

New and Emerging Occupational Risk and Associations with Small and Medium Enterprise (SMEs) in Malaysia: A Review

Nur Fazrina Mohamad Salleh^{1, a)}, Hanida Abdul Aziz^{1, b)} and Ezrin Hani Sukadarin^{1, c)}

¹*Occupational Safety and Health Program, Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 26300 Gambang, Pahang Malaysia.*

^{a)}fazrinaasalleh@gmail.com

^{b)}Corresponding author: hanidaaziz@ump.edu.my

^{c)}ezrin@ump.edu.my

Abstract. Other than traditional occupational risks, new and emerging risk or known as ‘NER’ is initially explored by European Agency for Safety and Health at Work (EU-OSHA) in 2002. The fundamental of NER is provided by EU-OSHA with four export forecasts on emerging risk associated with physical, psychological, chemical and biological. The study of NER is considered as a new discipline that needs a better clarification on the definition of the idea itself. Meanwhile, Small and Medium Enterprises (SMEs) contributed to the high rate of accident leading to high compensation and economic loss. This paper strives for reviewing the definitions of NER and association with SMEs. Journal articles were compiled from Scopus and Web of Science. The keywords used in the selection of the articles are reviews, definition, risk, occupational risk, new and emerging risk and SMEs. Based on the finding of the literature reviews of NER, issues of risk in Malaysia SMEs were explored and categorised accordingly.

INTRODUCTION

Acknowledged as the main vital of Malaysia’s economy, small and medium size enterprises (SMEs) continue to grow with a total of 97.2% business establishments in 2020 [1]. Out of 1,151,339 Malaysia SMEs establishments, the highest number comes from the service sector followed by construction, manufacturing, agriculture and mining and quarrying. There are 7.25 million people working in SMEs, and total of employment will increase every year. At the same time, high exposure risk of accident among SMEs workers is also escalating. Approximately, SMEs in Malaysia had recorded 80% of the total occupational accident and related disease [2]. There is sufficient evidence to presume that SMEs employees are exposed to higher risks than the employees in large companies [2, 3-7]. Besides traditional risks, SMEs are also susceptible to generate New and Emerging Risk (NER).

The initial study of NER was considered to be in 2002, when European Agency for Health and Safety at Work (EU-OSHA) was asked to start a risk observatory in order to fulfill the need to forecast new and emerging risks [8]. Since then, the conception of NER has escalated in attention in recent times. Consequently, few researchers have had addressed the issue of NER particularly on the definition and concepts. When it comes to NER, the terms has an intuitive appeal and meaning but a reliable and agreed definition is still lacking [9, 10, 11]. The term was believed has generally an ambiguous character, but has the advantage of allowing a distinction to traditional risk [12].

Recently, the International Organization of Standardization (ISO) had published a 45001:2018 standard [13] which could be an important source to deal with NER [14]. Unfortunately, it was believed that the standard failed to clearly distinguish between the ideas of NER and traditional risk [15]. It is crucial for the standard to be recognised and