egg, verbal ability

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