

The Status of First-Aid Education and its Perception among Teachers at Elementary, Middle, and High Schools

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Abstract

Background/Objectives: It is a necessity for anyone to learn and to become aware of first aid; especially, learning and repeated training is important during school life. The purpose of this study was to explore the perception of first-aid education, as well as the accident and first-aid education status of teachers in order to improve their response abilities during emergency situations that occur in educational settings. **Methods/Statistical Analysis:** Structured surveys of 203 teachers in Korea were analyzed. Contents included 30 questions about the necessity and awareness of first-aid education. The collected data were analyzed using SPSS Version 23.0 for Windows and the statistical significance level was set at $p < .05$. **Findings:** 87 (43%) of the elementary, middle school, and high school teachers reported an experience of safety accidents, while 116 (57%) did not. There was high interest about first aid in 83% of the teachers. 88% of them with first-aid education were satisfied and 92% of teachers without such displayed strong intentions to get such a kind of training. 94% of teachers responded that students would also need first-aid education. **Improvements/Applications:** Because interest about first aid in teachers was very high, an execution plan of first aid education for all teachers ought to be established. Also, effective first-aid education programs with high participation rates need to be developed.

Keywords: Elementary, First-Aid Method, Middle and High School, Precaution, Safety, Teacher

1. Introduction

In schools, there are just as many accident risks as at home or society per se. Students are often emotionally sensitive, physically active, and in a peer group that lacks a certain level of reasoning and behavioral skills¹, so the odds of accident occurrence are above-average. Even if teachers take considerable caution and supervise conscientiously, student accidents in the education field happen incessantly². Compensations to teachers for emotional and financial damages are increasing. However it is difficult to deal with ever-rising numbers of accidents within schools

only with health-specialized teachers. This can no longer be neglected in school life and there needs to be urgent establishment of countermeasures for physical mishaps in school, as well as for defining the faculty's legal responsibilities^{3,4}. While various plans exist, the best one would be conducting teachers' safety education ("first-aid education")⁵. In an active perspective, schools have personnel and facilities for first aid education effects and because they have the most students, there are places where the effect of first-aid education can maximized. Thus, first-aid education is a measure to nurture understanding, capabilities, and knowledge about functions, and attitudes about

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safety that can occur in everyday life to both individuals and groups. Thus, such first-aid education is utilized as the most effective method to maintain health and life as such. It is a mandatory for anyone to learn first aid as a preventative⁶. The current status of first-aid education in Korean schools is that awareness about it is dismal², maintained as a formality, and - thence - few schools conduct regular education. Nonetheless, first-aid education must not be the limited to applications in medical, health, and sports⁸-related education: Much rather, there is need for a framework to prepare for unexpected accidents. If education and repeated training can be established in the elementary, middle, and high school education process, it will increase the possibility of responding efficiently to accidents⁹.

This study first explored the perceptions of teachers about first-aid education¹⁰, then identified problems, and eventually suggested plans for solutions with regard to emergency situations occurring in educational settings.

2. Methods

2.1 Sample

The survey was distributed to 32 elementary school instructors, 79 middle school instructors, and 81 high school instructors in a South Korean city. 203 copies were analyzed. There were 78 male (38%) and 125 female respondents (62%): 85% of the participants were in the age between 26 and 55 years.

2.2 Research Method

A structured survey composed of 30 questions was employed, including content about general characteristics such as gender, teaching experience, perception of the necessity for first-aid education, institutions where first-aid training had been received, direct experience, and similar content.

2.3 Analysis

The collected surveys were analyzed using SPSS Version 23.0 for Windows

3. Results

3.1 Experiences about Accidents

87 of the teachers (43%) reported experience about safety accidents and 116 (57%) did not. 51 % (n = 40) middle school teachers had experiences with safety accidents,

39% (n = 31) in high school, and 36% (n = 16) in elementary school (statistically, there was no difference, p >.05), shown in Table 1.

Table 1. Experience of safety accident (unit:n(%))

Division	Elementary Schools	Middle Schools	High Sschools	Total
Experience of an Accident				
Yes	16(36%)	40(51%)	31(39%)	87(43%)
No	27(64%)	39(49%)	50(61%)	116(57%)
$\chi^2=3.259, p=.196$				

3.2 Interest about First Aid

In the analysis of the questions about interest in first aid, 98 (49%) responded “high” and 68 (34%) “very high” which showed that 166 (82%) teachers had a high interest in first aid: E.g. 39 (88%) of elementary school teachers, middle school teachers 80% (63), and high school teachers 81% (65), although the differences were not statistically significant (p >.05), given in Table 2.

Table 2. Interest about first aid (unit:n(%))

Division	Elementary Schools	Middle Schools	High Sschools	Total
Interest				
Veryhigh	14(33%)	21(27%)	33(41%)	68(34%)
High	25(55%)	42(53%)	32(40%)	98(49%)
Neutral	5(12%)	15(20%)	14(17%)	35(17%)
Low	-		1(1%)	1(0%)
Verylow	-		1(1%)	1(0%)
$\chi^2=9.535, p=.299$				

3.3 First Aid Education

78 (38%) of the respondents had first-aid education experience, while 125 (62%) had not (n.s. at the p > .05 level), illustrated in Table 3.

