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Letter to Editor (Pages: 7211-7212)

Pediatric Mass Casualty Incident: A Real Crisis Mandating Inter-Disciplinary Coordination, Considering Ethical Issues

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Dear Editor-in-Chief,

Interdisciplinary coordination of the director of crisis committee with emergency and other department's staff, financial support team, public relations, rehabilitation team, and police are required to successfully manage mass casualty incidents (MCIs). Prevention, staff training, equipment availability, clear-cut responsibilities and predicting all requirements are crucial aspects to be prepared (1). The task force for Mass Critical Care published guidance for adult MCI in 2008; For children, 17 experts of the Oak Ridge Institute for Science and Education developed recommendations for pediatric MCI (2). Certain guidelines have been suggested by the Centers for Disease Control and Prevention (CDC) and subsequently published in Pediatric Critical Care Medicine as a supplement as well as the more recent supplement in CHEST that updates the previous works (3, 4). Although the literature has provided sufficient evidence managing the situation, some major difficulties still exist in the stage of response to the crisis. Lack of equipment especially in international crises may lead to neglect moribund patients. This problem is more prominent for pediatric patients (5, 6). Personnel shortage mandates to accept the less-qualified staff contribution for pediatric care. **Triage modifications:** Several field and hospital triage models were developed according to age or height and evaluated for accuracy in pediatric MCIs and some still recommend reliance on expert opinion (1, 7). It was recommended by the National Committee on Management of Pediatric MCIs to be used in prehospital settings. However, the available evidence are against validity and/or inter-rater reliability of jump START, and some other pediatric MCI primary triage tools such as Smart Tape and Care Flight were claimed to be more sensitive, although none had more than 48% sensitivity (8, 9). **Ethical Challenges:** While trying to maintain basic standards of care, the legal and medical ethic aspects may have different definitions in crisis. Justice, autonomy, beneficence and non-maleficence are the major rules modified in these situations (10). Patient-centered care, respect and autonomy are all differed widely. Field and hospital triage in mass casualty incidents guide us not to resuscitate victims with no or trivial signs of life, or to perform only basic rescuing maneuvers to decide to tag the patient dead or to identify the need for emergent care. In other words, we may have to decide whose life can be saved when it is impossible to rescue all when failure to obey activity plan would cause higher mortality rate (1, 11). Following a recent systematic review by Leider et al, it is noted that the majority of studies discuss why ethics is needed in MCIs and beside noteworthy advancement in disaster planning, ethical frameworks have also been tried to improve. Therefore, lack of standard ethical rules is still present- which is clearly stated and justified- and a single and accepted instruction is yet not available (10). To manage the great number of patients, canceling elective care, opening unused wards and preparing alternative areas as critical care units with extra beds, equipment and staff may work (6). Alternate consenting and ethics policy updates should be considered in conjunction with clinical team response. **Conclusion:** Pediatric MCIs mandate more specific planning, team and equipment preparation and coordination between clinical and ethics committees.

Key Words: Children, Emergency, Mass Casualty Incident, Medical Ethics, Triage.

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3- REFERENCES

1. Antommaria AHM, Powell T, Miller JE, Christian MD. Task Force for Pediatric Emergency Mass Critical Care. Ethical issues in pediatric emergency mass critical care. Pediatr Crit Care Med 2011;12(6):S163-S8.

2. Burkle FM Jr, Argent AC, Kissoon N. Task Force for Pediatric Emergency Mass Critical Care. The reality of pediatric emergency mass critical care in the developing world, Pediatr Crit Care Med.2011; 12 (6): S169-79.

3. Mason KE, Urbansky H, Crocker L, et al. Pediatric emergency mass critical care: focus on family-centered care. Pediatr Crit Care Med 2011;12(6):S157-S62.

4. Christian MD, Sprung CL, King MA, Dichter JR, Kissoon N, Devereaux AV, et al. Triage: care of the critically ill and injured during pandemics and disasters: CHEST consensus statement. Chest 2014; 146(4_suppl): e61S-e74S.

5. Gausche-Hill M, Ely M, Schmuhl P, Telford R, Remick KE, Edgerton EA, et al. A national assessment of pediatric readiness of emergency departments. JAMA Pediatr 2015;169(6):527-34.

6. Niska RW, Shimizu I. Hospital preparedness for emergency response: United States, 2008. 2011.

7. Courtney B, Hodge JG Jr, Toner ES, Roxland BE, Penn MS, Devereaux AV, et al. Legal preparedness: care of the critically ill and injured during pandemics and disasters: CHEST consensus statement. Chest 2014;146(4_suppl):e134S-e44S.

8. Romig LE. Pediatric triage. A system to JumpSTART your triage of young patients at MCIs. JEMS 2002; 27(7):52-8, 60-3.

9. Wallis L, Carley S. Comparison of paediatric major incident primary triage tools. Emerg Med J 2006; 23(6):475-8.

10. Leider JP, DeBruin D, Reynolds N, Koch A, Seaberg J. Ethical Guidance for Disaster Response, Specifically Around Crisis Standards of Care: A Systematic Review. Am J Public health 2017;107(9):e1-e9.

11. Aacharya RP, Gastmans C, Denier Y. Emergency department triage: an ethical analysis. *BMC* Emerg Med 2011;11(1):16.