Pengaruh desain tungku terhadap iritasi mata akibat asap pembakaran kayu pada pekerja perempuan informal pembuatan emping di Banten = The effect of furnace design eye irritation due to burning wood smoke in emping informal women workers in Banten

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Abstrak

Latar Belakang: Keluhan iritasi mata banyak terdapat pada pekerja emping yang terpajan asap pembakaran kayu. Keluhan yang dirasakan adalah mata perih, gatal, merah dan berair. Pekerja masih menggunakan tungku lama. Penelitian ini bertujuan mengkaji pengaruh desain tungku terhadap penurunan derajat iritasi mata akibat asap pembakaran kayu.
Metode Penelitian: Desain kuasi eksperimen dua kelompok, menggunakan intervensi desain tungku baru untuk mengeliminir asap pembakaran kayu. Dilakukan pada 44 orang pekerja emping perempuan. Data dikumpulkan dengan wawancara, pemeriksaan fisik mata. Subyek penelitian mempunyai kriteria inklusi masa kerja 1 tahun dan bersedia menjadi responden dengan menandatangani informed consent, kriteria eksklusinya adalah tidak mengalami penyakit mata merah lainnya selain iritasi mata akibat kerja, mempunyai riwayat atopi dan menggunakan obat yang dapat mempengauhi air mata, seperti antihistamin, antiglaukoma, AINS dan antipsikotropica.
Hasil: Hasil menunjukkan adanya penurunan derajat iritasi mata pada kelompok studi setelah intervensi selama 14 hari sebesar 89% (Tabel 4.6). Terdapat perbedaan bermakna antara kelompok studi dan kontrol dalam perubahan iritasi mata dengan nilai p = 0,000 (Tabel 4.7).
Kesimpulan. Kelompok kontrol mempunyai kemungkinan 8 kali untuk mengalami iritasi mata yang buruk dibandingkan dengan kelompok studi, p = 0,000, RR = 8, CI 95% (2,08 ? 30,74). Hipotesis terbukti bahwa terjadi penurunan derajat iritasi mata sebesar 89% pada pekerja emping setelah menggunakan desain tungku baru selama empat belas hari.
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Background: There are many eye irritation complaints in workers exposed to the wood burning smoke. Perceived grievances are eye sore, itchy, red and watery. Workers are still using the old furnace. This study aims to examine the influence of furnace design to decrease the degree of eye irritation caused by the smoke of burning wood.
Method: Quasi-experimental design of the two groups, using a new furnace design interventions to reduce wood burning smoke. Conducted on 44 female workers emping. Data were collected through interviews, observation and physical examination eye. The respondents were met the inclusion criteria and did not meet exclusion. The inclusion criteria were age 1 year of work and willing to be the subject of research. Exclusion criteria were having red eyes besides eye irritation due to work, have history of atopy and is undergoing treatment thay may influence the tears, like antiglaucoma, NSAIDs, antihistamines and antipsikotropica. Determination of the control group and the study is base on cluster random sampling with consideration of psychosocial and RT boundaries. Each group consisted of 22 respondents.
Results: The proportion of poor eye irritation in the study group preintervensi 81.8%, day 7th intervention 13.6% and 9.1% intervention 14th day (Table 4.6), meaning that a decrease in the degree of eye irritation

with the use of a new furnace. Changes in eye irritation scores in the study group had occurred on the 7th day of the intervention by 83.3%, from preintervensi until the 14th day of the intervention of 88.9% and from day 7 until day 14 of 33.3 interventions %. Table 4.7 shows there is a significant difference between the control and study groups in terms of changes in the degree of eye irritation with p = 0.000.
Conclusion: The group that has the possibility of using the old furnace 8 times more likely to experience changes in eye irritation bad compared to the group using a new furnace with a value of p = 0.000, RR = 8.00, 95% CI (2.08 to 30.74). Hypothesis is proved that a decline in the degree of eye irritation of 88.9% in workers emping after using the new furnace design for fourteen days.