

# First Aid Skills of Pre-Service Physical Education Teachers at Batangas State University

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## Abstract

**Background:** The researchers believe acquiring knowledge and first aid skills can improve the instruction of Physical Education. Thus, no matter how proactive a teacher can be, there will be possibilities that an unnecessary situation may occur because it is movement education.

**Objectives:** The study aimed to determine the first aid skills of pre-service physical education teachers at Batangas State University. Specifically, the study determined the respondents' extent of manifestation of competencies in providing first aid skill components as assessed by the instructors and students, along with cardiopulmonary resuscitation, management of bleeding, and fracture. The study also compares the responses of the two groups of respondents. The issues and challenges in developing first aid skills were also ascertained to propose training activities to intensify students' skills and competencies.

**Methods:** This study used descriptive research and a researcher-made questionnaire to gather data from 186 participants, including 159 physical education students and 27 teachers from Batangas State University during the 2021-2022 academic year.

**Results:** The study found that students had moderate competency in applying CPR, recognizing victim situations, and performing two rescue breaths correctly. Similarly, students had moderate competency in managing bleeding and identifying fracture types. However, the two groups of respondents had no significant difference in competency. The biggest challenge identified by students was the need for more training and workshops related to first aid, while linguistic barriers and inconsistent training were less significant challenges.

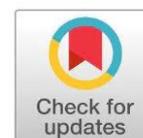
**Conclusion:** The findings show that Bachelor of Physical Education students greatly manifest first aid skills in CPR, managing bleeding, and treating fractures but need improvements in specific competencies. There was no significant difference in the assessment between the two groups of respondents. However, attendance to training and workshops was the primary issue and challenge in developing the first aid skills of BPEd students.

**Keywords:** first aid, first aid skill, pre-service teachers, issues and challenges, training activities.

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## INTRODUCTION

Health, educational achievement, profession, and socioeconomic position influence an individual's quality of life. The most important thing to consider is a person's health, which significantly influences their lives (Cassedy et al., 2013). In an accident, first aid is the initial help or treatment given to someone who has been hurt or become unwell at the event scene before an ambulance arrives (Mitchell & Haroun, 2016). First aid also refers to the evaluations and actions that a bystander can perform on a victim without medical equipment or in the presence of a medical professional. Most of the time, first aid consists of a series of potentially life-saving steps that a caregiver, regardless of whether or not they have received formal medical training, can learn to carry out with the absolute minimum amount of necessary equipment.

Educational institutions define "first aid" as behavior that should be displayed in an emergency based on scientific evidence and clinical criteria. These behaviors contain established knowledge abilities and life-saving practices and play a significant role in the educational concept. Protecting life, reducing bad conditions of injuries, and facilitating recovery are the aims of first aid procedures (O'Toole-Baker et al., 2017). Accidents and illnesses are considered unavoidable in all individuals, especially youngsters. First aid training begins at a young age, and significant efforts are made in this area because this training can save a person's life in an emergency (Bakke et al., 2017; Holding et al., 2017). The time between the occurrence and the hospital intervention is essential for the patient, especially in an accident or emergency. As a result, the behavior of the individuals on the scene is critical since many deadly circumstances may be avoided with early reactions before medical aid (Holding et al., 2017).

Compared to persons who have not received training, those who have obtained first aid instruction have a significant advantage in such hazardous situations. Acquiring such skills at a young age improves the frequency of practice and the amount of expertise because early reactions may reduce the number of fatalities and impairments (Bakke et al., 2017). Awareness of such beneficial outcomes is critical for educational institutions to emphasize the relevance of first aid classes and produce a quality application.

Training programs on first aid provide benefits such as safeguarding public health or being successful in early response. However, they also play a role in reducing sports injuries by creating a safe physical activity environment and increasing participation. Safe

physical activity circumstances necessitate tactics such as identifying injury processes, devising preventative measures, and assessing and executing these measures (Gamage et al., 2019; Impellizzeri et al., 2020). First aid skills are necessary to prevent every emergency from becoming worse. It saves thousands of lives every year and even more if most people are trained to perform it properly. The only problem is that most people need to pay more attention to the first aid training program because they need more time and money. This increases the risk of casualties because only a few people know what to do in an emergency.

First aid training is a significant factor in the formation and training of the required professionals. Even in some impairment and injury scenarios that occur in schools, the readiness of instructors who have received first aid training to intervene swiftly demonstrates the relevance of this problem (Al-Kubaisy et al., 2019). People who have had this training can act practically and take the necessary life-saving measures before medical assistance arrives, significantly changing the living conditions of those in need (Amro & Qtait, 2017; Das et al., 2020).

