

Investigation and Study on the Current Status of First Aid Competence among Preschool Education Majors

Lan Lan

School of Preschool Education, Shenyang Institute of Technology, Liaoning Shenyang Demonstration Area, 113122, China

Abstract. Understanding the current status of emergency response capabilities among preschool education majors at our institution is crucial for providing theoretical foundations and recommendations for the development and instructional design of subsequent practical courses in emergency nursing skills. A cluster sampling method was employed to survey the knowledge, attitudes, and behaviors related to emergency aid among the preschool education majors currently enrolled at our institution. The questionnaire was designed with reference to related literature and was modified accordingly. It analyzed the current state of emergency response capabilities among these students and their needs for emergency knowledge and skills. The accuracy rate of emergency knowledge among preschool education majors is generally low, yet there is a willingness to learn about emergency aid and skills. It is recommended to strengthen systematic theoretical education and to establish practical courses related to emergency nursing skills to enhance the emergency knowledge and skills of preschool education majors.

Keywords: Preschool Education Major; University Students; Emergency Knowledge; Survey Research.

1. Introduction

With the rapid development of society and the increasingly busy social life, people are facing more and more serious heart problems, including frequent occurrences of sudden cardiac arrest and sudden cardiac death [1]. Residents in our country have little knowledge about first aid, and even less know about the medical "golden four minutes" concept [2-3]. For college students majoring in preschool education, they are future kindergarten teachers, and the health and safety of children in kindergartens are related to the stability of families and society[4]. In order to understand the level of emergency response capabilities of college students in the preschool education program at our school, a questionnaire survey was conducted to analyze the current situation of their emergency response capabilities and their needs for emergency knowledge and skills. This provides theoretical basis and suggestions for the design of subsequent emergency-related training or practical courses in emergency nursing skills.

2. Object and Method

2.1. Survey Participants

The survey covered students from different grades majoring in preschool education at our school, totaling 212 participants. All were full-time undergraduate students recruited through regular admission channels who had given informed consent and were capable of independently completing the questionnaire. Those who refused to participate in the survey, could not independently complete the questions, or were not majoring in preschool education were excluded. A total of 212 questionnaires were distributed and all were collected back. Out of these, 198 were valid and 14 were invalid, resulting in an effective response rate of 93.4%.

2.2. Survey Instruments

Using literature review and survey methods, we referred to the questionnaire compiled by Hu Suzhen [5] and designed our own questionnaire based on it. The questionnaire included general demographic information and emergency capability assessment. After review by five experts, the overall content validity coefficient of the questionnaire was rated as 0.860. A preliminary pilot test was conducted with a sample of twenty people, showing that the Cronbach's α value of the questionnaire reached 0.811, and the test-retest reliability was as high as 0.902, indicating that the questionnaire has a high degree of reliability.

2.3. Survey Methodology

The questionnaire was distributed using the Questionnaire Star mini-program, allowing participants to complete the survey online. A unified training session was held for the 212 students, where the purpose, content, and important considerations of the survey were explained in a standardized manner to the participants. Two teachers verified the questionnaire information.

3. Results

3.1. Analysis of Experimental Results

Table 1. Comparison of Emergency Knowledge, Attitudes, and Behavior Scores Among Preschool Education Majors Across Different Grades ($\bar{x} \pm s$, points)

Grade	Freshman	Sophomore	Junior	<i>F</i>	<i>P</i>
Knowledge	12.84±1.462	11.83±2.338	12.02±2.143	3.711	0.026
Attitude	21.62±2.294	19.91±3.683	20.26±2.335	5.588	0.004
Behavior	27.70±2.750	26.08±3.269	25.43±3.414	7.885	0.001
Total Score	62.16±4.846	57.82±5.904	57.71±5.923	11.429	0.000

Table 2. Comparison of Emergency Knowledge, Attitudes, and Behavior Scores Between Preschool Education Majors Who Have Taken Relevant Courses and Those Who Have Not ($\bar{x} \pm s$, points)

Relevant Courses	Students	Knowledge	Attitude	Behavior	Total Score
Yes	144	12.24±2.066	20.82±2.768	27.31±3.344	59.38±5.856
No	54	11.96±2.172	19.59±3.123	25.96±3.273	57.52±5.942
<i>F</i>		0.438	0.346	0.010	0.025
<i>P</i>		0.403	<0.008	<0.005	<0.048

Among the first-year, second-year, and third-year preschool education majors, the scores for emergency knowledge were (12.84±1.462), (11.83±2.338), and (12.02±2.143) respectively, with a statistically significant difference ($P < 0.05$). The scores for attitudes towards emergency aid were (1.62±2.294), (19.91±3.683), and (20.26±2.335) respectively, which also showed a statistically significant difference ($P < 0.05$). Scores for emergency behaviors were (27.70±2.750), (26.08±3.269),

and (25.43 ± 3.414) respectively, indicating a statistically significant difference ($P < 0.05$). 73% of the students had undergone relevant training, and those who had received training scored higher in both emergency attitudes and behaviors than those who had not been trained, with a statistically significant difference ($P < 0.05$).as shown in Table.1, 2.

4. Conclusion

The emergency knowledge proficiency among preschool education majors is generally low, yet there is a willingness to learn emergency knowledge and skills. It is recommended to strengthen systematic theoretical education by setting up practical courses related to emergency nursing skills. Enhancing cooperation between preschool education and medical majors could be beneficial, as it would allow for the collaborative development and provision of interdisciplinary emergency courses. This would enable students to understand and master emergency knowledge from different perspectives, thereby improving the emergency knowledge and skills of university students majoring in preschool education.

References

- [1] Li Tao, Wei Yaguang. Research on the Current Status and Influencing Factors of First Aid Knowledge and Skills Mastery Among College Students in Local Universities [J]. Health Vocational Education, 2023, 20: 111-113.
- [2] Dong Xinyi, Li Qiuge, Chen Yudi, et al. Investigation on Emergency Knowledge and Needs of Undergraduate Students in Universities: A Case Study of Shihezi University [J]. Agricultural Reclamation Medicine, 2023, 45(04): 368-371.
- [3] Dong Min, Zhou Fan, Wu Xuehua, et al. Analysis of the Current Situation and Influencing Factors of On-site First Aid Ability among Higher Vocational Students in Mianyang City [J]. Occupational Health and Emergency Rescue, 2023, 4(41): 152-160.
- [4] Chen Qian, Ke Qingyan, Cheng Chunwei, et al. Investigation on the Pre-hospital First Aid Knowledge, Attitude and Practice among Medical and Non-medical Students in Private Universities [J]. Health Vocational Education, 2023, 41 (12):65-68.
- [5] Hu Suzhen, Feng Xiaojun, Guo Lingling. Investigation on the Current Status of Pre-hospital Emergency Care Capabilities among Non-medical College Students in Ningbo [J]. Journal of Nursing, 2016, (23)06:49-52.