

## RINGKASAN

### HUBUNGAN ASAP DAPUR DAN DEBU KAYU TERHADAP KEJADIAN KARSINOMA NASOFARING DI YOGYAKARTA

**Latar Belakang:** Karsinoma nasofaring (KNF) merupakan karsinoma dengan insidensi jarang ( $<1/100.000$ ) pada ras dan geografis yang beragam di dunia. Kasus KNF jarang terdaftar dalam sensus epidemiologi karena fasilitas rumah sakit dan diagnosis KNF yang kurang. KNF merupakan kanker 4 besar di Indonesia. Salah satu faktor penyebab KNF adalah paparan asap dapur pada saat memasak dan debu kayu gergaji pada pekerja yang terpapar dengan kayu.

**Tujuan:** Menganalisis hubungan asap dapur dan debu kayu terhadap kejadian karsinoma nasofaring di Yogyakarta.

**Metode:** Penelitian ini dilakukan dengan metode *case control Nested Hospital base*. Jumlah subjek kasus dan kontrol masing-masing 189 dan 387 sampel. Data karakteristik dan paparan faktor risiko subjek diambil dari kuisioner. Analisis hubungan dan korelasi dilakukan dengan *chi-square* dan regresi logistik.

**Hasil:** Paparan asap dapur pada variabel jarang (OR = 2,029, CI 95%: 0,668-6,162) dan tiap hari (OR = 1,708, 95% CI: 1,142-2,552) meningkatkan risiko KNF dan paparan debu kayu meningkatkan risiko KNF pada variabel jarang (OR = 2,127 (95% CI: 1,203 - 3,759), sering (OR = 2,945, 95% CI: 1,217-7,127) dan tiap hari (OR = 2,650, 95% CI: 0,797-8,809). Risiko KNF menurun pada paparan asap dapur "Sering" (OR = 0,835, 95% CI: 0,321-2,170). Tidak ada korelasi antara frekuensi paparan asap dapur dan debu kayu dengan risiko KNF. Paparan terhadap debu kayu dapat meningkatkan risiko KNF (OR: 3,441, CI 95%: 1,614 - 7,334) dibanding Risiko akibat paparan terhadap asap dapur saja atau paparan terhadap kedua paparan. Faktor risiko pendidikan dan pekerjaan berpengaruh terhadap risiko KNF.

**Kesimpulan:** Paparan Asap Dapur meningkatkan risiko kejadian KNF sebesar 1,58 kali dibanding populasi yang tidak terpapar. Paparan Debu Kayu meningkatkan risiko kejadian KNF sebesar 2,12 kali dibandingkan populasi yang tidak terpapar. Frekuensi paparan asap dapur dan debu kayu tidak berkait dengan kenaikan risiko KNF.

**Kata Kunci:** KNF, Karsinoma Nasofaring, Paparan Asap Dapur, Paparan Debu Kayu.

## ABSTRACT

### ASSOCIATION OF KITCHEN SMOKE AND WOOD DUST WITH INCIDENCE OF NASOPHARYNX CARCINOMA IN YOGYAKARTA

**Background:** Nasopharynx carcinoma (NPC) is a rare malignancy with incidence  $<1/100.000$  with variance in ethnic and geographic over the world. NPC cases are rarely listed in epidemiological census because hospital's facilities are lacking and poor diagnoses. NPC is one of four major cancer in Indonesia. One of risk factor of NPC are kitchen smoke and wood dust from saw which exposed to worker.

**Objective:** Analyze association between kitchen smoke and wood dust toward incidence of nasopharynx cancer in Yogyakarta.

**Methods:** this research uses *case control Nested Hospital base* method. Total number of case and control subjects each one are 189 and 387 samples respectively. Characteristics and exposure of risk factor data taken from questionnaire. Analysis of associations and correlation used chi-square analysis and logistic regression analysis.

**Results:** Exposure of kitchen smoke in "rare" variable (OR = 2,029, CI 95%: 0,668-6,162) and "everyday" (OR = 1,708, 95% CI: 1,142-2,552) increase risk of NPC. Exposure of wood dust increase risk of NPC in "rare" (OR = 2.127(95% CI:1.203 - 3.759), "often" (OR = 2,945, 95% CI: 1,217-7,127) and "everyday" variable (OR = 2,650, 95% CI: 0,797-8,809). NPC risk decreased with "often" exposure from kitchen smoke (OR = 0,835, 95% CI: 0,321-2,170). There is no correlation between exposure frequency of kitchen smoke and wood dust with NPC risk. Exposure from wood dust increase more NPC risk (OR: 3,441, CI 95%: 1,614 - 7,334) compared with the risk caused by exposure from kitchen smoke or exposure from both of them. Education and occupational risk factors have influence for NPC risk.

**Conclusions:** Exposure of kitchen smoke increase NPC risk 1,58 more higher compared to unexposed populations. Exposure of wood dust increase NPC risk 2,12 more higher compared to unexposed populations. Exposure frequency of kitchen smoke and wood dust don't have correlation with increased risk of NPC

**Keywords:** NPC, nasopharynx carcinoma, exposure of kitchen smoke, exposure of wood dust.