Today, everyone can see that first aid trainers use various training systems, each of which technology supports. Because people can more easily access many courses through online learning methods, the scope of such training can be broadened while simultaneously being simplified by utilizing both face-to-face and online learning methods in conjunction with one another. The fact that training in first aid can potentially save a person's life in a crisis is what motivates people to begin teaching it to children at a young age and to devote significant resources to furthering education and research in this field (Bakke et al., 2017; Holding et al., 2017).

The time of the incident and time spent in the hospital is crucial for the patient. This is especially true in an accident or an emergency. Because of this, the actions of those currently at the scene of the incident are crucial because a significant number of potentially disastrous scenarios can be averted with prompt responses before the arrival of hospital personnel (Holding et al., 2017). Those who have obtained first aid instruction have a significant advantage in such risky circumstances compared to those without training. Acquiring such skills at a young age improves the frequency of practice and the amount of expertise because the early reaction may reduce the number of deaths and impairments.

Approximately 50% of instructors have standard and sport-specific First Aid training, and about 90% believe they can provide first aid in the case of an accident in their

classroom. Standard first aid training has lately been part of the academic curriculum of PE teachers, although these courses do not currently include sports-specialized first aid. Standard first aid training includes CPR, recovery positions, and, most importantly, self-protection in urban and traffic incidents. Because appropriate first aid can impact the outcome of injuries, focusing on first aid is sensible (Essers et al., 2019). The researchers are looking forward to providing a better solution based on the findings of this study. Pre-service physical education teachers at Batangas State University have a first-aid background. They have taken one of their subjects concerning emergency preparedness and safety management, which they can use in teaching Physical Education in the future. It encompasses the knowledge and first aid skills they can use in the classroom and community. Thus, they may have the knowledge or background in first aid, but they may need to improve in performing and rendering it. The Physical Education teacher should have basic first aid concepts to act appropriately when necessary.

The researchers believe acquiring knowledge and first aid skills can improve the instruction of Physical Education. Thus, no matter how proactive a teacher can be, there will be possibilities that an unnecessary situation may occur because it is movement education. This study will help pre-service physical education teachers overcome extreme circumstances in the classroom or community.

This scenario led the researchers to conduct this study as it is a significant issue that needs to be addressed. Safety and competence in rendering first aid are necessary for their subject. This study will help the pre-service teachers improve their competence in first aid and raise awareness of how essential it is to learn first aid. The first aid skills training activities encompass knowledge, skills, and situations that may require first aid.

The study aimed to determine the first aid skills of the pre-service Physical Education teachers at Batangas State University. The research objectives were to assess the extent of manifestation of competencies in providing first aid skill components, including Cardiopulmonary Resuscitation (CPR), management of bleeding, and fracture, as assessed by both the instructor and the students themselves. Furthermore, the study aimed to compare the responses of the two groups of respondents and ascertain the issues and challenges related to developing first aid skills.

## **METHOD**

### **Study Design and Participants**

The study aimed to determine the first aid skills of the preservice Physical Education teachers at Batangas State University. The researchers utilized the descriptive research method as it accurately presented the necessary data for the study. According to [Thyer \(2009\)](#), descriptive research aims to characterize features of a sample as well as links between phenomena, settings, and events seen by the researcher. Researchers hope to do this by better understanding and quantifying how variables are naturally distributed.

The study involved 159 second, third, and fourth-year students in the Bachelor of Physical Education program at Batangas State University's Pablo Borbon and JLPC-Malvar campuses, along with 27 Physical Education teachers from these campuses, totaling 186 respondents. No sampling method was used as the researchers included the entire population.

### **Research Instruments**

This is a quantitative research study. The primary data collection tool utilized was the researcher-made questionnaire. To collect relevant data, researcher-made questionnaires were used as the primary tool. The researchers created questionnaires that will help them achieve the objectives of the study, which is to determine the respondents' extent of manifestation of competencies in providing first aid as assessed by the instructors and students themselves, along with cardiopulmonary resuscitation, management of bleeding, fracture, find the differences in the assessments by the two groups of respondents, and ascertain the issues and challenges in the development of first aid skills to propose first aid training activities.

