Application Research of Kindergarten Hazard Source Identification in Intelligent Campus Construction

Ke Liang
Shaanxi Xueqian Normal University, Shaanxi, 710127, China

Keywords: Kindergarten; Safety Accident; Prevention; Treatment; Hazard Source Classification; Hazard Identification Method; Risk Assessment

Abstract: Hazard identification and risk assessment are the foundation and important link in establishing an occupational health and safety management system. According to the role of hazard sources in the development of production accidents, the hazard sources are divided into two categories. The identification methods and precautions of hazard sources are briefly introduced, and the methods of risk assessment are discussed. Rich wild resources are a treasure of early childhood science. Teachers should make full use of these on-the-ground resources to provide rich operational materials for early childhood science activities and to stimulate children's strong interest in scientific practice activities. Teachers should also fully understand the value of scientific practice activities, guide young children to adapt to nature, and promote the harmonious development of children in all aspects. In view of the current situation of kindergarten school safety accidents, it is recommended to strengthen the safety awareness of faculty and staff, implement the "Safety Management List for Teaching Staff", improve the self-care ability of young children, prevent the occurrence of safety accidents, and propose corresponding treatment methods. T method.

1. Introduction

Safety issues have always been a top priority in kindergarten management. "Kindergartens must put the protection of children's lives and promote the health of young children in the first place. With the complex changes in society and the lag of kindergarten safety management, kindergarten accidents occur frequently." Highlight the seriousness of kindergarten safety issues and the urgent need to strengthen kindergarten safety management. Sex. Review the status quo of "there are many disadvantages in kindergarten safety management." If the security system flows in the same way as "a dummy," the employee's responsibilities will be weakened. In the action post, the teaching environment crisis has a lack of awareness of “the situation is frequent and the child’s self-protection ability is weak”[1].

2. Kindergarten Campus Safety Accident Prevention

Germany's PABBS, Hein's Haien Law, pointed out that any unsafe accident can be prevented. The so-called safety accident prevention refers to the management of all aspects of kindergarten facilities and equipment to reduce or eliminate factors that may pose a threat to young children (teachers and staff) and to develop a safety management plan. Prevention is an important preliminary work[2]. This stage is meticulous. All aspects of safety management can eliminate many safety hazards in the bud.

2.1. Strengthen the safety awareness of faculty and staff

In the kindergarten, the teacher is the guardian of the child. In order to ensure the safety of children, “teachers must establish a sense of safety”, master common security knowledge, and deploy safe work. Kindergartens will conscientiously do a good job in safety, carefully deploy the upper and lower departments, and work together to implement ideas, energy in place, and funds in place.
2.2. Implementation of the teacher safety management checklist

Based on the actual situation of the park and the safety of the kindergarten, we have proposed three “safety lists”, namely the risk list, the responsibility list and the rectification list. The “Crisis List” security risk investigation is for education and daily management. Thoroughly inspect facilities, equipment, and operations. Analyze and evaluate safety risks. Therefore, establish a list of security crises.

2.3. Improve children's self-protection ability

The Child Learning and Development Guide states that early childhood learning is based on direct experience. In games and everyday life, we must cherish the unique value of games and life and create a rich security education environment [3].

3. Kindergarten Campus Security Incident Handling

After the occurrence of a safety accident, the safety accident shall be handled in an orderly manner in accordance with the provisions of the relevant plan. Multiple innovative safety management strategies that address harm or effectively reduce losses can help instructors learn to cope with exams. Standardize and artistically handle all kinds of safety accidents that have occurred. “After the accident, the police should be in a timely manner, and the teachers on duty must have the sense of responsibility and courage to bear this responsibility. They should not try to escape from evading responsibility. Under the premise of caring for the injured, the police in the park will promptly report to the relevant departments[4]. Member of the security management team. Perform duties, respond quickly, and handle incidents together. Members need to remember the phone numbers of some key departments to provide accident information in a timely and clear manner.

3.1. Science ambulance life

After the accident, the rescue of life as the primary task, the maximum implementation of the rescue, and strive for the best time to deal with the accident. Health care physicians and directors should immediately check the injury and take appropriate measures to promptly treat the situation according to the situation. If the injury is serious, staff should be organized immediately. The vehicle was taken to the hospital. The health care doctor performs the necessary self-help and first aid before the medical staff arrives. When the child is injured, the garden should promptly notify the parents to let the parents rush to the hospital to participate in the treatment process, so as not to cause parents' fear. In the course of treatment, kindergartens should fully communicate with parents and cooperate fully with the principle of life first. The doctor is treating. If the parents do not arrive in time, the kindergarten should report the treatment process to the parents in time and save the medical record card in the kindergarten archives.

3.2. Real communication conflicts

After the accident, the manager and the on-duty teacher should communicate with the parents immediately at the time of the accident or on the same day, and express their condolences. Explain the whole process of the accident with the most sincere attitude and seek the understanding of the parents. If parents, especially their parents, are very excited, their attitude is not calm, learn to change their minds, understand their parents' psychological feelings, adjust their strategies in time, and conduct further communication, such as multiple home visits, always caring for children. Injury, accompanied by follow-up treatment. Early childhood education communicates in good faith, resolves contradictions, and reaches a consensus on how to deal with this issue[5].

3.3. Seeking truth from facts

In the face of public opinion, kindergartens should follow the principles of openness and objectivity and be interpreted by the spokesperson. The public should be informed of the situation and measures taken to prevent the spread of false information. If there is government and police involvement, it must be coordinated in the safest way after the statement, release it, and strive to
gain public understanding and support, and strive to restore the impact of the accident.

