

The Importance of First Aid in Physical Education and sports Classes at the Primary School

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Abstract:

The study aimed to identify the possibility of providing treatment and reducing injuries during physical and sports education classes for primary school students, by the physical education teacher, who is considered the person primarily responsible for the class. The study was conducted on 25 teachers, selected randomly as the sample. We relied on the descriptive method through the distribution of questionnaires to primary-level teachers, after verifying the scientific validity conditions of the instrument. Percentages (%) and the Chi-square (χ^2) test were used as statistical tools to analyze the study's results. Ultimately, the study results confirmed the validity of the hypotheses: that the physical and sports education teacher is knowledgeable in first aid, and that this knowledge contributes to reducing the severity of injuries among primary school students; and that a teacher's knowledge of first aid is essential for identifying the type of injury and how to treat it, thereby reducing the severity of student injuries. Accordingly, the researchers recommended the necessity of training teachers in first aid.

Keywords: First aid, physical education teacher, injuries, physical education class.

Introduction:

Physical and sports education is an integral part of a broader, comprehensive educational system, subject to the same goals that education as a whole seeks to achieve. Logically, physical education is an inseparable part of holistic education, requiring educators more than mere trainers — as the saying goes, "a sound mind in a sound body," meaning that a healthy body possessing strength and muscular coordination is evidence of the soundness and vitality of its owner's mind. It works to develop and shape the student's personality, preparing them physically and mentally in complete balance. (Ministry of National Education, 2006, p.24).

The relationship between physical and sports education and health has never been as strong as it is today — it is a means toward a better, healthier life. Health should be a goal the student maintains while engaging in physical activity and while striving to achieve society's objectives. This becomes clear through the goals physical and sports education achieves at the primary level: while practicing this activity, the student experiences physical and psychological comfort, since they are



living through childhood, a stage in which they express feelings and suppressed emotions and assert their freedom and existence as an individual who has not yet had the opportunity for self-affirmation.

No field of sports activity is free from the possibility of sports injuries of various kinds, whether natural or external — such as poor warm-up, fatigue, clothing, or physical preparation. Warming up helps the student physiologically and psychologically to perform a particular movement or sports activity. Injuries are defined as a disruption in the anatomical and physiological function occurring in certain body tissues and organs (Dhirgham Hasim Al-Nu'aimi, 2004, p.231).

Sports psychology has come to share certain subjects with other fields of expertise, though its perspective on these subjects is from an educational-sports point of view. Human movement is considered an important expression of behavior, which is regarded as one of the important aspects studied by sports psychology, falling within the scope of human movements.

Sports psychology research should not be limited to sports movements alone, as this could obscure important information needed to understand motor behavior, given its connection to mental, emotional, and social components. (Dr. Nahid Al-Dulaimi, 1994, pp. 110–112).

The aim is to enhance students' abilities to face the problems and obstacles they encounter throughout their sports participation, as well as to shape and develop specific traits, training, and psychological skills.

Through this research, we aimed to highlight the importance of first aid within physical education and sports classes at the primary school level; based on the foregoing, we can raise the following questions:

— What is the importance of first aid in physical education and sports classes at the primary school?

Sub-questions:

— What is the importance of first aid in physical education and sports classes at the primary school?

— is the physical and sports education teacher's knowledge of first aid necessary?

— Does the teacher's knowledge of the type of injury and how to treat it increase their effectiveness in reducing the severity of student injuries?

Sub-hypotheses:

— Understanding the importance of first aid in physical education and sports classes at the primary school .

— It is essential for the physical education and sports teacher to have knowledge of first aid.

— The teacher's knowledge of the type of injury and how to treat it increases their effectiveness in reducing the severity of student injuries.

Research Objectives:

To understand the role played by the physical education teacher in administering first aid to mitigate the severity of an injury.

— To attempt to identify the types of injuries students experience during physical and sports education classes.

— Raising teachers' awareness of the importance of first aid, and examining the types of injuries and first aid techniques.

Definition of Terms:

Physical Education Teacher:

Conceptually: An organizer of activities for the student's development, whose work is continuous and methodical, who must oversee the developmental process and monitor results — that is, achieve balance among the goals defined for the teacher's role. (Bouchnaf, Z., 1996, p.52).