Construction. The questionnaire items were created using the ideas and insights gleaned from published books and unpublished materials that cover every aspect of first aid. The survey questionnaires were divided into two parts. The first part focused on the respondents' extent of manifestation in providing first aid as assessed by the instructor and students, along with cardiopulmonary resuscitation, management of bleeding, and fracture. In comparison, the second part focused on determining the issues and challenges in developing first aid skills.

The researchers sought the assistance of their research adviser in correcting and modifying their survey questionnaires, as well as possible suggestions for inclusion in the

questionnaires. The researcher ensured everything was for the instrument's further validation.

**Validation.** The experts' views and suggestions were considered in the final version of the questionnaire. The researchers sought validation from experts in the field after finishing the final draft of the questionnaire. Content validation was performed to verify that all questionnaire items were thorough and accurate. After that, the given ideas were incorporated into the finalization of the study instrument. The researchers created a final copy for distribution to the respondents.

**Administration.** Following that, to administer the research instrument, a formal letter was written, addressed, and sent to the dean of the colleges of Pablo Borbon and JLPC-Malvar campuses to seek permission to conduct the research study. After that, the approval of the requests is solicited. The questionnaires were created using Google Forms, and the link was distributed to the respondents. The data was tallied and properly accounted for before being subjected to statistical treatments with the assistance of a research statistician.

## Data Analysis

**Scoring of responses.** The researchers used a four-point scale, accompanied by verbal descriptors, to assess the extent of competencies in providing first aid skills, including CPR, bleeding management, and fracture care, as evaluated by instructors and students. They also used a four-point scale (Table 1) to determine issues and challenges in developing first aid skills and tallied and calculated responses from submitted google forms.

**Table 1.** Verbal Interpretation

Option	Range	Verbal Interpretation
4	3.50-4.00	Greatly Manifested/ Strongly Agreed
3	2.51-3.49	Moderately Manifested/ Agree
2	1.50-2.50	Slightly Manifested/ Disagree
1	1.00-1.49	Least Manifested/ Disagree

## RESULTS

### 1. Extent of Manifestation of Competencies in First Aid Skills

The term "extent of manifestation of competencies in providing first aid skills" means the ability of respondents to provide first aid in an emergency. The study assessed this ability in relation to CPR, bleeding management, and fracture management.

### Cardiopulmonary Resuscitation (CPR)

Table 2 presents the respondents' assessment of the extent of manifestation of competencies in providing first aid skills in cardiopulmonary resuscitation (CPR). It includes different proper techniques and skills in rendering cardiopulmonary resuscitation.

**Table 2.** Extent of Manifestation of Competencies in Terms of Cardiopulmonary Resuscitation (CPR)

Cardiopulmonary Resuscitation	Instructors		Students	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Applying CPR when a specific situation necessitates.	3.39	Moderately Manifested	3.36	Moderately Manifested
2. Recognizing the victim's situation before performing CPR.	3.39	Moderately Manifested	3.40	Moderately Manifested
3. Recognizing if the victim is an infant, child, or adult before applying appropriate procedure of CPR.	3.55	Greatly Manifested	3.65	Greatly Manifested
4. Laying the person on their back and opening their airway.	3.55	Greatly Manifested	3.48	Moderately Manifested
5. Securing the victim's area safe.	3.77	Greatly Manifested	3.67	Greatly Manifested
6. Contacting local medical authorities for assistance.	3.71	Greatly Manifested	3.66	Greatly Manifested
7. Checking victim's breathing and pulse.	3.58	Greatly Manifested	3.77	Greatly Manifested
8. Performing proper chest compressions.	3.52	Greatly Manifested	3.54	Greatly Manifested
9. Performing two rescue breaths correctly.	3.39	Moderately Manifested	3.47	Moderately Manifested
10. Checking the person to see whether they respond to verbal or physical stimuli before starting CPR	3.52	Greatly Manifested	3.69	Greatly Manifested
<b>Composite Mean</b>	<b>3.53</b>	<b>Greatly Manifested</b>	<b>3.57</b>	<b>Greatly Manifested</b>

As shown in Table 2, the instructors assessed that most students moderately manifested the skill of recognizing a victim's situation before performing CPR, as assessed by instructors. Before beginning any rescue efforts, assessing the victim's situation is crucial by checking for responsiveness. This supports The Response Institute's claim that determining the need for CPR is challenging. If the person is unresponsive, without a pulse, and their heart has stopped, start CPR immediately. Overall, the instructors assessed that students are highly proficient in administering CPR and can effectively apply a range of first aid skills. However, some students may lack sufficient knowledge to recognize the victim's situation before performing CPR and performing two rescue breaths correctly. Nevertheless, most students know how to administer CPR in an emergency, which is crucial for saving lives.

