

## **ABSTRACT**

# **EFFECTS OF PESTICIDE EXPOSURE, HOME GARDENING AND FOOD SECURITY ON STUNTING INCIDENCE IN TODDLERS AGED 24-59 MONTHS IN KELUMBAYAN DISTRICT TANGGAMUS DISTRICT, LAMPUNG PROVINCE**

**BY**

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**Background:** *Stunting* is short stature from the ratio of height to age which is the result from lack of nutritional for a long time. Incidence of stunting can occur due to not optimal nutritional intake during the first 1000 days of birth and exposure to pesticides with high exposure level.

**Method:** The design of this study was observational analytic with case control approach. There were 294 respondents who participated in this study, consisting of 147 case groups and 147 control groups. The sampling technique in this study used simple random sampling. The study data was collected using a questionnaire to assess exposure to pesticides, food insecurity and home gardening. The data were analyzed using the Chi square test with 95% CI ( $\alpha= 5\%$ ).

**Results:** The results showed that 26.5% of children under five were exposed to pesticides with a high level of exposure, 54.8% were food insecure, 28.6% did not use their yards. There is an effect of exposure to pesticides on stunting ( $p= 0.001$ ) with the calculation of the odds ratio (OR) obtained a value of 3.8 and there is an effect of food security ( $p= 0.004$ ) on stunting. However, there was no effect of using house yards ( $p= 0.093$ ) on stunting.

**Conclusion:** There is a relationship between exposure to pesticides and food security to stunting and there is no relationship between home gardening and the incidence of stunting.

**Keywords:** stunting, pesticide, food security and home gardening

## **ABSTRAK**

# **PENGARUH PAPARAN PESTISIDA, PEMANFAATAN LAHAN PEKARANGAN RUMAH DAN KETAHANAN PANGAN TERHADAP KEJADIAN STUNTING PADA BALITA USIA 24-59 BULAN DI KECAMATAN KELUMBAYAN KABUPATEN TANGGAMUS PROVINSI LAMPUNG**

## **OLEH**

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**Latar Belakang:** *Stunting* adalah perawakan pendek menurut umur yang merupakan akibat dari tidak terpenuhinya kebutuhan zat gizi dalam jangka waktu yang lama. Kejadian *stunting* dapat terjadi karena asupan gizi kurang optimal selama periode 1000 hari pertama kelahiran serta paparan pestisida dengan tingkat paparan tinggi.

**Metode:** Desain penelitian ini adalah analitik observasional dengan pendekatan *case control*. Terdapat 294 responden yang mengikuti penelitian ini, terdiri dari 147 kelompok kasus dan 147 kelompok kontrol. Teknik pengambilan sampel pada penelitian ini menggunakan *simple random sampling*. Data penelitian dikumpulkan dengan kuisioner untuk menilai paparan pestisida, kerawanan pangan dan ketahanan pangan. Data diuji menggunakan *chi square test* dengan CI 95% ( $\alpha = 5\%$ ).

**Hasil:** Hasil penelitian menunjukkan bahwa 26,5% balita terkena paparan pestisida dengan tingkat paparan tinggi, 54,8 % rawan pangan, 28,6% Tidak memanfaatkan lahan pekarangan rumah. Terdapat pengaruh paparan pestisida terhadap *stunting* ( $p = 0,001$ ) dengan perhitungan odds ratio (OR) diperoleh nilai 3,8 dan terdapat pengaruh ketahanan pangan ( $p= 0,004$ ) terhadap *stunting*. Namun, tidak terdapat pengaruh pemanfaatan lahan pekarangan rumah ( $p= 0,093$ ) terhadap *stunting*.

**Kesimpulan:** Terdapat pengaruh antara paparan pestisida dan ketahanan pangan terhadap *stunting* serta tidak ada pengaruh pemanfaatan lahan pekarangan rumah terhadap kejadian *stunting*.

**Kata kunci:** *stunting*,pestisida, tahan pangan dan pemanfaatan pekarangan