

## International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# A Cross-Sectional Analysis of CPR Knowledge, Attitude, and Ability Among Students in Selected High Schools in Indore

Mrs. Vidyashri R<sup>1</sup>, Dr Sneha Sahay Youtham<sup>2</sup>

<sup>1</sup>Research Scholar, Malwanchal University, Indore

### Introduction

The Indian Medical Association estimated that if everyone in India received CPR training, it would save 500,000 lives each year. A technique known as cardiopulmonary resuscitation is used in order to keep a person's brain alive while other life-saving operations are carried out on them while they are unconscious. These procedures include: Rescue breathing and chest compressions are two of the life-saving techniques that will be administered in the event that a cardiac arrest is suspected. CPR training is highly recommended for anyone considering a career in the medical field (CPR). In recent years, the mortality toll from cardiac arrest has soared, turning the issue into a serious public health disaster throughout the globe. Although cardiac arrest has been the subject of extensive study in many industrialised nations, significantly less attention has been paid to the knowledge, attitudes, and abilities of secondary school students about CPR. The primary objective of this research was to gather information on current levels of cardiopulmonary resuscitation (CPR) knowledge, attitude, and performance so that it may be used to guide future studies and policies pertaining to health care, the process through which something is done

## Methodology

The investigation looked into a variety of educational institutions located in and around Indore. The assessment of the study was carried out using a rigorous methodology. The size of the sample, which was decided to be 200, was based on many factors, including a significance level of 0.5 and a proportional-to-population ratio. KAP was observed and evaluated on a consistent basis for the whole of the clinical trial. For the purpose of data collection, a methodical questionnaire was used, which was comprised of demographic questions as well as the researchers' own KAP questionnaire. Either the correct answer was rapidly filled in or it was circled first. The primary investigator, along with three other third-year anaesthesia students, was given a rundown of the subject matter and instructions on how to go about collecting data for the study. The results of the spreadsheet were put through a battery of statistical tests as soon as was humanly practicable after the data gathering process was completed. These tests included the chi-square test and the P-value for categorical variables. The threshold of significance that was chosen was a P-value that was lower than 0.05.

## Results

Adults make up a larger proportion of students enrolled in secondary schools (52%), compared to younger pupils (48%). The bulk of the students are either males (52%) or sophomores (62%), with males making up the majority (52% to 39% of the total). 96% of respondents expressed confidence in their ability to perform cardiopulmonary resuscitation (CPR). The findings indicated that virtually all of the respondents had some level of familiarity with CPR, with 83% of the male students participating in the survey. In terms of the amount of CPR knowledge, neither age nor gender had a significant influence; however, grade level and educational background did. Statistics revealed a significant difference (p 0.05).50 percent of the students in the sample watched a video lecture, 22 percent watched a video that was similar to it on YouTube, and 6 percent saw a movie on the topic. The vast majority of responders (80%) were under the impression that cardiac and respiratory arrests were the most typical circumstances that called for CPR. One in every 16 times that cardiopulmonary resuscitation (CPR) was performed, the patient passed away abruptly and unexpectedly. Participants in the exercise showed complete confidence in their capacity to perform cardiopulmonary resuscitation (CPR) in front of their colleagues and to react quickly and appropriately in the event of a real emergency. Only seven percent of those questioned had a negative outlook, while the remaining ninetythree percent were optimistic. The generational, educational, media, and political divides, together with the existing disparity in worldviews, have all contributed to the widening of this rift. Regarding cardiopulmonary resuscitation (CPR), there was no noticeable gender gap among the students' opinions. When asked why they were unable to perform cardiopulmonary resuscitation (CPR), almost all of the students (96%) claimed a lack of training and experience in actual CPR situations as the reason for their inability. Respondents to the survey indicated that they now had less trust in their ability to perform cardiopulmonary resuscitation (CPR). A p-value less than 05 indicates that you can be confident that your lack of expertise in performing cardiopulmonary resuscitation (CPR) is solely due to a lack of training.

