Topic: ‘Establishing an EMS in a Resource Constrained Country, the Story of the GAS’.

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The only thing that stands between a man and what he wants from life is often merely the will to try it and the faith to believe that it is possible.

Richard M. DeVos
"In the confrontation between the stream and the rock, the stream always wins - not through strength but by perseverance."

H. Jackson Brown
Factors that Influence the Establishment of an EMS in a Resource Constrained Country

- Trigger
- Political Commitment
- Technical Expertise
- Financial Support
- Public Awareness and Pressure
Trigger

- 9th May 2001 Stadium Disaster, in which over one hundred and twenty sports enthusiasts died

- Public uproar against deaths

- Committee set up to investigate cause of deaths

- Recommendation of Committee in favor of establishing an EMS
Political Commitment

• President tasked Ministry of Health (MOH) and stakeholders to establish an EMS in Ghana

• MOH takes measures to establish the Ghana Ambulance Service (GAS)

• MOH starts recruitment and training of Emergency Medical Technicians (EMTs)

• MOH committed to make GAS an autonomous Agency
Technical Expertise

• Careful selection of Competent Team to oversee establishment and operations of GAS

• Three tier team approach
  • National Team
  • Regional Teams
  • District Teams
Financial Support

- Dedicated Source of Funding through Government Budget Allocation
- Reimbursement through Health Insurance
- Funding through a Fund
- Other identifiable Source of Funding
- Fees for Services
Public Awareness and Pressure

- Advocacy to create Public Awareness
- Interest Groups to mount pressure on Government to support the Service.
Linking Emergency Transport with Emergency Medicine

- Strategies for Prehospital care
- Models of care
Strategies for Prehospital care

- Essential decision in prehospital care is whether the patient should be immediately taken to the hospital or advanced care resources are taken to the patient where they lie.

- "scoop and run" approach

- "stay and play"
"scoop and run" approach

- Strategy developed for prehospital trauma care based on the Golden Hour theory,

- Trauma victim's best chance for survival is in an operating room, with the goal of having the patient in surgery within an hour of traumatic event.

- Minimal time spent providing prehospital care

- Spine immobilization;

- "ABCs",
"scoop and run" approach

- Ensure airway, breathing and circulation; external bleeding control; endotracheal intubation) and victim transported as fast as possible to trauma centre

- Minimalistic approach to prehospital care, basically BLS level only,

- Aim in "Scoop and Run" treatment is generally to transport casualty or patient within ten minutes of arrival,

- Birth of phrase, "the platinum ten minutes" (in addition to the "golden hour"),
Stand and Play approach

• Involves administering as much medical care as possible to casualties at the trauma site itself,

• Aggressive strategy trying to bring the level of care in an emergency department to the scene.

• Is the dominant mode of pre-clinical treatment offered in most European Countries.
Models of care

• Generally be placed into one of two categories

• One Physician led

• Other led by Pre-hospital Specialists such as:
  - Emergency Medical Technicians (EMTs)
  - Paramedics

• May or may not have accompanying physician oversight
Models of care

- Models typically identified by their locations of origin

- **Franco-German** model (Physician-led)

- **Anglo-American** model, (utilizes Pre-hospital care Specialists, such as EMTs and Paramedics, to staff ambulances)
Franco-German model

- Physician-led, with doctors responding directly to all major emergencies requiring more than simple first aid.

- Team's Physicians and in some cases, Nurses provide all medical interventions for patient,

- Non-medical members of the team simply provide the driving and heavy lifting services.

- Ambulances in this model tend to be better equipped with more advanced medical devices,

- In essence, bringing the emergency department to the patient.
Franco-German model

- Preference is to remain and provide definitive care to patient until medically stable, and accomplish transport.
- Physician and nurse may actually staff an ambulance along with a driver,
- May staff a rapid response vehicle instead of an ambulance, providing medical support to multiple ambulances.
Anglo-American model,

• Utilizes Pre-hospital care specialists, such as EMTs and Paramedics to staff ambulances,

• Ambulances may be classified according to the varying skill levels of the crews.

• Rare to find a physician actually working routinely in pre-hospital setting,

• Physician may be utilised on complex or major injuries or illnesses.
Anglo-American model,

- Physicians involvement most likely to be provision of medical oversight for work of ambulance crews,

- May be accomplished in terms of off-line medical control, with protocols or 'standing orders' for certain types of medical procedures or care,

- On-line medical control, in which technician establishes contact with physician, usually at hospital and receive direct orders for various types of medical interventions
The Story of the Ghana Ambulance Service (GAS)
INTRODUCTION. Background

This is how it started.

