

Student's Awareness in Basic First Aid and their Academic Performance



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ABSTRACT: Emergency cases and any untoward incidents may happen anytime and anywhere. Thus, first aid is an invaluable skill one must learn. Since children spend considerable time at school, knowledge, and awareness in first aid is important especially in situations requiring the skill. This quantitative inquiry investigated the level of awareness of students in performing basic first aid and explores the relationship to their academic performance. It utilized a researcher-made questionnaire to answer the descriptive and inferential questions. It was revealed that students are in high level in performing first aid in burns, wounds and bleeding, and fracture considering the variables. Thus, a very satisfactory level was culled out. In addition, a significant difference exists in their level of awareness and academic performance of students when grouped according to sex, and section. But, there was a positive significant relationship between the student's awareness in performing first aid and their academic performance. Therefore, the two major areas have direct relationship. It is recommended that a regular emergency awareness campaign be conducted to students to maintain and improve to a highest level. As such, teachers should be provided with the trends in emergency response to effectively teach the concepts of first aid in high competence.

KEYWORDS: Health, first aid, awareness, academic performance, students, quantitative, Philippines

INTRODUCTION

First aid is an invaluable skill one must learn. Emergency cases and any untoward incidents may happen anytime and anywhere (Jose, 2015). Thus, awareness in performing basic first aid is essential. Thus, first aid is defined as the initial, immediate, temporary care given to an injured or sick person in life threatening situations and taking effective action to keep the injured or ill person alive and in the best possible condition until emergency medical services and treatment can be obtained (Mathew, Salman, Khurshid and Luke, 2016). Consequently, to save someone from severe situations, one must be aware on how to deal with common emergencies such as burns, wounds and bleeding, and fracture.

Knowledge and awareness of first aid measures is important for every individual at every age, including school children (Baser, 2017). Because children spend considerable time at school when they are not with their families, situations requiring first aid often are encountered out there. In addition, students represent good source of information that can be transformed to the community. Therefore, many studies have emphasized that teaching basic first aid should be compulsory in all schools (Eisenburger and Safar, 2015). School children are highly exposed to emergency situations since there is an increase of physical activity. Particularly adolescents and secondary school-age students (equivalent to high school) are at greater risk of emergency situations and accident incidents with the severest consequences (Tursz, 2016), due to increased involvement to strenuous violent act and riskier physical behavior. On the other hand, the knowledge of first aid is not related to people's education levels (Emir and Kus, 2015, Davies, et al., 2013). Hence, any kind of education including traditional methods improve the first aid education of students (Davies, et al., 2013).

The Department of Education has added topics on basic first aid along with basic survival skills in the curriculum of MAPEH (Music, Arts, Physical education, and Health). This is to address the vision and mission of the Department of Education which is to produce graduates who are ready to face the real world. Thus, learning essential skills of basic first aid makes every learner capable of facing even life-threatening situations. The researchers, being MAPEH teachers has seen the importance of teaching awareness in performing basic first aid among students. This would prepare the students to be ready in case of emergencies and it would help them know on what to do during these times. Though, basic first aid is being taught in school, the researchers wanted to determine whether the students have internalized the things to be done in performing basic first aid

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and whether this learning could be confidently performed by the students when they face emergencies. Hence, this study was conducted.

METHODS

A descriptive research design in the form of survey was used in this study. It is used to gather information on current situations and conditions that helps provide answers of who, what, when, where and how of a particular research study (Prieto, Naval and Carey, 2018). Moreover, the researcher gathered data using the survey-instrument where the characteristics of every respondent is reflected on it.

A sample of 295 out of 1117 Grade 9 students of Victorias National High School in Victorias City during the School Year 2018 – 2019 were taken as respondents of the study utilizing the stratified random sampling (Faltado, et al., 2016). This set of respondents evaluated their own level of awareness in performing basic first aid and were asked to give their grades in Health under their MAPEH subject. Moreover, the respondents were classified according to selected sex, section, and residence. As to the academic performance, they were categorized using the Department of Education standards: Outstanding, Very Satisfactory, Satisfactory, Fairly Satisfactory, and Did Not Meet Expectations.

The researchers developed their own survey-instrument that was used in gathering data. The self-made survey-questionnaire was further subjected to the approval of the jury of validators with a 4.69 validity index. This instrument was divided into two parts. Part I elicited personal information of the respondents which comprised sex, section, residence, and academic performance while Part II was the questionnaire proper with a total of 30 items: 10 for each of the common emergency (burns, wounds and bleeding, and fracture). Furthermore, to determine the level of awareness in performing basic first aid of the Grade 9 students, they were asked to rate the frequency of issues as observed, experienced, or practiced according to levels as 1 being very low to 5 being very high. Likewise, reliability testing follows with a Cronbach's alpha of 0.880. overall, the instrument used was both valid and reliable.

