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DIRECTOR'S MESSAGE

EMS Research Today and Tomorrow

National Ambulance Services (NAS) facility, under National Health Mission, in March 2018, is available in 31 states/Union Territories (UT) in India out of the total 36 States/UTs. '108' services are predominantly catering to emergencies. '102' services essentially consist of basic patient transport aimed to cater the needs of pregnant women and children, though, other categories are also taking benefit and are not excluded. 8061 ambulances are being supported under 108; 8252 ambulances are operating as 102; 7603 empanelled vehicles are also being used in some States to provide transport to pregnant women and children. Most of the States are preferring to continue these services through competitive bidding process. The request for proposal (RFP) document of emergency response services (ERS) is explicitly articulating scope of services, technology, manpower ratios, type of ambulances, medical equipment, unit cost and transparent selection process. Even penalties to the service provider, in case of deviation and default, are also made clear. National Health Mission is closely monitoring and reviewing the performance of 108 and 102 services.



Common Review Mission Reports are documenting the role of ambulance services from time to time. At the central government level, National Ambulance Code, Technical specifications of Medical equipment for Emergency Response Vehicles are documented. Health Sector Skills Council (HSSC) has spelt out the curriculum and training standards of basic and advanced EMTs. World Health Organization (WHO) has initiated emergency care systems (ECS) and capacity building requirement standardization for lower and middle income countries. The Government of India has also initiated attempts to streamline paramedical education through an expert group. State level paramedical boards are registering 2-year trained Advanced EMTs. EMS operators are leveraging technology, optimizing services. Thus emergency response services are stabilized on most of the fronts. With these important

building blocks in place, EMS research need to be focussed in future.

GVK EMRI always believed 'Research' is an integral part of private partner's contribution. Accordingly, Operations and Analytics research department supported by technology is able to generate ambulance based data on multiple parameters. Resource utilization is being monitored. Operations units are perusing the near real time data in monitoring and improving services through "Operation Excellence Desks-OED)" in Emergency Response Centre at every state level. Hence, there is a need to strengthen these research initiatives not only to optimize resources to make services cost effective, but should also expand to clinical care audits to measure and improve prehospital care in coming years.

GVK EMRI and Stanford Emergency Medicine International (SEMI)-USA collaboration in research, has now started showing results through publications in high citation index journals. On-Line-Medical-Research (OLMR), a unique prospective research technique, enables data collection through out-bound calls, from ten GVK EMRI operating states, on a particular type of emergency, through a pre-

determined questionnaire. OLMR also reveals a comparative status of performance of different states under GVK EMRI. Thereby, specific areas of immediate improvements in services and training can be selected. These are close to the PIP (performance improvement plans) in other EMS systems. GVK EMRI has realized importance of working with the other EMS systems in Asian region in research. Creation of Registry for Out-of-Hospital-Cardiac Arrests (OHCA) and Trauma Registry are firm steps, to leap frog in research front in the coming years. There is a scope to propose projects for funding from national and international agencies. There is an immense need to carry out joint research and create pilots and Proof Of Concept (POC) on several prehospital service dimensions. Simulation based education in life support skills can be a special area for consideration in research as India and other developing countries require huge capacity building focus in the next one decade. GVK EMRI, so far, was involved in Resuscitation guidelines, ST elevation Myocardial Infarction (STEMI) and Traumatic Brain Injury (TBI), prehospital trauma care guidelines development in the Indian context. GVK EMRI has created processes to welcome internships from premier institutions in India and other countries, to encourage

inter-institutional EMS based research to create meaningful inferences towards improving patient care.

GVK EMRI is now reaching about 800 million people in India and Srilanka through a fleet of 11000 ambulances and 46,000 associates and all in public-private partnership (PPP) mode. Hence, governments at all levels should be sensitized about the need for appropriate research to favour policy implications in the medium and long terms. I am delighted to mention that GVKEMRI has published more than 108 number of scientific papers. Indian Emergency Journal (IEJ) is a platform to disseminate good quality research in EMS of developing world.

With Warm Regards,
Mr K. Krishnam Raju
Director- GVK EMRI

EDITORIAL ARTICLE

Medical Equipment in EMS

Dr G V Ramana Rao

With the advent of recent advances in education, care, research, technology and changes in policies in prehospital care, EMS providers are able to diagnose, stabilize and manage acute injury and illness. Equipment is necessary for carrying out procedures. Medical equipment enables EMS linked diagnosis. EMS knowledge and skills become mostly useless if providers do not have tools to help patients. List of medical equipment EMS providers can use may be very exhaustive. Rationalization of equipment is important. There is a great need for contextualization of medical equipment to the existing EMS system. Sometimes space, usage rates, benefits to the patients and cost, influence the process of selection. Factors like lifespan of an equipment, service and repair needs must also stimulate the selection. Medical equipment in most of the EMS



systems are categorized into 'basic', 'advanced' and 'optional'. Use of basic and advanced medical equipment is also linked to competencies and provider levels. There cannot be hard and fast rule in considering certain medical equipment into one fixed category. It is interchangeable, based on the ecosystem. However, basic life support equipment is universally necessary.