Operationally: The person who teaches physical and sports education programs; several terms are used for this role, such as educator, instructor, and teacher.

First Aid:

Conceptually: The initial care given to a person who has been injured or suddenly taken ill; it is the urgent care and attention provided before the ambulance arrives. (Ehab Al-Saeed, 2007, p.03).

Operationally: The measures that can be provided by individuals present at the scene of an accident, or by those transporting the injured person, before reaching the hospital. This first aid may, in many cases, be the difference between life and death.

Injuries:

Conceptually: Damage to a tissue or organ resulting from a force greater than the resistance that tissue or organ can withstand. (Yassin Ramadani, 2008, p.202).

Operationally: An impairment affecting the student during the physical and sports education class, ranging from minor to severe.

Physical and Sports Education Class:

Conceptually: The smallest unit within the physical education curriculum, representing the smallest part of the subject while carrying all its characteristics. The overall plan of the school's physical education curriculum encompasses all aspects of activity the teacher wishes students to practice. (Mohamed Said Azmi, 1996, p.102).

Operationally: The process through which physical and sports activity is practiced within the educational institution, aiming to equip the learner with physical, cognitive, and social qualities, skills, and experiences.

Physical and Sports Education:

Conceptually: The educational process that aims to improve human performance through selected activities to achieve that goal. (Mohamed Hamed Al-Nasser, Khawla Darwish, 1997, p.20).



Physical education is an integrated part of the educational system; like other subjects, it contributes significantly to achieving the state's objectives for education and training the younger generation. It is taught throughout the educational path following a coherent curriculum based on continuity, gradual progression, and integration in the learning process, as the student acquires motor skills built on the development of physical capacities, in parallel with adaptation to various behavioral situations according to their level of maturity, within the framework of the competency-based approach adopted in its general vision of learning. (Attallah Ahmed, 2009, p.4).

Operationally: One of the branches of general education, drawing its theories and principles from various sciences. It is a method used by an individual to teach or help another individual or group of individuals acquire information, knowledge, and technical and physical abilities.

Presentation, Analysis, and Discussion of Questionnaire Results:

Research Methodology and Field Procedures:

Research Method:

Undoubtedly, any completed scientific work that aspires to scientific rigor must establish a plan, method, or approach that defines the steps followed to reach its results. Based on our study topic . The Importance of First Aid in Physical Education and sports Classes at the Primary School

we relied on the descriptive method because it is the most widely used research method, particularly in educational, psychological, social, and sports research. It is concerned with precise scientific descriptions of phenomena, describing and explaining the current situation, identifying common issues, and understanding the opinions, beliefs, and tendencies of individuals and groups and their patterns of growth and development. It also aims to study the relationships existing among different phenomena. (Ikhlas Mohamed Abdel Hafeez, Mostafa Hassan Al-Bahi, 2002, p.34).

Research Variables:

Independent Variable: The variable that the researcher assumes to be the cause, or one of the causes, of a particular outcome — a study that may reveal its effect on another variable (Nasser Thabet, 1984, p.59).

Definition of the Independent Variable: The Importance of First Aid

Dependent Variable: The variable affected by the independent variable; it depends on the effect of the values of the other variables, such that whenever changes are made to the values of the independent variable, they will appear in the dependent variable (Mohamed Hassan Alawi, 1999, p.219).

Definition of the Dependent Variable: Physical Education and Sports Class – Primary.

Research Population:



Conceptually, this is a group of elements that share one or more common characteristics that distinguish them from other elements, and upon which research and investigation are conducted (Maurice Angers, 2004, p.67).

The statistical population is also referred to as the "universe," and can be defined as all things possessing characteristics or traits that are observable, measurable, and subject to statistical analysis.

Research Sample:

The researcher attempted to define a sample for this study that would be more representative of the original population, allowing for results that could be generalized, even relatively, thereby producing results consistent with reality and giving a realistic picture of the field studied. A well-chosen sample makes the results generalizable to the population. Hence, we chose the sample randomly, using the descriptive method, selecting 25 teachers teaching at the primary level.

