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ABSTRACT

Title of Abstract : Health Impacts Quality of Life in Communities Affected by Coal

Mining in Kutai Kartanegara

Authors of Abstract : Rahmat Barkati, Ike Anggraeni, Annisa Nurrachmawati

Affiliation : Others

Correspondence E-mail : rahmat.medic@gmail.com

Background: The impacts of coal mining activities on the quality of life in surrounding communities, specifically focusing on employment opportunities, income perceptions, health security, and infrastructure.

Objective: The primary goal is to understand how these factors influence the overall well-being of residents in mining-affected areas, providing valuable insights for sustainable community development and policy-making

Research Methods/ Implementation Methods: A cross-sectional survey was conducted with 300 respondents from three villages near mining operations in Kutai Kartanegara, East Kalimantan, using structured questionnaires. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to explore the relationships between various social determinants and health outcomes. The study also examined environmental factors, such as air and water quality, through laboratory testing

Results: The findings highlight significant variations in the perceptions of the local community regarding the benefits and challenges posed by mining activities. Employment opportunities and income were generally viewed positively, while concerns about environmental pollution and housing affordability were prevalent. These results underscore the need for targeted interventions to improve health security and infrastructure in mining communities.

Conclusion/Lesson Learned: While coal mining has contributed to economic opportunities for some, it has also introduced challenges related to environmental health and living conditions. The study highlights the need for improved environmental management, better health services, and policies that address housing affordability. These findings emphasize the importance of balancing economic development with community health and well-being in mining regions.

Keyword: Quality of Life, Mining Area, Health, Environment