The data gathered were statistically analyzed using several statistical tools. To determine the level of awareness of students in performing basic first aid in the different common emergencies, and their academic performance the mean was utilized. Additionally, to determine if significant difference exist between awareness and academic performance, z-test was used. Likewise, to determine if relationship exist between two areas, Pearson r moment correlation coefficient was utilized.

RESULTS AND DISCUSSION

Results revealed that the level of awareness of students in performing basic first aid in the areas of burns, wounds and bleeding, and fracture showed a high level. This study contradicts with Goniewicz, et al. (2012) when it was found out that Polish high school students admitted that their first aid skills were insufficient. In addition, Sosada, et al. (2012) findings revealed that children (58.9%) represented inadequate level of knowledge. More so, Salcedo et al. (2015) study showed inadequate knowledge about first aid among the female students in Marikina City. Likewise, this is also in contrast with Parnell and his collaborates (2014) where a poor theoretical knowledge on first aid was found among high school students. Also, Jose (2015) found out that 13% high school students had poor knowledge of first aid. Consequently, Racomora, et al. (2015) found out that 2.5% had poor knowledge among students at primary schools. As such, Mathew, et al., (2016) emphasizes the need for compulsory first aid training program with practical activities. The overall result also contradicts the study of Romualdez and Dominguez (2017), in which among the different specific first aid management topics, fractures have the highest level of retention and at the same time supports them that burns is the last.

Table 1: Summary of the Level of Awareness in Performing Basic First Aid of Students in terms of Common Emergencies

Area	Mean	Interpretation
Burns	3.63	High Level
Wounds and Bleeding	3.76	High Level
Fracture	3.67	High Level
Over-all Mean	3.69	High Level

Specifically, in terms of the variable sex, sections, and residence, the level of awareness of students in performing first aid to burns are in high level. These imply that when burn emergency happens, students' immediate response is to call for medical help and suppress the flame by stop, drop, and roll action. For wounds and bleeding considering the variables sex, sections, and residence, the student's awareness level is in high level. Thus, students are very aware to wash their hands before and after they will perform the basic first aid, understand the ways or methods like raising limb above the heart to stop bleeding and the need

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to apply antibiotic cream and covering the wound with sterile bandage. Finally, in terms of fracture, the level of students' awareness in performing basic first aid in the variables of sex, sections, and residence in in high level. This implies that students have idea on how to make and apply an improvised splint and seek medical help if the situation is severe like that of the limb or joints appearing to be deformed.

Table 2: Summary of the Level of Awareness in Performing Basic First Aid of Students in terms of Variables and Common Emergencies

Variables	Area	Mean	Interpretation
Sex	Burns	3.63	High Level
	Wounds and Bleeding	3.76	High Level
	Fracture	3.68	High Level
Sections	Burns	3.62	High Level
	Wounds and Bleeding	3.76	High Level
	Fracture	3.67	High Level
Residence	Burns	3.63	High Level
	Wounds and Bleeding	3.76	High Level
	Fracture	3.67	High Level

Results also showed that the level of academic performance of students was at a very satisfactory level when they were Grouped According to all selected variables such as sex, section, and residence.

Table 3: Summary of the Level of Academic Performance of Students in terms of Variables

Variable	Category	Mean	Interpretation
Sex	Male	84.04	Very Satisfactory
	Female	85.33	Very Satisfactory
Section	Lower	82.83	Very Satisfactory
	Upper	86.28	Very Satisfactory
Residence	Rural	84.76	Very Satisfactory
	Urban	84.59	Very Satisfactory

Analysis of data revealed that there was no significant difference on the level of awareness in performing basic first aid of students when they were grouped and compared according to residence. Thus, the place of residence of the students does not cause variations in their level of awareness in performing basic first aid. This supports Alhejaili and Alsubhi (2016) since they found out a significant result showed that the level of first aid knowledge and awareness of the respondents does not differ if the variable of geographic location is considered. On the other hand, analysis of data revealed that there were significant differences on the level of awareness in performing basic first aid of students when they were grouped and compared according to sex and section. The mean scores also suggest that the female students who belongs to upper sections performed better than male in lower sections. Unlike in the study of Alhejaili and Alsubhi (2016), it was showed that the level of first aid knowledge and awareness of the respondents does not differ if the variable sex is considered. Likewise, Mathew, et al., (2016), found out that the students' level of knowledge and awareness of first aid showed no significant differences when grouped according to sex. Parnell and collaborates [2014]; Racomora, et al. (2015); and Jose (2015) also had contrasting findings with this study in which no significant difference existed in the level of awareness on basic first aid among students when they were grouped according to age.