On the other hand, as reflected in Table 1, the student-respondents assessed themselves that they moderately manifested the skill of applying CPR when necessary, as assessed by themselves. This means that students are competent in performing CPR during emergencies. CPR is crucial when a person is not breathing, including situations such as cardiac arrest, near-drowning incidents, and suffocation. The purpose of administering CPR is to ensure oxygen-rich blood is delivered to the brain, which can double or triple the chances of survival after cardiac arrest. They are aware of proper CPR techniques, including checking for breathing and pulse and assessing responsiveness before administering CPR. While some students may need more familiarity with when to apply CPR, most know how to provide immediate response in emergencies.

### Management of Bleeding

Table 3 presents the respondents' assessment of the extent of manifestation of competencies in providing first aid skills in managing bleeding. It includes proper methods for stopping blood from leaking from the victim's body and first aid treatment.

**Table 3.** Extent of Manifestation of Competencies in Terms of Management of Bleeding

Management of Bleeding	Instructors		Students	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Taking off any clothing or debris from the wound.	3.43	Moderately Manifested	3.55	Greatly Manifested
2. Cleaning the wound thoroughly to avoid infection.	3.58	Greatly Manifested	3.61	Greatly Manifested
3. Identifying the type of bleeding to know what to do next.	3.47	Moderately Manifested	3.55	Greatly Manifested
4. Applying pressure to the wound with a clean cloth.	3.55	Greatly Manifested	3.39	Moderately Manifested
5. Selecting the appropriate antibiotic cream or ointment.	3.55	Greatly Manifested	3.42	Moderately Manifested
6. Immobilizing the injured body part as much as possible to avoid further blood loss.	3.57	Greatly Manifested	3.35	Moderately Manifested
7. Bandaging the wounded area to keep it clean and safe.	3.60	Greatly Manifested	3.52	Greatly Manifested
8. Elevating the limb for exceedingly high above heart level to reduce circulation to that area.	3.53	Greatly Manifested	3.45	Moderately Manifested
9. Using a tourniquet when a specific situation calls for it.	3.33	Moderately Manifested	3.48	Moderately Manifested
10. Contacting the local authorities for an ambulance if the bleeding does not stop.	3.58	Greatly Manifested	3.32	Moderately Manifested
<b>Composite Mean</b>	<b>3.52</b>	<b>Greatly Manifested</b>	<b>3.46</b>	<b>Moderately Manifested</b>

As reflected in Table 3, the instructors' responses indicate that physical education students' manifestation of competencies in providing first aid for bleeding management

falls into the category of moderately manifested. They find removing debris and cleaning the wound easier than other indications, but some students need to gain knowledge of immobilizing injured body parts and local emergency hotlines. However, most students demonstrate an adequate understanding of stopping bleeding and providing first aid, which is essential in emergencies.

On the other hand, the composite means of Bachelor of Physical Education students' manifestation of competencies in managing bleeding is greatly manifested as assessed by themselves. They demonstrate awareness of proper wound care to prevent infection and speed up healing, with ease in cleaning and bandaging wounds. While tourniquets have the least weighted mean, most students have adequate knowledge of stopping bleeding and providing first aid, which is crucial in emergencies.

### Fracture

Table 4 presents the respondents' assessment of the extent of manifestation of competencies in providing first aid skills in terms of fracture. It includes proper methods for attending to a fracture victim's body and first aid treatment.

**Table 4.** Extent of Manifestation of Competencies in Terms of Fracture

Fracture	Students		Teachers	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Retaining composure in the face of an emergency.	3.42	Moderately Manifested	3.68	Greatly Manifested
2. Identifying the type of fracture that has occurred.	3.42	Moderately Manifested	3.32	Moderately Manifested
3. Securing the injured victim's area.	3.56	Greatly Manifested	3.58	Greatly Manifested
4. Supporting and securing the joints near the suspected fracture site.	3.48	Moderately Manifested	3.65	Greatly Manifested
5. Making the victim understand the importance of immobilization in order to secure the fractured site.	3.61	Greatly Manifested	3.48	Moderately Manifested
6. Placing a splint above and below the fractured site.	3.38	Moderately Manifested	3.39	Moderately Manifested
7. Adding padding to the injury to provide extra support.	3.43	Moderately Manifested	3.35	Moderately Manifested
8. Using an ice pack or ice cubes wrapped in a clean cloth to relieve pain.	3.49	Moderately Manifested	3.55	Greatly Manifested
9. Examining the victim for signs of shock and assisting them in finding a comfortable position, encouraging them to rest, and reassuring them.	3.60	Greatly Manifested	3.52	Greatly Manifested
10. Observing the victim until help arrives	3.69	Greatly Manifested	3.74	Greatly Manifested
<b>Composite Mean</b>	<b>3.51</b>	<b>Greatly Manifested</b>	<b>3.53</b>	<b>Greatly Manifested</b>