<sup>&</sup>lt;sup>2</sup>Research Supervisor, Malwanchal University, Indore

## Conclusion

Students often lacked confidence in their capacity to perform cardiopulmonary resuscitation (CPR), display a positive attitude, or demonstrate knowledge of essential topics.

The vast majority of students took something of value away from their virtual learning environments (VLEs), and some of them have even gone on to make productive use of other online resources, most notably YouTube, to continue their education even when they are not physically present in a classroom setting. The majority of people who work in emergency situations are interested in studying cardiopulmonary resuscitation (CPR), with a specific focus on learning how to do chest compressions and the manikin breathing technique. This is because these are the two most important aspects of the skill. Due to the fact that they had never received CPR training, the majority of the participants lacked fundamental survival skills. When asked why they do cardiopulmonary resuscitation (CPR), the majority of respondents said that it is to assist victims of cardiac or respiratory arrest. Even though there was a lot of support for cardiopulmonary resuscitation among the rescuers, it wasn't enough. The level of instruction provided to students has a significant impact on their motivation to learn CPR.

#### References

- 1. Chamberlain DA, Hazinski MF. Education in resuscitation: an ILCOR symposium: Utstein Abbey: Stavanger, Norway: June 22–24, 2001. Circulation. 2003; 108:2575–2594LinkGoogle Scholar
- 2. Hazinski MF, Markenson D, Neish S, Gerardi M, Hootman J, Nichol G, Taras H, Hickey R, O'Connor R, Potts J, van der Jagt E, Berger S, Schexnayder S, Garson A, Doherty A, Smith SAmerican Heart Association; American Academy of Pediatrics; American College of Emergency Physicians; American National Red Cross; National Association of School Nurses; National Association of State EMS Directors; National Association of EMS Physicians; National Association of Emergency Medical Technicians; Program for School Preparedness and Planning National Center for Disaster Preparedness Columbia University Mailman School of Public Health.Response to cardiac arrest and selected life-threatening medical emergencies: the medical emergency response plan for schools—a statement for healthcare providers, policymakers, school administrators, and community leaders. Ann Emerg Med. 2004; 43:83—99CrossrefMedlineGoogle Scholar
- 3. Nichol G, Thomas E, Callaway CW, Hedges J, Powell JL, Aufderheide TP, Rea T, Lowe R, Brown T, Dreyer J, Davis D, Idris A, StiellIResuscitation Outcomes Consortium Investigators.Regional variation in out-of-hospital cardiac arrest incidence and outcome. JAMA. 2008; 300:1423–1431CrossrefMedlineGoogle Scholar
- 4. Sasson C, Rogers MA, Dahl J, Kellermann AL. Predictors of survival from out-of-hospital cardiac arrest: a systematic review and meta-analysis. Circ Cardiovasc Qual Outcomes. 2009; 3:63–81LinkGoogle Scholar
- 5. Van Hoeyweghen RJ, Bossaert LL, Mullie A, Calle P, Martens P, Buylaert WA, Delooz H. Quality and efficiency of bystander CPR. Belgian Cerebral Resuscitation Study Group.Resuscitation. 1993; 26:47–52CrossrefMedlineGoogle Scholar
- 6. Larsen MP, Eisenberg MS, Cummins RO, Hallstrom AP. Predicting survival from out-of-hospital cardiac arrest: a graphic model. Ann Emerg Med. 1993; 22:1652–1658CrossrefMedlineGoogle Scholar
- 7. Wik L, Steen PA, Bircher NG. Quality of bystander cardiopulmonary resuscitation influences outcome after prehospital cardiac arrest. Resuscitation. 1994; 28:195–203CrossrefMedlineGoogle Scholar