Standardization of medical equipment in an EMS system of reference is mandatory. Error reduction and saving time are direct advantages of standardization. Even lay out standardization of the patient compartment area of an ambulance will

Address for Correspondence

Dr. G.V. Ramana Rao

Director Emergency Medicine learning, Care & Research

GVK Emergency Management & Research Institute, Hyderabad. email: ramanarao_gv@emri.in

enhance operability of EMS staff with equal efficiency from any vehicle. Most of the EMS systems discourage use of personalized equipment or treatment bags to support team-based care and round-the-clock duties. Single patient use equipment should be appropriately disposed. Small items like masks are frequently used. Some, like disposable delivery kits are used as and when needed basis. Some items are like AED pads are sparingly used. Some items may occupy large space like stretchers. Hence, stock levels should also be defined.

Procurement of medical equipment is a challenge and hence it is necessary to have generic specifications for medical equipment. Cost, utility, availability in domestic market, maintenance and patient safety are crucial issues to be considered while procuring medical devices. Consistency and standardization in technical specifications promotes positive competition and reduces cost. It also promotes uniformity in user training and smooth maintenance of equipment.

Ministry of Road Transport and Highways (MORTH), Government of India, in 2013

developed National Ambulance Code (NAC) and defined Basic and Advanced Life Support Ambulances. Basic Life Support (BLS) ambulance was defined as a vehicle ergonomically designed, suitably equipped and appropriately staffed for the transport and treatment of patients requiring non-invasive airway management / basic monitoring. (Type C). Advanced Life Support (ALS) ambulance was defined as a vehicle ergonomically designed, suitably equipped and appropriately staffed for the transport and treatment of emergency patients requiring invasive airway management/intensive monitoring (Type D). Code states that general requirements of the medical devices are designed for use in mobile situations and in field applications. Word 'portability' is used when an equipment is expected to be mandatorily used in an ambulance. In addition, portability also takes cognisance to the ability to be carried by a person, with in-built battery power wherever necessary. In the ambulance portable equipment are generally hanged on the street wall side of the patient compartment of an ambulance. In certain cases, such portable equipment can be hanged on to

the roof as well, but should reach the patient during service. Regular and smooth patient transport equipment like stretchers and their movements should not be effected by the location of the medical equipment. Medical equipment which needs to be fixed must hold the device during accelerations and decelerations including transverse, longitudinal and vertical movements. National Ambulance Code has categorized the medical equipment into Patient handling equipment, immobilization equipment, life support oxygen delivery equipment, diagnostic equipment, infusion material, drugs, equipment for life threatening problems (Defibrillators, cardiac monitoring, portable airway care systems, portable advanced resuscitation systems, ventilators), bandaging and nursing systems, Personal Protective Equipment (PPE), Rescue and Protective material, communication material.

Ministry of Health and Family Welfare (MOHFW), Government of India, extraordinary gazette, clearly indicated that product standards for medical device conform to the standards laid down by the Bureau of Indian Standards

established under section 3 of the Bureau of Indian Standards Act, 1985. Where no relevant Standard of any medical device has been laid down under sub-rule (1), such device shall conform to the standard laid down by the International Organisation for Standardisation (ISO) or the International Electro Technical Commission (IEC), or by any other pharmacopoeial standards. Even the labelling of the medical equipment norms like name, details necessary for the user to identify the use or its uses, details of manufacturer, quantity, month and year of manufacture and expiry are asked to be printed. In case of sterile devices, date of sterilization has to be given in place of manufacturing. In case the device is manufactured with stable material (like stainless steel), date of expiry need not be mentioned. Unique device identification number will be implemented in near future. Recall of a medical device can also happen when it is believed to cause risk to the health of user or patient.

Under National Accreditation Board for Hospitals and Healthcare (NABH) Providers, Access Assessment and Continuity of Care (AAC), it is mentioned

that in hospitals availability of an appropriate ambulance fitted with life-support facilities accompanied by trained personnel is a must. Under Care of Patients (COP), the ambulance services should be commensurate with the scope of the services provided by the organization. It is expected that any ambulance shall be equipped with at least basic life support equipment for both adult and paediatric patients shall be present.