Research Tools:

A – Means of Information Gathering: These consisted of sources and references (books, dictionaries, scientific publications) in addition to previous studies.

B – Means of Data Collection: To conduct this research, we used a questionnaire form appropriate to the nature of the sample studied.

Statistical Tools for the Questionnaire:

The three-part method is considered the most commonly used for determining numerical data, used here to extract the percentage of data for each question. The percentage formula is as follows:

$$\text{Percentage} = (\text{Number of effective responses} / \text{Total responses}) \times 100$$

Chi-square:

The Chi-square (χ^2) test is a non-parametric test that relies on comparing observed frequencies (obtained through measurement) with expected (theoretical) frequencies.

The researcher performs statistical processing for the various categories of the qualitative variable by calculating (χ^2), converting the observed difference between the observed frequencies in the Chi-square table (χ^2) — the probability of this value occurring in the statistical population. Chi-square is used when there is one qualitative variable, or when there are two qualitative variables.

The Chi-square formula is as follows (Abdelkarim Bouhafs, 2006, p.193):

$$\chi^2 = \sum (\text{Observed Frequency} - \text{Expected Frequency})^2 / \text{Expected Frequency}$$

Standard error level = ($\alpha = 0.05$). **Degree of freedom ($r - 1$),** where **r** represents the number of categories.

χ^2 represents the value calculated through the tests.

t.h.: number of actual (expected) frequencies.

t.n.: number of theoretical (expected) frequencies (Abdelaine Saif Al-Samarrai, 1997, p.75).

Presentation, Analysis, and Discussion of Results:

First Axis: The Importance of First Aid in Physical Education and sports Classes at the Primary School



Question 1: Since being hired at the primary level, have you ever administered first aid to a student?

Purpose of the question: To determine whether the teacher has provided first aid to any of their students since being hired.

Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
Yes	22	91.66%					
No	03	08.34%	16.66	3.84	0.05	1	Significant
Total	25	100%					

Analysis and Discussion of Results:

Table (01) shows that 91.66% of teachers answered "yes," indicating they had previously administered first aid to an injured student during a physical education class, while 08.34% answered "no," meaning they had not previously done so.

The calculated χ^2 value (16.66) is greater than the tabulated χ^2 value (03.84), indicating statistically significant differences at a significance level of 0.05 and 1 degree of freedom.

Conclusion:

We conclude that the majority of teachers have provided first aid to an injured student during a physical and sports education class.

Question 2: Does a teacher's knowledge of first aid have positive implications for preventing student injuries?

Purpose of the question: A teacher's knowledge of first aid has positive implications for preventing the risks associated with student injuries.

Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
Always	21	83.33%					
Sometimes	04	16.67%	28	5.99	0.05	2	Significant
Never	00	00%					
Total	25	100%					

Analysis and Discussion of Results:

Table (02) shows that 83.33% A teacher's knowledge of first aid has positive implications for preventing injuries among students.



, while 46.50% A teacher's knowledge of first aid can sometimes help mitigate the severity of injuries sustained by students.

The calculated χ^2 value (28) is greater than the tabulated χ^2 value (5.99), indicating statistically significant differences at a significance level of 0.05 and 2 degrees of freedom.

Conclusion:

We conclude that a teacher familiar with first aid has positive effects in reducing the severity of student injury.

Second Axis: Knowledge of first aid among primary school physical education teachers.

Question 1: Have you previously received training in first aid?

Purpose of the question: To determine whether the teacher has taken a training course in first aid.

Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
Psychological comfort	25	100%	24	03.84	0.05	1	Significant
Tension	00	00%					
Total	25	100%					

Analysis and Discussion of Results:

Table (03) shows that 100% of teachers received training in first aid, while 00% did not receive such training.

The calculated χ^2 value (24) is greater than the tabulated χ^2 value (03.84), indicating statistically significant differences at a significance level of 0.05 and 1 degree of freedom.

Conclusion:

From the table above, we conclude that most teachers received training in first aid, given its importance in saving lives and reducing pain.

Question 2: In which situation does the importance of the teacher's awareness of first aid become most evident?

Purpose of the question: To identify the situation in which the importance of first aid becomes evident.

Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
Both together	23	91.67%	37	5.99	0.05	2	Significant



Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
During student injury	00	00%					
In the doctor's absence	02	8.33%					
Total	25	100%					

Analysis and Discussion of Results:

Table (4) shows that 91.67% of the teachers indicated that a teacher's knowledge of first aid is relevant when a student is injured in the absence of a doctor, whereas 8.33% believed that the value of such knowledge becomes apparent only when the doctor is absent.

The calculated χ^2 value (37) is greater than the tabulated χ^2 value (5.99), indicating statistically significant differences at a significance level of 0.05 and 2 degrees of freedom.

Conclusion: We conclude that the majority of teachers believe the teacher's awareness of first aid is important both during an injury and in the doctor's absence — that is, both together.

Third Axis: The teacher's knowledge of the type of injury and how to treat it contributes to reducing the severity of injuries among primary school students.

Question 1: Are you able to detect a student's injury when they try to hide it?

Purpose of the question: To determine whether the teacher can detect a student's injury despite the student's attempt to hide it.

Answer	Frequencies	Percentage	Calculated χ^2	Tabulated χ^2	Significance level	Degree of freedom	Significance
Yes	08	33.34%					
No	00	00%					
Sometimes	17	66.66%	16	5.99	0.05	2	Significant
Total	25	100%					

Analysis and Discussion of Results: Table (5) shows that 66.66% of teachers answered that they sometimes detect a student's injury when the student tries to hide it, while 33.34% indicated they can detect a student's injury when hidden.

The calculated χ^2 value (16) is greater than the tabulated χ^2 value (5.99), indicating statistically significant differences at a significance level of 0.05 and 2 degrees of freedom.

Conclusion: From the table above, we conclude that teachers can sometimes detect a hidden student injury, which is attributable to the teacher's field experience in detecting injuries.

Question 2: Once you identify the type of injury, do you administer first aid to the student immediately?

Purpose of the question: To determine whether the teacher administers first aid to the injured student immediately.

Significance	Degree of freedom	Significance level	Tabulated χ^2	Calculated χ^2	Percentage	Frequencies	Answer
Significant	2	0.05	5.99	45	00%	00	I help
					91.66%	22	I sometimes help
					8.33%	3	I do not help
					100%	25	Total

Analysis and Discussion of Results: Table (6) shows that 91.66% of teachers answered that they sometimes administer first aid to an injured student immediately upon recognizing the type of injury, while 8.33% do not intervene directly to help the injured student.

The calculated χ^2 value (45) is greater than the tabulated χ^2 value (5.99), indicating statistically significant differences at a significance level of 0.05 and 2 degrees of freedom.

Conclusion: From the table above, we conclude that teachers sometimes assist an injured student as soon as they recognize the type of injury, which relates to their intervention in serious injuries requiring intervention to reduce their severity.

General Conclusion:

Based on the results obtained and the confirmation of the hypotheses formulated to answer the research question regarding the extent to which The Importance of First Aid in Physical Education and sports Classes at the Primary School

A physical education teacher who knows first aid can address a student's need for energy replenishment when performing difficult movements.

Most of the physical and sports education teacher's interventions increase the injured student's chances of survival.

Even though the instructor is skilled in first aid, this does not alleviate the injured person's pain; rather, it prevents the injury from worsening—which is precisely the role of the first responder.



- The physical and sports education teacher's knowledge of first aid increases the injured person's chances of survival.
- The teacher intervenes to reduce the injury's severity, even without equipment, by offering advice and guidance.
- Most injuries occur in team and combat sports, resulting from excessive roughness, over-enthusiasm, and performance errors.

Suggestions:

This study is merely a modest attempt, limited by the resources available. Nevertheless, we wanted to provide a starting point for further, more expansive and in-depth research in this field, which our library lacks:

- It is recommended that a health file be established for each student.
- The need to raise awareness about the risks of sports injuries and how to treat them.
- The establishment and nationwide promotion of sports facilities, and the encouragement of school sports.
- Attention to media outreach and efforts to spread a culture of first aid.
- Providing medical staff within educational institutions along with all necessary first aid supplies.
- The need to pay attention to the physical and sports education class by providing all means to achieve its educational goals.

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