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**N.H.M. Kamrujjaman Serker**

**Rajshahi University of Engineering & Technology (RUET)**

**Title:**

**Workplace Safety Assessment in Building Construction: A Case Study in Rajshahi City**

**Abstract**

**Background**

The construction sector of Bangladesh is one of the least safe sectors, with building construction responsible for the majority of workplace accidents and fatalities. According to the current reports, number of accidents at the construction sites is increasing day by day. These accidents not only cause serious injuries but also take several lives. Among different types of construction, building construction causes the most injuries and death.

**Methods**

This study focuses on the safety issues in building construction sites in Rajshahi City, an emerging urban area. Even though Rajshahi is an emerging urban area, it hasn’t gone through proper construction safety assessments. Building construction was chosen because it causes many preventable injuries and deaths, and it is important for city growth and the economy. 31 construction sites were selected for assessment, however, complete data from some construction sites could not be gathered due to access issues. Data were collected through field surveys of the construction sites, structured interviews with workers as well as from expert opinions.

**Results**

The findings reveal that only 8% of sites are considered safe, while the majority are classified as unsafe or very unsafe. Major hazards include falls from height, electrocution, and being struck by falling objects. Most accidents are attributed to a lack of safety awareness, poor use of personal protective equipment (PPE), insufficient supervision, and inadequate safety training. Alarmingly, most workers are unaware of national building codes and labor laws, and PPE usage is extremely low.

**Conclusions**

The study highlights the urgent need for regular safety training, strict enforcement of regulations, proper PPE provision and usage, and continuous on-site supervision to improve safety and reduce the number of accidents in Bangladesh’s building construction sector.