

## INTISARI

Obesitas merupakan salah satu faktor risiko penyebab penyakit tidak menular, seperti kanker yang dapat meningkatkan mortalitas. Indonesia, dengan persebaran orang obesitas kesepuluh terbanyak di dunia berisiko menanggung beban penyakit kanker yang diakibatkan obesitas. Penelitian mengenai estimasi beban penyakit akibat obesitas ini bertujuan untuk melihat seberapa besar angka kematian dan *Premature Mortality Cost* penyakit kanker akibat obesitas di Indonesia.

Estimasi beban penyakit kanker akibat obesitas berupa epidemiologi deskriptif dan estimasi berdasarkan *prevalence-based* dengan indikator yang digunakan yaitu angka kematian penyakit kanker akibat obesitas dan *Premature Mortality Cost*. Angka kematian penyakit kanker akibat obesitas diperoleh dengan mengalikan nilai *Obesity Attributable Fractions* (OAFs) dengan angka kematian tiap penyakit kanker, dimana nilai OAFs diperoleh dari rumus perhitungan menggunakan data prevalensi obesitas dan *relative risk* tiap penyakit. *Premature Mortality Cost* diperoleh dengan mengalikan angka kematian penyakit kanker akibat obesitas, angka harapan hidup, dan rata-rata pendapatan masyarakat Indonesia.

Nilai OAFs tertinggi penyakit kanker akibat kelebihan berat badan pada laki-laki yaitu pada kanker usus (9,20%), kanker ginjal (7,30%), dan kanker pankreas (5,30%). Pada perempuan, kanker ginjal (18,10%), kanker endometrium (12,50%), dan kanker usus (10,80%). Pada kasus obesitas, OAFs tertinggi pada laki-laki yaitu kanker pankreas (3,80%), kanker usus (2,90%), dan kanker ginjal (2,50%). Pada perempuan, kanker endometrium (12,80%), kanker ginjal (9,80%), dan kanker usus (4,10%). Angka kematian total penyakit kanker akibat obesitas dan kelebihan berat badan tertinggi yaitu kanker usus (929 kematian), kanker ovarium (599 kematian), dan kanker pankreas (190 kematian). Nilai *Premature Mortality Cost* penyakit kanker akibat obesitas terbesar pada kanker ovarium (Rp 61.118.937.644,00), kanker usus (Rp 56.651.715.527,00), dan kanker pankreas (Rp 15.472.573.550,00) untuk satu tahun periode perhitungan biaya. Estimasi beban penyakit kanker akibat obesitas perlu dilakukan untuk membantu pemerintah dalam menentukan program kesehatan dan untuk mengurangi beban penyakit kanker akibat obesitas di Indonesia.

Kata kunci: obesitas, angka kematian, *Premature Mortality Cost*, Indonesia

## ABSTRACT

Obesity is one of the risk factor of non-communicable diseases, one of them is cancer. It may lead to the escalation of mortality. Indonesia is the top 10 country with the highest prevalence of cancer burden due to obesity. This study was conducted to perceive how much are the death rate and Premature Mortality Cost of cancer due to obesity in Indonesia.

The chance of cancer caused by obesity is estimated epidemiologic descriptive and prevalence-based estimation with obesity attributable cancer mortality and Premature Mortality Cost as indicators. Obesity-related cancer mortality is calculated by multiplying Obesity Attributable Fractions (OAFs) rate by cancer death rate, which OAFs rate obtained by calculating obesity prevalence data and relative risk of each disease. Premature Mortality Cost was calculated by multiplying obesity-related cancer mortality, life expectancy, and Indonesian average income.

The highest OAFs score for overweight-related cancer on male is 9.20% for colon cancer, 7.30% for kidney cancer, and 5.30% for pancreatic cancer. On female, 18.10% for kidney cancer, 12.50% endometrial cancer, and 10.80% for colon cancer. On obesity-related cancer, the highest OAFs on male is pancreatic cancer (3.80%), colon cancer (2.90%), and kidney cancer (2.50%). On female endometrial cancer (12.80%), kidney cancer (9.80%), and colon cancer (4.10%). The highest total mortality's rate for obesity-related cancer and overweight-related cancer are colon cancer (929 death), ovarian cancer (599 death), and pancreatic cancer (190 death). The highest value of Premature Mortality Cost are Rp61,118,937,644.00 for ovarian cancer, Rp56,651,715,527.00 for colon cancer, and Rp15,472,573,550.00 for pancreatic cancer. The estimation of cancer burden due to obesity shall be done to help the government determines the health programs and decrease the number of cancer burden due to obesity in Indonesia.

Keywords: obesity, death rate, Premature Mortality Cost, Indonesia