After the safety incident is handled, the kindergarten should continue to actively condolences, express sincere concern to the injured and their families, help the child to restore health, conduct accident investigations, determine the nature of the accident according to the safety incident report, and abide by the system. According to the extent of the accident, deal with. If the teacher is not at fault, disclose the truth in time and give the teacher full comfort and care. Kindergartens should timely carry out reflective education activities for specific security incidents, organize all employees of the school to analyze the accidents, identify the main causes of the accidents, and improve subsequent rectification measures to avoid repeated accidents. On this basis, the current security management was evaluated. Seriously correct, establish a more complete safety management work system, and constantly enhance the awareness of safety responsibility of personnel in each position, keeping in mind and internalizing.

4. Hazard Source Identification Method

For a company, the existence of dangerous sources is complicated, many dangerous sources are not easy to be discovered, and the identification of dangerous sources, especially for coal enterprises, has brought great difficulties. Introduced several commonly used identification methods: Direct inquiry method: Organize people with on-site work experience to conduct conversations, ask about the dangers of specific work, and preliminarily determine the first and second types of hazard sources existing in the work according to the content of the conversation. On-site observation method: Through the inspection and observation of the on-site working environment, it is found that the source of danger exists[6].Review related incident records: Identify existing hazards by reviewing previous event records. Obtain external information: Obtain hazard information from related companies, literatures, etc., and analyze and study them to identify hazards. Work task analysis: Identify the relevant hazard sources by analyzing the hazards involved in the work tasks of business members. Safety Checklist: Use the prepared safety checklist to perform a system safety check on the company to determine the source of the hazard. Hazard and Operability Studies: Hazard and operability studies are techniques for critical review and control of hazards in the process. It seeks process deviations through instructional statements and standard formats, identifies hazards in the system, and identifies countermeasures to control hazard risks. Event Tree Analysis: Event tree analysis is a method that analyzes the development process of “success” or “failure” of each link event from the initial cause event, and predicts various possible outcomes, namely sequential logic analysis and judgment methods. This method is used to analyze various events of the system and identify the source of danger of the system. Fault Tree Analysis: Fault Tree Analysis is a method of finding the cause, condition, and pattern associated with an incident based on the outcome of an incident that may or may have occurred. Through this process analysis, the relevant hazard sources in the system that cause the accident can be identified. In addition, by looking up energy sources, energy carriers, and analyzing their impact on the type of accidents and control factors, the source of danger can be identified[7].

![Fig.1. Research Trend Chart of Smart Campus](image)
5. Teacher First Aid Skills Risk Assessment and Training

Risk is a combination of the likelihood and consequences of a particular situation. Risk assessment is the process of assessing the magnitude of the risk and determining whether the risk is affordable. Risk assessment is an important part of the occupational health and safety management system. The purpose of risk assessment is to evaluate and classify the risks brought by existing risk sources, and conduct targeted risk control based on the evaluation results to achieve good occupational health and safety performance. The basis of risk assessment comes from the meaning of risk, that is, the risk is determined around the possibility and consequences. Two risk assessment methods are introduced:

5.1. Qualitative evaluation method

Combine the severity of the consequences of accidents with the possibility of accidents, classify the consequences and possibilities into different categories, analyze and compare the current status of risks, and determine one of the consequences and possibilities, such as: The possibility is defined as "possible". The possibility of an accident is defined as “very unlikely” and is defined as “impossible”. The serious consequences of multiple casualties are defined as “severe injuries” and the consequences of minor injuries are defined as “slight injuries”, defined as “general injuries”. The level of risk is based on a combination of consequences and possibilities[8].

5.2. Quantitative evaluation method

Quantitative calculations of the risks associated with each hazard can be used. The following method: \( d=leC \) in the middle D —— risk value; L - the size of the accident; e - the frequency with which personnel are exposed to hazardous environments; The consequences of the C-accident.

After obtaining the risk value \( d \), the key is how to determine the definition value of the risk level, and this definition value is not fixed for a long time. In different periods, the company should determine the value of the risk level according to the specific situation to meet the concept of continuous improvement.

5.3. Training teachers first aid skills

There is no doubt that we do not want to see an accident in any outdoor activity. Although we can't stop the accident, we can minimize the risk of the accident. Despite caution, if an child has an accident, the teacher should remain calm and use appropriate methods to deal with the accident and minimize the harm to the child. This requires teachers to understand the relevant first aid skills, can easily deal with the damage caused by the accident, and ensure that the accident is handled in the accident [9].

6. To Sum Up

Hazard identification and risk assessment are the most critical and fundamental steps in establishing a health and safety management system. It is a prerequisite for risk control planning, implementation and monitoring. Therefore, schools should explore the most appropriate hazard identification methods and risk assessment methods according to specific conditions, and lay a solid foundation for risk control planning, so that the occupational health and safety management system can achieve good safety performance, reduce and avoid production accidents and diseases. happened.

In short, security issues are very important in kindergarten education. We must put the safety of young children and the physical and mental health of young children first. When teachers organize outdoor activities, the risk factors caused by various outdoor factors are relatively high. Therefore, when organizing outdoor activities, it is necessary not only to master daily safety management, to create a safe outdoor environment, but also to strengthen the self-protection of young children. Consciously, we must also develop the first aid skills of teachers to ensure the safety of young children in outdoor activities. Start with details to ensure the safety of outdoor activities.
Acknowledgement

In this paper, the research was sponsored by the Identification, Assessment and Prevention of Daily Living Hazards in Kindergartens, National College Student Innovation and Entrepreneurship Training Program in 2018.

References


