



Sistem Manajemen Keselamatan dan Kesehatan Pariwisata Pantai di DIY : Identifikasi Bahaya dan Penilaian Risiko Dengan Pendekatan “Perceived Safety and Realistic Safety Model” Melalui

Paradigma Preventif Edukatif (Pantai Baron dan Pantai Parangtritis)

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Sistem Manajemen Keselamatan dan Kesehatan Pariwisata Pantai di DIY :

## Identifikasi Bahaya dan Penilaian Risiko Dengan Pendekatan “Perceived Safety and Realistic Safety Model” Melalui Paradigma Preventif Edukatif (Pantai Baron dan Pantai Parangtritis)

### Abstrak

**Latar belakang:** Pantai memiliki banyak potensi risiko dan tingkat bahaya yang dapat menyebabkan insiden dan atau kecelakaan. Penting dilakukan penilaian secara komprehensif terkait faktor keamanan, keselamatan dan kesehatan wisatawan dan perancangan suatu sistem manajemen keselamatan dan kesehatan pariwisata yang aplikatif dan dapat diterapkan di Indonesia pada umumnya. **Metode:** Penilaian komprehensif dilakukan melalui *concurrent mixed-method* dengan mengambil Identifikasi Bahaya dan Penilaian Risiko (IBPR) menggunakan teknik HAZOP/HAZID serta mendapatkan data dari wawancara semi terstruktur, *gray literature*, dan observasi langsung. Hubungan *perceived safety* dengan kepuasan wisata menggunakan metode *cross sectional* melalui kuesioner skala Likert dianalisis menggunakan *full structural equation model* (SEM). Desain intervensi manajemen risiko yang berlaku saat ini dinilai kesesuaiannya dengan ISO 13009:2015 serta dibandingkan dengan desain intervensi manajemen risiko yang direkomendasikan. **Hasil:** Analisis *perceived safety* yang mendeskripsikan penerapan SMK3 serta dilakukannya IBPR sebagai *realistic safety* didapatkan perbedaan signifikan gambaran *perceived safety* terhadap IBPR. Pengunjung cenderung memiliki *perceived safety* yang lebih positif atau memiliki *perceived risk* yang lebih rendah dibandingkan dengan penilaian IBPR. **Kesimpulan:** Manajemen risiko dan implementasi SMK3 yang berkelanjutan serta hasil penyelarasan IBPR dan analisis SEM terhadap *perceived safety* wisatawan, merekomendasikan dilakukannya opsi lanjutan pengendalian risiko yaitu *drowning prevention system* (DPS) yang terintegrasi dengan *early warning systems* (EWS) dan *emergency respons plan* (ERP). Paradigma EWS perlu diperluas bukan hanya berperan dalam sistem kebencanaan tapi juga dalam sistem pencegahan bahaya bagi wisatawan sehingga DPS yang termasuk didalamnya berperan fungsi informasi, edukasi, *closure* dan zonasi akan menjadi bagian penting dari sistem EWS.

**Kata kunci:** SMK3 pantai, SMK3 Wisata, IBPR pantai, persepsi selamat, SEM wisata

## **Tourism Health and Safety Management System: Hazard Identification and Risk Assessment with the Perceived Safety and Realistic Safety Model Approach Through the Educational Preventive Paradigm (Baron and Parangtritis Beach)**

### **Abstract**

**Background:** Beaches have many potential risks and levels of hazard that can lead to incidents and /or accidents. It is important to conduct a comprehensive assessment of the security, safety, and health factors of tourists and to design an applicable tourism health and safety management system that can be applied in general particularly in Indonesia. **Methods:** The comprehensive assessment was conducted through concurrent mixed-method by taking Hazard Identification and Risk Assessment (HIRA) using HAZOP / HAZID techniques and obtaining data from semi-structured interviews, direct observation and gray literature. The relationship between perceived safety and tourism satisfaction using the cross-sectional method through a Likert scale questionnaire was analyzed using a full structural equation model (SEM). Current risk management intervention designs are assessed for conformance with ISO 13009: 2015 and compared with recommended risk management intervention designs. **Results:** The analysis of perceived safety which describes the implementation of occupational health and safety (OHS) management systems and HIRA shows a significant difference in the perceived safety of HIRA. Visitors tend to have a more positive perceived safety or have a lower perceived risk compared to the HIRA assessment. **Conclusions:** Risk management and sustainable implementation of OHS management systems as well as the results of the alignment of HIRA and SEM analysis on the perceived safety of tourists, recommends implementing an advanced risk control option, namely the drowning prevention systems (DPS) that are integrated with the early warning systems (EWS) and emergency response plans (ERP). EWS paradigm needs to be expanded not only in the disaster system but also in the hazard prevention system for tourists, as a result, the DPS which includes information functions, education, closure, and zoning will become the main part of the EWS systems.

**Keywords:** Beach OHS, Tourism OHS, HIRA of beach, perceived safety, SEM in tourism