IT WAS FUN.
IT ENDED UP BEING BLOODY

IT BECAME MESSY
IT Turned out deadly

Some survived, others were not lucky.
Establishment of Emergency Medical Service System in Ghana

Ghana Ambulance Service (GAS)

- GAS was established in 2004
- Has been charged with the task of providing Pre-hospital Care (phc) to the sick and wounded and conveying them to health facilities
- Support of policy of IMPROVING ACCESSIBILITY to Medical Care.
GAS strives to provide the most comprehensive pre-hospital care in the most efficient manner possible to all people living in Ghana.
GAS has been charged with specific roles and responsibilities of Establishing and providing a Nationwide Comprehensive Pre-Hospital care to accident victims or patients.
Mission

GAS ensures

- To provide high standards of pre-hospital emergency care and treatment.
- To provide high standards of ambulance transport for our emergency and non-emergency patients.
- To provide coordinated and seamless care to our patients with other agencies or institutions within the healthcare community.
- To provide value for money service by utilizing our resources effectively and efficiently and become the preferred provider of our range of services.
Functions

• To provide pre-hospital emergency care to victims (Road traffic, Domestic, Industrial, Medical etc.)

• To transport casualties from scene of incidents to appropriate health facilities

• To provide stand-by emergency cover at mass public gatherings

• To provide care in collaboration with other emergency services in time of disaster or mass casualty incidents

• To assist in formulation and implementation of programmes for first respondents in communities
Pre-Hospital Care Across the Country

- GAS Stations since inception have grown from 4 stations in Ghana to 121 stations country-wide within a span of 8 years
## COMPARISON OF INDICATORS (2007-JUNE 2013)

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Graphical representation of cases from 2004-2011

High Vehicle Down time +
High Cost of Maintenance =
Low Number of Available Cars to attend Cases =
Low Number of Cases
PICTORIAL VIEW OF CASES FROM 2004-2013 (June)
CASE CLASSIFICATION, 2006

- ROAD TRAFFIC ACCIDENT: 10%
- INTER HOSPITAL TRANSFER: 76%
- RESIDENCE: 8%
- OTHERS: 6%
GAS DOES NOT ONLY PROVIDE CARE FOR THE TRAUMA VICTIMS, BUT ALSO TO ANYONE IN NEED. IT COULD BE A:

A TOURIST  BUSINESS  STUDENTS  Brother/Sis/wife

DAD  ENTIRE FAMILIES
MAJOR PROBLEMS

• Inadequate funding for emergency medical care services in general
• Inadequate no. of Ambulances and Ambulance stations
MORE PROBLEMS

- Lack of Street Names (SN) making location and access to victims difficult
- Disrespect of sirens by motorist and general public
- Use of Sirens by other vehicles for none emergency purposes
• Pressure from people in high Authority to use Ambulances for conveyance of dead bodies

• Pressure from Senior Health Officers to use Ambulances as utility vehicles
FUTURE PLANS OF NAS

• OPEN 500 AMBU STATIONS NATIONWIDE

• TRAIN 6000 EMTS

• REDUCE RESPONSE TIME TO INTERNATIONAL LEVEL (3---8MINUTES)

• OPERATE AIR AMBULANCE, BOAT AMBULANCE, MOBILE CLINIC E.T.C

• TRAIN COMMUNITY / VOLUNTEER CORPS-FIRST RESPONDERS

➢ BECOME A GATEWAY TO AFRICA IN EMERGENCY SERVICES
Conclusion

• Health care in developing countries has not traditionally focused on emergency medical care.

• The efficacy of such care could be assessed by implementing pilot programmes in several Districts and Regions.

• The incorporation of a basic level of emergency medical care into health care systems could have a significant impact on the well-being of populations.

• It would respond to the self-perceived needs of populations and decrease the long-term human and economic costs of illness and injury.
Challenges are what make life interesting; overcoming them is what makes life meaningful.

Joshua J. Marine
Quotation about Challenge

Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do. So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover.

Mark Twain:
• Life is an opportunity, benefit from it.
• Life is beauty, admire it.
• Life is bliss, taste it.
• Life is a dream, realize it.
• Life is a challenge, meet it.
• Life is a duty, complete it.
• Life is a game, play it.
• Life is a promise, fulfill it.
• Life is sorrow, overcome it.
• Life is a song, sing it.
• Life is a struggle, accept it.
• Life is a tragedy, confront it.
• Life is an adventure, dare it.
• Life is luck, make it.
• Life is too precious, do not destroy it.
• Life is life, fight for it.

• ---Mother Theresa