FACTORS INFLUENCING THE FAILURE OF RESUCITATION EMERGENCY CARE OF CARDIOPULMONARY ARREST PATIENT

Case Control Study at In-Patient Department St. Vincentius A Paulo Catholic Hospital of Surabaya

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Cardiopulmonary arrest often firstly witnessed by nurses. Well performed caring cardiopulmonary arrest resuscitation needs a particular integrated system to meet the adherence of guidelines in order to decrease the failure. Failure rate in 2006 is 55,11% while in 2007 during April-September is 59%.

The objective of this study is to determine factors influencing failure in handling cardiopulmonary arrest at In-Patient Department (IPD) of St. Vincentius A Paulo Catholic Hospital of Surbaya (SVAPCHS).

Research design was retrospective survey case control study and purposive sampling was used as sampling method. Subjects were nurses and patients. Tools in gathering data were the questionnaire and observation. The data from the nurses were taken by using questionnaire and observation. They consisted of time-interval, resuscitation and Positive Pressured Ventilation (PPV) technique. Data of circulation and respiration of pre-cardiac arrest condition, the etiologi of cardiopulmonary arrest, heart and chest wall disruption were studied from medical record and patients' documentation during admission. All tabulated data were analyzed by using linier regression statistic test.

Result of this study showed that there was an influence between time-interval, circulation and respiration of pre-cardiac arrest condition, the etiologi of cardiopulmonary arrest and the failure of handling cardiopulmonary arrest at IPD of SVAPCHS by the following value t=5.554 for time-interval with signification level p=0.000 (p<0.05), t=4.885 for circulation and respiration with signification level p=0.000 (p<0.05), t=3.057 for the etiologi of cardiopulmonary arrest with signification level p=0.006 (p<0.05) while variable of resuscitation simulation technique, providing PPV, and heart and chest wall disruption not influencing the failure in handling cardiopulmonary arrest by the following respective value t=-1,004 for resuscitation simulation technique and providing PPV with significant level p=0.307 (p>0.05) and t= -3.005 for heart and chest wall disruption with value p=0.006.

This research showed that time-interval was predominant factor influencing the failure in handling cardiopulmonary arrest at IPD of SVAPCHS. In conclusion, resuscitation in the health care setting for the purpose of the time saving-based procedure needs a proper centralized allert or paging communication system.

Keywords: time, technique, circulation/respiration, etiologi, heart and chest wall disruption.