Table 3. Experience of first aid education
(unit:n(%))

Experience \ Education	Elementary Schools	Middle Schools	High Sschools	Total
Yes	16(36%)	34(43%)	28(35%)	78(38%)
No	28(64%)	45(57%)	52(65%)	125(62%)
$\chi^2=1.186, p=.553$				

Out of the 78 subjects who had experience of receiving first aid education shown in Table 3, 37 (47%) responded "It was very helpful" and 32 (41%) responded "It was helpful". 88% (66) teachers were satisfied and there was no statistically significant difference ($p > .05$), given in Table 4.

Table 4. Satisfaction on first aid education
(unit:n(%))

Division \ Assistance in Education	Elementary Schools	Middle Schools	High Sschools	Total
Much help	10(67%)	13(38%)	14(49%)	37(47%)
Help	3(20%)	16(47%)	13(45%)	32(41%)
Normol help	2(13%)	3(9%)	1(3%)	6(8%)
Little help	-	2(6%)	1(%)	3(4%)
No help	-	-	-	-
$\chi^2=4.880, p=.559$				
$\chi^2=4.880, p=.559$				

125 subjects who had no experience of receiving first aid education, on the question about if first-aid education opportunity was given, 25 (20%) responded they would "actively participate" and 90 (72%) responded they would "participate if there is opportunity". It was found that 92% (115) of the subjects showed high intentions of receiving first aid education and there was no statistically significant difference ($P > .05$), given in Table 5.

Table 5. Opportunity for first aid education
(unit:n(%))

Division \ Willing to get education	Elementary Schools	Middle Schools	High Sschools	Total
Actively	5(18%)	6(13%)	14(27%)	25(20%)
Possibly	23(82%)	34(76%)	33(64%)	90(72%)
Usually	-	2(4%)	5(10%)	7(6%)
Seldom	-	3(7%)	-	3(2%)
Naver	-	-	-	-
$\chi^2=11.822, p=.066$				

3.4 Necessity of First-Aid Education in Schools

Regarding the necessity of first aid education in schools, 90 (44%) responded "very much necessary" and 100 (50%) responded "necessary". It was found that 94% (190) of subjects thought that first-aid education for students is also necessary and there was no statistically significant difference ($p > .05$), shown in Table 6.

Table 6. Necessity of first aid education in schools
(unit:n(%))

Division \ Necessary of first aid	Elementary Schools	Middle Schools	High Sschools	Total
Very necessary	24(55%)	32(41%)	34(42%)	90(44%)
Necessary	19(43%)	41(51%)	40(50%)	100(50%)
Neutral	1(2%)	6(8%)	6(8%)	13(6%)
Not necessary	-	-	-	-
Not at all necessary	-	-	-	-
$\chi^2=3.305, p=.508$				

4. Discussion

First-aid education instructs what to do about injuries and patients according to emergency situations and clearly warns about what not to do. It would be the mission of the teacher to attend to the safety of the students themselves if accidents occur in the school. In Korea, there is a separate health teacher at the school and it is operated in a way where all safety accidents at the school are entrusted with him or her¹¹.

In the study, it was found that 43% of teachers had experience about school safety accidents, but there were no significant differences on safety accident experiences. Looking at the school safety accident analysis by author in¹² a trend of gradual increases with 69,487 in 2009, 77,496 in 2010, and 86,468 in 2011 can be identified. Because most of the school accident processing is entrusted to the health teacher in Korea, there needs to be a systematic amendment for when such instructors are absent and first-aid education for acting teachers is not just very important but must be treated as an urgent issue¹³. Therefore, if responsibilities are given to all teachers to receive first-aid education and if they receive such, the students' safety will also enhance¹⁴.

Interest about first-aid education and teachers was very high with 83% and in the study by Author in¹⁵, 84.5% responded that first aid was necessary in the curriculum of universities¹⁵. With such education, students should be kept healthy, safe, and able to study with a peace of mind. Kwon Young-Guk (2015) stated that although many middle and high school students feel the need for first-aid education, the actual level of knowledge about safety awareness and first aid education was very low¹⁶.

This study found that an impressive 94% of teachers felt the need for first-aid education in schools. 92% showed high intentions of receiving education if there was an opportunity and it was found that 88% of teachers who had already received education were satisfied.

In the light of the contemporary situation where various accidents and acute illnesses are frequently occurring, there is a definite need to educate about the knowledge and function of first aid and to foster abilities for appropriate responses to emergency situations which includes students to protect others from accidents and illnesses.

5. Conclusion

This study found that 83% of teachers had a high interest in first aid. Since this is quite difficult in Korea's educational arena, mandatory systems ought to be established where first-aid education is guaranteed to be conducted simultaneously with multiple school teachers.

Second, 92% of teachers who had no experience of first-aid education would be willing to receive it

Third, 94% responded that there was a need for first-aid education conducted in schools. Because such interest was very high, execution plans of first-aid education for all teachers must be established. In addition, effective first-aid education programs must be developed that promise high participation rates.

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