

## Analisis faktor risiko kardiovaskular pada pekerja perusahaan minyak dan gas X di Qatar = Analysis of cardiovascular risk factors in the workers of the oil and gas company X in Qatar

Iqbal Mochtar, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20501931&lokasi=lokal>

---

### Abstrak

Penyakit kardiovaskular adalah penyakit yang memiliki tingkat morbiditas dan mortalitas yang tinggi, baik pada populasi masyarakat umum maupun populasi pekerja. Pekerja migas, baik off-shore maupun on-shore, terpapar dengan berbagai hazard, yang secara langsung maupun tidak langsung meningkatkan faktor risiko dan risiko kardiovaskular mayor mereka. Hingga saat ini belum ditemukan adanya studi yang mempelajari tentang faktor risiko dan risiko kardiovaskular mayor pada pekerja migas di Timur Tengah. Penelitian ini bertujuan menganalisis faktor risiko dan risiko kardiovaskular mayor pada pekerja off-shore dan on-shore perusahaan migas 'X' di Qatar. Dengan metode potong lintang, studi ini menganalisis dan membandingkan data pekerja off-shore dan on-shore perusahaan 'X' pada dua tahun berbeda, yaitu tahun 2008 dan 2018. Data pekerja yang dianalisis meliputi jenis kelamin, usia, kadar-kadar kolesterol total, LDL, HDL, trigliserida dan gula darah sewaktu, tekanan darah sistolik dan diastolik, kebiasaan merokok, penggunaan obat tekanan darah, berat badan dan tinggi badan. Data yang ada juga digunakan untuk menghitung risiko kardiovaskular mayor pekerja dengan menggunakan Framingham Risk Score.

Hasil penelitian ini mendapatkan bahwa pada periode 2008-2018, pekerja off-shore mengalami perburukan pada sembilan faktor risiko, yaitu tekanan darah sistolik, gula darah sewaktu, LDL, kolesterol total, trigliserida, berat badan, pengobatan tekanan darah, jumlah penderita diabetes dan sindrom metabolik. Selain itu, pekerja off-shore mengalami perburukan significant risiko kardiovaskular mayor dari skor FRS 9,2% (risiko ringan) menjadi 20,3% (risiko tinggi). Pada periode yang sama, pekerja on-shore hanya mengalami perburukan pada dua faktor risiko, yaitu LDL dan berat badan, serta mengalami perbaikan pada satu faktor risiko, yaitu HDL. Selain itu, pekerja on-shore juga mengalami perburukan risiko kardiovaskular mayor dari skor FRS 10,0% (risiko ringan) menjadi 17,0% (risiko sedang). Berdasar hasil studi ini disimpulkan bahwa dibanding pekerja on-shore, pekerja off-shore mengalami lebih banyak perburukan faktor risiko dan risiko kardiovaskular mayor.

.....Cardiovascular disease is a prevalent disease and associated with high morbidity and mortality in both general and worker population. Oil and gas workers, both off-shore and on-shore, are exposed to various hazards in the workplace, which directly or indirectly increase the workers' risk factors and risk of developing major cardiovascular events. Up to present, no study investigating risk factors and risk of major cardiovascular events in the Middle East has been found. This study was intended to analyze the risk factors and risk of major cardiovascular events in the off-shore and onshore workers of the 'X' oil and gas company in Qatar. Using a cross-sectional method, this study analyzed and compared the health data of the off-shore and on-shore workers of the 'X' company in the two different year, namely 2008 and 2018. The data analyzed included gender, age, the levels of total cholesterol, LDL, HDL, triglycerides and blood sugar, systolic and diastolic blood pressure, smoking habit, use of blood pressure medications, body weight and height. The available data was also utilized to calculate the workers' risk of developing major cardiovascular events using Framingham Risk Score.

This study found that during the period of 2008-2018, the off-shore workers suffered the worsening in the nine cardiovascular risk factors, namely systolic blood pressure, blood sugar, LDL, total cholesterol, triglycerides, body weight, blood pressure medication, numbers of diabetic and metabolic syndrome. In addition, the off-shore workers experienced a significant deterioration in the risk of developing major cardiovascular event from a FRS score of 9.2% (mild risk) to 20.3% (high risk). In the same period, on-shore workers experienced the worsening only in two risk factors, namely LDL and weight, and experienced an improvement in one risk factor, namely HDL. In addition, on-shore workers also experienced a deterioration in the risk of developing major cardiovascular events from a FRS score of 10.0% (mild risk) to 17.0% (moderate risk). Based on the study, it is concluded that compared to the onshore workers, the off-shore workers experienced more worsening of risk factors and risk of major cardiovascular events.