- 8. Gallagher EJ, Lombardi G, Gennis P. Effectiveness of bystander cardiopulmonary resuscitation and survival following out-of-hospital cardiac arrest. JAMA. 1995; 274:1922–1925CrossrefMedlineGoogle Scholar
- 9. Valenzuela TD, Roe DJ, Cretin S, Spaite DW, Larsen MP. Estimating effectiveness of cardiac arrest interventions: a logistic regression survival model. Circulation. 1997; 96:3308–3313CrossrefMedlineGoogle Scholar
- 10. Waalewijn RA, Tijssen JG, Koster RW. Bystander initiated actions in out-of-hospital cardiopulmonary resuscitation: results from the Amsterdam Resuscitation Study (ARRESUST). Resuscitation. 2001; 50:273–279CrossrefMedlineGoogle Scholar
- 11. Iwami T, Kawamura T, Hiraide A, Berg RA, Hayashi Y, Nishiuchi T, Kajino K, Yonemoto N, Yukioka H, Sugimoto H, Kakuchi H, Sase K, Yokoyama H, Nonogi H. Effectiveness of bystander-initiated cardiac-only resuscitation for patients with out-of-hospital cardiac arrest. Circulation. 2007; 116:2900–2907LinkGoogle Scholar
- 12. Brison R, Davidson JR, Dreyer JF, Jones G, Maloney J, Munkley DP, O'Connor HM, Rowe BH. Cardiac arrest in Ontario: circumstances, community response, role of prehospital defibrillation and predictors of survival. Can Med Assoc J. 1992; 147:191–199Google Scholar
- 13. SOS-KANTO Study Group.Cardiopulmonary resuscitation by bystanders with chest compression only (SOS-KANTO): an observational study. Lancet.2007; 369:920–926CrossrefMedlineGoogle Scholar
- 14. Swor R, Khan I, Domeier R, Honeycutt L, Chu K, Compton S. CPR training and CPR performance: do CPR-trained bystanders perform CPR? AcadEmerg Med. 2006; 13:596–601CrossrefMedlineGoogle Scholar
- 15. Hallstrom AP, Ornato JP, Weisfeldt M, Travers A, Christenson J, McBurnie MA, Zalenski R, Becker LB, Schron EB, ProschanMPublic Access Defibrillation Trial Investigators. Public-access defibrillation and survival after out-of-hospital cardiac arrest. N Engl J Med. 2004; 351:637–646CrossrefMedlineGoogle Scholar
- 16. Peberdy MA, Ottingham LV, Groh WJ, Hedges J, Terndrup TE, Pirrallo RG, Mann NC, >Sehra RPAD Investigators. Adverse events associated with lay emergency response programs: the public access defibrillation trial experience. Resuscitation. 2006; 70:59–65CrossrefMedlineGoogle Scholar
- 17. Caffrey SL, Willoughby PJ, Pepe PE, Becker LB. Public use of automated external defibrillators. N Engl J Med. 2002; 347:1242–1247CrossrefMedlineGoogle Scholar
- 18. Valenzuela TD, Roe DJ, Nichol G, Clark LL, Spaite DW, Hardman RG. Outcomes of rapid defibrillation by security officers after cardiac arrest in casinos. N Engl J Med. 2000; 343:1206–1209CrossrefMedlineGoogle Scholar
- 19. White RD, Asplin BR, Bugliosi TF, Hankins DG. High discharge survival rate after out-of-hospital ventricular fibrillation with rapid defibrillation by police and paramedics. Ann Emerg Med. 1996; 28:480–485CrossrefMedlineGoogle Scholar

- 20. Pelinka LE, Thierbach AR, Reuter S, Mauritz W. Bystander trauma care-effect of the level of training. Resuscitation. 2004; 61:289–296CrossrefMedlineGoogle Scholar
- 21. Digest of Education Statistics, 2005. Washington, DC: National Center for Education Statistics, US Department of Education Institute of Education Statistics; 2006:table 147.Google Scholar
- 22. Isbye DL, Meyhoff CS, Lippert FK, Rasmussen LS. Skill retention in adults and in children 3 months after basic life support training using a simple personal resuscitation manikin. Resuscitation. 2007; 74:296–302CrossrefMedlineGoogle Scholar