Table 4: Comparative Analysis on the Level of Awareness in Performing Basic First Aid of Students when they were grouped And compared according to Selected Variables

Variables	Categories	N	Mean	z-Value	Level of Significance	p-value	Interpretation
Sex	Male	152	3.61	-2.046	0.05	0.042	Significant
	Female	143	3.77				
Section	Lower	139	3.61	-1.975		0.049	Significant
	Upper	156	3.76				

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Residence	Rural	122	3.63	-1.225		0.222	Not Significant
	Urban	173	3.73				

Another analysis was revealed that there were significant differences on the level of academic performance of students when the students were grouped and compared according to sex and section. Male students differ from the female in terms of academic performance as well as those students who belong to lower and upper sections. The female performed better than the male. Likewise, students belonging to upper sections performed better than those who belong to lower sections. However, no significant difference exists on the level of academic performance when the students were grouped and compared according to residence. Thus, the place or area where the students reside does not cause variations in the students' academic performance. This study supports Finger and Schlessler (2014) in which they revealed that regardless of sex, male and female students perform equally when it comes to academic achievements.

Table 5: Comparative Analysis on the Level of Academic Performance of Students when they were grouped and compared according to Selected Variables

Area	Categories	N	Mean	z-Value	Level of Significance	p-value	Interpretation
Sex	Male	152	84.04	-2.386	0.05	0.018	Significant
	Female	143	85.33				
Section	Lower	139	82.83	-6.676		0.000	Significant
	Upper	156	86.28				
Residence	Rural	122	84.76	0.308		0.759	Not Significant
	Urban	173	84.59				

Furthermore, a significant relationship between level of awareness in performing basic first aid and students' academic performance was revealed. In addition, the positive correlation also implies that the level of awareness in performing basic first aid is directly proportional to students' academic performance. In this case, if the level of awareness in performing basic first aid is high, then the level of academic performance will also be high. On the other hand, if one variable decreases, then the other variable likewise decreases. A supportive study conducted by Gertrundt (2016) explored on the expertise of middle school students when it comes to performing first aid as it is correlated with their academic performance; results revealed that those with higher scholastic index tend to have higher level of expertise skills and knowledge in first aid as compared to those with lower academic performance. This has been linked that intelligence quotient play a factor in mastering basic life skills such as first aid.

Table 6: Relational Analysis between Level of Awareness in Performing Basic First Aid and Level of Students' Academic Performance

Variables	r-Value	Level of Significance	p-Value	Interpretation
Level of Awareness in Performing Basic First Aid vs Academic Performance	0.153	0.05	0.008	Significant

SUMMARY OF FINDINGS

The students had "high level" of awareness in performing basic first aid in all common emergencies: burns, wounds and bleeding, and fracture were considered. In terms of all common emergencies: burns, wounds and bleeding, and fracture, the students had "high level" of awareness in performing its basic first aid even when these students were grouped according to sex, section, and residence. Also, students were performing at a very satisfactory level and even when they were grouped according to sex, section, and residence. Likewise, significant differences exist on the level of awareness in performing basic first aid when students were grouped and compared according to sex and section, but the variable residence showed no significant difference. Moreover, significant differences exist on the students' level of academic performance when they were grouped and compared according to sex and section, but the variable residence showed no significant difference. Lastly, there was a significant relationship between level of awareness in performing basic first aid and the level of students' academic performance.

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CONCLUSIONS

Since the students had "high level" of awareness in performing basic first aid in all common emergencies: burns, wounds and bleeding, and fracture were considered, it is concluded that the students have been mastering the concepts and skills regarding basic first aid with respect to these abovementioned common emergencies. However, the students still have many things to learn and experience for them to possess the highest level of awareness in performing basic first aid. Moreover, students in public schools have almost the same level of awareness in performing basic first aid.

Since the results revealed that in terms of all common emergencies: burns, wounds and bleeding, and fracture, the students had "high level" of awareness in performing its basic first aid even when these students were grouped according to sex, section, and residence, it is concluded that students already had an idea on how basic first aid is performed which are possible because of the lessons they learned from school, the movies that showed first aid, and the like. Additionally, since the students were performing at a very satisfactory level even when they were grouped according to sex, section, and residence, it is concluded that students do not feel that MAPEH curriculum is a difficult one unlike with other subjects where most of the students showed below mastery results reflected in their Mean Percentage Score in the National Achievement Test. Moreover, students in public schools are performing of the same level regardless of their school.

The findings showed significant differences existed on the level of awareness in performing basic first aid when students were grouped and compared according to sex and section, but the variable residence showed no significant difference. Hence, it is concluded that to some extent, the students' section and even their sex may influence their level of awareness in performing basic first aid. Thus, the male differs from the female. More so, with the section they belong, those students who belonged to the upper the section the higher their level of awareness becomes since they were the ones who finish the competencies. On the other hand, those who belonged to lower sections are often late and problems on attendance exists among learners. About the residence, it does not affect the level of awareness in performing basic first aid among the students.

