Comprehensive and Prospective National AED Deployment Policy in Taiwan

BRIEF BACKGROUND
Taiwan has been developing modern EMS since the end of the 1990s. A series of implementation including EMT training, AED used by EMTs, and 2-tier advanced life support responses with paramedics, all contribute to the improvement of OHCA survival. From 2010, it becomes clear that in order to further enhance and extend the chain of survival, all efforts must be made to provide on-scene resuscitation before EMS arrival.

STEPS TAKEN
In 2011, a collaboration project led by Taiwan Society of Emergency Medicine and Department of Health established a blue-ribbon committee comprised of all stakeholders to promulgate a national public access defibrillation implementation program with seven guiding principles.

In 2013, Taiwan government passed several PAD relevant laws and policies. EMS Act was amended, requiring AED deployment at designated public places, and providing legal protection for Good Samaritans. A strategic deployment plan was formulated based on epidemiological data, and a compulsory registry established. System performance was captured with PAD device locale map and mandatory event report system.

CHALLENGES
A challenge in the process was how to define locations requiring AED implementation. The “4H Principles” were formulated so that potential locations that meet the criteria of:

1. High population density
2. High risk environment
3. High cost-effectiveness and
4. Hard-to-reach by routine EMS were identified as high priority.

Eight categories of mandatory PAD sites were promulgated accordingly.
RESULTS

At the end of 2018, more than 9000 defibrillators were registered. Between 2013 to 2018, 510 public AED were used. 44.1% were shockable-rhythm and the first-shock successful rate was 98% • Of these cases, 86% had received bystander CPR, and for those who had received both PAD shock and bystander CPR, 55% achieved good neurologic outcome survival.

OUTLOOK

The history of the advanced Taiwan PAD program is compatible with GRA’s 10 actions. Neither was Taiwan the first country to promote the program, nor did it deploy the greatest numbers of defibrillators, however, it’s executing was highly prospective, integrative, evidence-based and well-coordinated.

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