As shown in [Table 4](#), the instructors' assessments indicate that students have demonstrated great competence in providing first aid for fractures. This suggests that students know how to respond during a fracture-related emergency. Physical education students understand the importance of observing, examining, and assessing the victim's condition until help arrives, and they can remain composed in the face of an emergency. However, some students may need to learn to use splints for mobilization, resulting in a lower weighted mean. Overall, most students have adequate knowledge of first aid procedures for fractures, which is crucial during emergencies, as highlighted by [Nanassy et al.'s \(2020\)](#) study on the importance of being informed and trained during emergencies involving uncontrolled hemorrhage.

On the other hand, the student's self-assessment showed a high level of competency in providing first aid for fractures, with a composite mean rating of "greatly manifested." This indicates that physical education students are knowledgeable and able to apply different competencies in providing first aid, particularly in treating fractures. Students have a good understanding of the proper skills required for giving first aid treatment for fractures. They can easily observe the victim until help arrives and explain the importance of immobilization. However, there needs to be more familiarity or knowledge regarding the placement of splints above and below the fractured site, resulting in the lowest weighted mean but still being moderately manifested. Overall, most students possess adequate knowledge of the proper procedure of first aid for fractures, which is crucial in emergencies.

## 2. Comparison of responses by the two groups of respondents

[Table 5](#) shows the difference in the assessment of two groups of respondents on the extent of manifestation of competencies in providing first aid skills.

**Table 5.** Difference on the Assessment of Two Groups of Respondents on the extent of manifestation of competencies in providing first aid skills

Items	t-value	p-value	Decision on H <sub>0</sub>	Verbal Interpretation
CPR	0.887	0.376	Failed to Reject H <sub>0</sub>	Not Significant
Management of Bleeding	0.932	0.353	Failed to Reject H <sub>0</sub>	Not Significant
Fracture	0.162	0.871	Failed to Reject H <sub>0</sub>	Not Significant

[Table 5](#) shows no significant difference between the two groups of respondents on the extent of competencies in providing first aid, as validated by their t-value and p-value for CPR, bleeding management, and fracture, all greater than the .05 significance level.

This acceptance of the null hypothesis suggests that the two groups have the same competencies in providing first aid, indicating that most respondents have lifesaving first aid skills.

### 3. Issues and Challenges Encountered in the Development of First Aid Skills

Table 6 summarizes respondents' perspectives on the issues and challenges they encountered while learning first aid. It indicates and encompasses various potential issues and challenges that may interfere with one's focus on learning first aid skills.

**Table 6.** Assessment on the Issues and Challenges Encountered in the Development of First Aid Skills

Issues and Challenges	Instructors		Students	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Attendance to training and workshop related to first aid	3.77	SA	3.68	SA
2. Delivering consistent trainings	3.61	SA	3.60	SA
3. Cost of first aid training seminars	3.71	SA	3.58	SA
4. Times and content issues	3.71	SA	3.51	SA
5. Availability of first aid training equipment	3.71	SA	3.64	SA
6. Mode of instruction in first aid training program	3.71	SA	3.58	SA
7. Feedback and support system of the first aid training program management	3.71	SA	3.57	SA
8. Linguistic barriers to communications	3.61	SA	3.45	A
9. Assertiveness and self-confidence in participating to training program related to first aid	3.71	SA	3.57	SA
10. Latest technological advancements in teaching first aid skills	3.74	SA	3.60	SA
<b>Composite Mean</b>	<b>3.70</b>	<b>Strongly Agree</b>	<b>3.58</b>	<b>Strongly Agree</b>

As shown in Table 6, the instructors' assessment of the issues and challenges encountered in developing students' first aid skills shows a strong agreement with the composite mean. This indicates that pre-service physical education teachers need help acquiring these skills. The students themselves also identified attendance to first aid training programs as a major hindrance, with a high weighted mean. Although linguistic barriers to communication and consistent training delivery had the lowest weighted mean, they were still ranked as strongly agreed. Most items were strongly agreed upon, indicating that students face challenges acquiring first aid skills.

