

INTISARI

Kegiatan *cave tubing* di Gua Kalisuci merupakan salah satu bentuk wisata minat khusus yang memiliki risiko tinggi terhadap keselamatan wisatawan karena aktivitasnya dilakukan di lingkungan alam yang dinamis. Penelitian ini bertujuan untuk mengidentifikasi potensi bahaya, melakukan penilaian risiko, serta mengetahui mitigasi atau pengendalian risiko yang dilakukan oleh pengelola di Gua Kalisuci, Gunungkidul. Metode penelitian yang digunakan adalah deskriptif analitis dengan teknik pengumpulan data melalui observasi, wawancara, dan penyebaran kuesioner kepada 94 responden yang merupakan wisatawan dan pemandu wisata di Gua Kalisuci. Analisis risiko dilakukan dengan mengalikan nilai probabilitas dan keparahan untuk menentukan level risiko, yang kemudian dipetakan kedalam hierarki pengendalian risiko. Penelitian ini mengidentifikasi potensi bahaya yang terbagi menjadi tiga kategori: bahaya alam (tenggelam, longsor, jeram, banjir), bahaya operasional (kerusakan alat dan sistem evakuasi), dan bahaya manusia (kompetensi pemandu, kejujuran kondisi fisik peserta). Hasil dari penilaian risiko ditemukan terdapat 7 risiko level rendah atau *low risk*, 4 risiko level sedang atau *moderate risk*, dan 2 risiko level tinggi atau *high risk*. Pengendalian risiko yang diterapkan pengelola meliputi: (1) Eliminasi: penutupan operasional saat banjir dan larangan bagi peserta dengan penyakit kronis; (2) Substitusi: penggantian alat yang tidak layak; (3) Kontrol teknis: pemasangan pagar, tali bantu, dan katrol evakuasi; (4) Kontrol Administratif: penerapan Prosedur Standar Operasional (*Standard Operational Procedure/SOP*), *briefing* peserta, serta pelatihan PPGD bagi pemandu; dan (5) Penggunaan APD lengkap seperti helm, pelampung, serta pelindung lutut dan siku. Implikasi manajerial dari penelitian ini juga didiskusikan.

Kata Kunci: Identifikasi Bahaya, Penilaian Risiko, Pengendalian Risiko, *Cave Tubing*, Gua Kalisuci

ABSTRACT

Cave tubing at Kalisuci Cave is a form of special interest tourism characterized by high safety risks due to its activities being conducted in a dynamic natural environment. This research aims to identify potential hazards, perform risk assessment, and determine the mitigation or risk control strategies implemented by the management at Kalisuci Cave, Gunungkidul. The research method used is descriptive-analytical, with data collection techniques including observation, interviews, and the distribution of questionnaires to 94 respondents, consisting of tourists and tour guides at Kalisuci Cave. Risk analysis was conducted by multiplying probability and severity values to determine risk levels, which were then mapped into the hierarchy of risk control. This study successfully identified potential hazards categorized into three groups: natural hazard (drowning, landslides, rapids, flooding), operational hazards (equipment failure and evacuation systems), and human hazards (guide competence and honesty regarding participants physical condition). The risk assessment results revealed 7 low-risk levels, 4 moderate-levels, and 2 high-risk levels. Risk controls implemented by the management include: (1) Elimination: closing operations during floods and prohibiting participants with chronic illnesses; (2) Substitution: replacing inadequate equipment; (3) Engineering controls: installation of fences, assist ropes, and evacuation pulleys; (4) Administrative controls: implementation of SOPs, participant briefings, and First Aid (PPGD) training for guides; and (5) The use of Personal Protective Equipment such as helmets, life jackets, and knee and elbow protectors. In the end, the managerial implications of this study is discussed.

Keywords: *Hazard Identification, Risk Assessment, Risk Control, Cave Tubing, Kalisuci Cave*