The findings revealed that significant differences existed on the students' level of academic performance when they were grouped and compared according to sex and section, but the variable residence showed no significant difference. Hence, the male and female differ from each other same is true with the kind of section where they belong. It is observed that those belonging to upper sections performed well and were fast in finishing the lesson unlike those who belonged to the lower sections since the latter has some issues with the attendance and even performance and participation. Though, the students' area of residence does not contribute to the significant differences in their academic performance.

There was a significant relationship between level of awareness in performing basic first aid and the level of students' academic performance. Hence, the academic performance in their MAPEH especially in Health component of the said subject of the students is affected by their level of awareness in performing basic first aid. Much more, that their level of awareness in performing basic first aid is influenced by their level of academic performance. If the student has higher level of academic performance, it follows that more lessons were stored in his mind, and then it will be easier for him to recall the concepts and skills needed.

RECOMMENDATIONS

Since the students had "high level" of awareness in performing basic first aid in all common emergencies: burns, wounds and bleeding, and fracture were considered, it is recommended that this will be increased to its highest level if not maintained. This could be done by conducting a two-day "Emergency Awareness Campaign" to all students. In this activity, varied activities to campaign awareness in emergency situations will be given to students which will be presented through simulation, film showing, and demonstration regarding responses to varied emergency cases. These activities will be conducted by the collaboration among medical experts, the City Disaster Risk Reduction Management (DRRM) Officer, school DRRM focal person, school nurse, MAPEH teachers and others who possess expertise regarding basic first aid.

In addition, to maximize participation and appreciation among students, a grade level contest on print materials campaign on emergency awareness will be conducted. The students will create poster, tarpaulin, flyers, leaflets, newsletter, and the like which aim to show on how to respond to the common emergency situations such as burns, wounds and bleeding, and fracture. Since, the students were performing at a very satisfactory level and even when they were grouped according to sex, section, and residence; it is recommended that the level of academic performance of the students will be increased if not maintained. Moreover, it is believed that by equipping the teachers with the needed knowledge, skills and competences makes learning more effective. Hence, teachers to be able to become ready in their class should be provided with enough trainings on current trends and pedagogies in teaching. As such, future researchers who will be conducting similar investigations should look for other variables not covered in this study.

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REFERENCES

- 1) Davies, C.S., Colquhoun, M.C., Graham, S., Evans, T. and Chamberlain, D. (2012) Defibrillators in Public Places: The Introduction of a National Scheme for Public Access Defibrillation in England. *Resuscitation*, 52, 13-21.
- 2) Alhejaili AS, Alsubhi SA (2016) Knowledge and Attitude of First Aid Skills among Health Science Students at Taibah University. *J Gen Practice* 4:257. doi:10.4172/2329-9126.1000257
- 3) Baser, M. (2017) Evaluating First Aid Knowledge and Attitude of a Sample of Turkish Primary School Teachers. *Journal of Emergency Nursing*, 33, 428-432.
- 4) Eisenberg, M.S. and Mengert, T.J. (2011) Cardiac Resuscitation. *New England Journal of Medicine*, 344, 1304-1313.
- 5) Finger, J. A., & Schlessner, G. E. (1963). Academic performance of public and private school students. *Journal of Educational Psychology*, 54(2), 118-122.
- 6) Mathew, S.S., Parsa & Khurshid, Shibra & Luke, Alexander. (2016). Awareness of First Aid among Undergraduate Students in Ajman, UAE. *IOSR Journal of Dental and Medical Sciences*. 15. 30-38. 10.9790/0853-1506143038.
- 7) Romuladez, JW and Dominguez PK, (2017). Skills for life: First aid and cardiopulmonary resuscitation in schools. *Health Education Journal* Vol 76, Issue 8, pp. 1009 – 1023
- 8) Goniewicz, M., Chemperek, E. and Mikula, A. (2012) Attitude of Students of High Schools in Lublin towards the Problem of First Aid. *Wiadomosci Lekarskie*, 55, 679-685.
- 9) Jose, N. (2015) Awareness, attitude and practice of first aid among junior high school students in Oriental Mindoro. *J Prim Health Care* 7: 274-275.
- 10) Tursz, A. (2016) Epidemiological Studies of Accident Morbidity in Children and Young People. *World Health Statistics Quarterly*, 39, 257-267.
- 11) Salcedo C, Sacarias MN, Santana, B N (2015) A Study On Assessment Of Knowledge Attitude And Practices Regarding First Aid Among High School Students. *IntJCurrRes*7: 16873-16875.
- 12) Sosada, K., Zurawinski, W., Stepien, T., Makarska, J. and Myrcik, D. (2012) Evaluation of the Knowledge of Teachers and High School Students in Silesia on the Principles of First Aid. *Wiadomosci Lekarskie*, 55, 883-889.