Similarly, the composite means of the student's assessment on issues and challenges in developing first aid skills is strongly agreed upon, indicating that students encounter hindrances and challenges in acquiring these skills. Most students considered attending

first aid training programs as the biggest hindrance, with a high weighted mean. Although linguistic communication barriers had the lowest weighted mean, they were still rated as agree. Overall, most items were strongly decided upon, with only one rated as arranged, which suggests that students face challenges in acquiring first aid skills.

## DISCUSSION

Physical education teachers should undergo training in first aid and CPR to effectively respond to medical emergencies. According to [Zayapragassarazan \(2016\)](#), teachers must possess the ability to assess vital signs and administer basic first aid, including CPR, bleeding management, and fracture management. To enhance students' CPR skills, it is imperative to provide more opportunities for practice, such as applying CPR when necessary and executing two rescue breaths accurately. Programs that facilitate hands-on learning and discussion about emergencies have been shown to increase students' willingness to act in emergency situations ([Buckley et al., 2009](#); [Oliver et al., 2014](#)).

In addition, frequent practice drills can help physical education instructors assess their readiness and enhance student CPR proficiency ([Zayapragassarazan, 2016](#)). Equipping physical education teachers with these skills is crucial for ensuring the safety and well-being of students.

Proper first aid for bleeding is essential to avoid serious complications ([Holland, 2018](#)). [Spahn \(2019\)](#) identified uncontrolled bleeding as the leading cause of preventable death after trauma. A study by [Habib et al. \(2018\)](#) revealed that students were proficient in cleaning wounds but less competent in promptly contacting emergency services for persistent bleeding. Notably, students exhibited moderate competence in using a tourniquet, the least highly rated bleeding management skill. These findings suggest that targeted training in specific areas is necessary to improve students' first aid skills ([Habib et al., 2018](#)).

Emergency preparedness training is indispensable for teachers, given that children spend a significant portion of their day at school and are vulnerable to emergencies ([Olympia, 2020](#)). Teachers should be adequately trained to respond effectively to emergencies in school settings, with a focus on proper first aid for bleeding to prevent further harm.

A fracture, defined as a break in a bone or cartilage, can be life-threatening depending on the severity of the trauma. Studies indicate that fractures are more common

in older children during PE classes, possibly due to increased mobility and engagement in more advanced physical activities (Sheen & Garla, 2022; Clementsen & Randsborg, 2014).

Students demonstrated the highest competence in observing a victim until help arrived when treating fractures but were least competent in identifying the type of fracture. Both teachers and students agreed that students were generally proficient in first aid skills for treating fractures. Students self-assessed as most competent in observing the victim until help arrived and least competent in placing a splint above and below the fracture site.

Teachers and students exhibit similar competencies in providing first aid skills, including CPR, bleeding management, and fracture management. This underscores the importance of basic first aid knowledge and skills for both instructors and students in school settings (Celik, 2013).

Basic first aid training should be universally provided, encompassing both instructors and students, as individuals with first aid skills can play a crucial role in saving lives. Given their likely role as first responders in school accidents, teachers, in particular, should undergo comprehensive first aid training (Pelinka et al., 2004).

Identifying risk factors is crucial for effective first aid education and training. The first aid experience of teachers is especially important, as nurses may design and implement health education initiatives for community empowerment, indirectly empowering students to respond to accidents or emergency situations until help arrives (Al Hosis et al., 2013; Al Yahya et al., 2019; Masih et al., 2018). The study found a strong agreement among both instructors and students regarding the significance of attending first aid training and workshops as a major issue and challenge in developing first aid skills.

## CONCLUSION

The findings show that BPEd students greatly manifest first aid skills in CPR, managing bleeding, and treating fractures but need improvements in specific competencies. There was no significant difference in the assessment between the two groups of respondents. However, attendance at training and workshops was the primary issue and challenge in developing the first aid skills of BPEd students.

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## CONFLICT OF INTEREST

The author officially certifies that there are no conflicts of interest with any party with respect to this research.

## AUTHOR'S CONTRIBUTION

Mauricio Atienza Jr., Kyla Marie Maralit, and Chino Randel Odello wrote the full work and presented excellent and informative research related to first aid. While Davidsol Mendoza served as the adviser and mentor to accomplish the research paper.

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