

ABSTRACT

RELATIONSHIP OF ULTRAVIOLET LIGHT EXPOSURE AND WEARING PERSONAL PROTECTIVE EQUIPMENT (PPE) AGAINST PHOTOKERATITIS COMPLAINTS IN FARMERS IN SIDOWALUYO VILLAGE OF SIDOMULYO DISTRICT OF SOUTH LAMPUNG

By

MADE MICHAEL DANA

Background : Photokeratitis is an eye injury that is included in occupational diseases, which is usually caused by exposure to intense ultraviolet rays for a long time. In Sidowaluyo Village, many farmers found complaints of eye disorders similar to those experienced by photokeratitis sufferers. In addition, several risk factors for photokeratitis were also found, such as exposure to direct sunlight when working for a long time. This study aims to determine the relationship between the wear of PPE and duration of exposure to ultraviolet light on photokeratitis complaints in farmers in Sidowaluyo Village, Sidomulyo District, South Lampung Regency.

Methods: This research was concluded in June 2021 at Sidowaluyo Village. The design of this study was analytic observational with a cross sectional approach. Determination of the number of samples used in this study with the slovin method and obtained a sample of 95 respondents.

Results: Respondents who were exposed to ultraviolet light for 4 hours and had complaints of photokeratitis were 3 respondents (17.65%). While respondents who were exposed to ultraviolet light > 4 hours and had complaints of photokeratitis were 24 respondents (30.77%) and obtained a P value > 0.005 which was 0.277. Respondents who use appropriate personal protective equipment and have complaints of photokeratitis are 17 respondents (53.13%), while respondents who are not appropriate in using personal protective equipment and have complaints of photokeratitis are 10 respondents (15.87%) and obtained a P value 0.02 (< 0.05)

Conclusion: long of duration exposure to sunlight has no effect on complaints of photokeratitis and the use of appropriate personal protective equipment can prevent photokeratitis complaints from farmers in Sidowaluyo Village, Sidomulyo District, South Lampung Regency, Lampung Province.

Kata kunci: Photokeratitis, PPE, sunlight

ABSTRAK

HUBUNGAN PAPARAN SINAR ULTRAVIOLET DAN PENGGUNAAN ALAT PELINDUNG DIRI (APD) TERHADAP KELUHAN FOTOKERATITIS PADA PETANI DI DESA SIDOWALUYO KECAMATAN SIDOMULYO LAMPUNG SELATAN

Oleh

MADE MICHAEL DANA

Latar belakang : Fotokeratitis merupakan cedera mata yang termasuk kedalam penyakit akibat kerja (PAK), yang biasanya disebabkan oleh paparan sinar ultraviolet secara intens dalam waktu yang cukup lama. Di Desa Sidowaluyo banyak dijumpai petani dengan keluhan pada mata yang mirip dengan keluhan dialami penderita fotokeratitis. Selain itu ditemukan faktor risiko fotokeratitis seperti paparan sinar matahari langsung saat bekerja dengan waktu yang lama. Penelitian ini bertujuan untuk mengetahui hubungan penggunaan APD dan lama paparan sinar ultraviolet terhadap keluhan fotokeratitis pada petani di Desa Sidowaluyo Kecamatan Sidomulyo Kabupaten Lampung Selatan.

Metode: Penelitian ini dilakukan bulan Juni 2021 di Desa Sidowaluyo. Rancangan penelitian ini adalah observasional analitik dengan pendekatan *Cross Sectional*. Penentuan jumlah sampel yang digunakan dalam penelitian ini menggunakan metode slovin dan didapatkan sampel sebanyak 95 responden.

Hasil: responden yang terpapar sinar ultraviolet ≤ 4 jam dan memiliki keluhan fotokeratitis sebanyak 3 responden (17,65%). Sedangkan responden yang terpapar sinar ultraviolet > 4 jam dan memiliki keluhan fotokeratitis sebanyak 24 responden (30,77%) dan didapatkan nilai P value $> 0,005$ yaitu sebesar 0,277. Responden yang menggunakan alat pelindung diri yang sesuai dan memiliki keluhan fotokeratitis sebanyak 17 responden (53,13%), sedangkan responden yang tidak sesuai dalam menggunakan alat pelindung diri dan memiliki keluhan fotokeratitis sebanyak 10 responden (15,87%) dan didapatkan nilai P value 0,02 ($< 0,05$)

Simpulan: lama paparan sinar matahari tidak berpengaruh terhadap keluhan fotokeratitis dan penggunaan APD yang sesuai dapat mencegah terjadi keluhan fotokeratitis pada petani Desa Sidowaluyo Kecamatan Sidomulyo Kabupaten Lampung Selatan Provinsi Lampung

Kata kunci: APD, fotokeratitis, sinar matahari