National Health Systems Resource Centre, (NHSRC), Technical support institute of National Health Mission in its technical specifications document listed 31 medical devices for emergency response services for BLS/ ALS ambulances. This list includes suction pump (electrical/ foot operated & hand operated), Laryngoscope, flow meter with humidifier, oxygen cylinders (D type), Bag Mask Ventilation Devices (adults/ children & Neonatal), Stretchers (collapsible), spinal board, double head mobilizer, cervical collar, pneumatic splints, first aid box, Stethoscope, BP apparatus (aneroid), portable hand held glucometer, nebulizer, foetal Doppler, AED, monitor, syringe pump, transport

ventilator (adult and paediatric & neonatal), IV cut down set / suture kit, Pulse oximeter and LMA (all sizes). ALS ambulances only will have monitors, ventilators, fetal monitor. For each of these medical equipment detailed specifications are lucidly documented under major headings of Name and Coding (including definition); General use; Technical (physical characters, software if any, energy source, accessories, spares & consumables; environmental and cleaning details; standard and safety; training and installation; warranty and maintenance; documentation- service/operating manual; Service support/warning). Equipment specific standards and safety such as FDA (US-Food & Drug Administration), CE (European Conformity), ISO (International Organization for Standards), IEC (International Electro-Technical Commission) were recommended. Training of users on operation and basic maintenance were also proposed. Checking the functioning status of Medical equipment at the start and end of the shift is an EMS best practice. All ambulance staff using provided equipment should do so only if they are

adequately trained. Staff should not misuse the equipment or damage work equipment for their health, safety and welfare. Line managers are to ensure that staff use work equipment and that they are trained. Asset management process that records key maintenance events throughout the operational life-cycle of the equipment, including commissioning, servicing, repair and disposal are notable features in a good EMS organization.

Currently in all the RFP (Request For Proposals) documents for ambulance services at the state level, list of the medical equipment is often provided along with specifications. At GVK EMRI, medical equipment related orientation has been a focus throughout. Medical equipment maintenance and repair are documented for the learning of Basic EMTs in the form of two manuals covered in foundation and refresher training respectively. In the two-week ALS training, medical equipment usage has been the focus. In exclusive ALS ambulance projects, in addition to the operation manuals, special videos were developed and shared with EMTs. Throughout the organization, all the

ambulances are expected to be audited once in a month. An essential aspect of ambulance audit is the status of medical equipment. An exclusively developed software is in use in many states, in which EMTs can document the non-functioning status of a medical equipment or shortage of a single use device. Emergency Response Centre Physicians during the medical direction, obtain vitals from the EMTs, malfunctioning or lack of medical equipment used in patient assessment and diagnosis will be recognized on a regular basis. Review of PCR (prehospital care records) at the state level PCR Cell, assess the use of right medical equipment based on the type and criticality of the patient condition. Operations Executives are expected to visit ambulances regularly under their jurisdiction and they inevitably record the status of medical equipment. In other words, training, monitoring and maintenance of medical equipment is an integral part of 108 GVK EMRI. At the organizational level, a broad based annual ambulance committee reviews the equipment from time to time. AAC document lists the equipment, consumables, drugs, extrication and communication

equipment in BLS/ALS and other emergency vehicles including the number to be stocked. All the equipment is categorized into Essential and Desirable under each type of ambulance. Calibration of medical equipment is yet another process in place. Call back of drugs and equipment is also inbuilt or activated as and when needed. High end equipment are put in Annual Maintenance Contract (AMC). Departments of Fleet, Supply Chain Management and Emergency Medicine Learning Centre closely coordinate the study, selection, procurement, training and maintenance of medical equipment. Procurement of medical equipment through imports by adherence to the government laid process enables right equipment at the right time. Procurement of equipment in large quantities across the organization provides much needed negotiation power. Involvement of medical teams at every stage enables good quality and training. GVK EMRI representatives getting invited into National Ambulance Code (NAC) and other committees at Ministry of Health and Family Welfare (MOHFW) and Ministry of Road Transports and Highways (MORTH),

reflect the recognition of expertise in the organization. Collaboration with Stanford University and their involvement in 2-year advanced EMT program and hospital physician program facilitated development of deeper insights into the equipment used in life threatening and critical conditions.

In conclusion, Indian EMS has undergone considerable standardization of medical equipment in the last few years. Choice of medical equipment is now an integral part of comprehensive care package and training. Effective management of this important EMS resource is required to meet the objective of high quality patient care, clinical and financial governance. Good medical equipment management not only reduces the potential harm to the patient and the staff, but reduces costs. Policies and processes when in place and in regular control can significantly contribute to the name and glory of EMS system. EMS providers develop immense confidence and satisfaction in saving lives. Well stabilized patient along with the appropriate use of medical equipment will for sure, seek commendation from the receiving staff at the receiving hospital. Use of right

equipment in prehospital care provides excellent feedback and trust amongst emergency patients and favourable patient outcomes. It is a good resolution for an EMS organization to orient all the members on medical equipment (like skilling everyone in CPR) as mandatory. After all, medical equipment demands such high priority in EMS. Hope in the near future, technology enables detailed documentation of equipment usage vis-à-vis type of emergency and initiate IOT (internet of things) to take the EMS to the next level of expectation.

References:

1. Technical Specifications of medical devices for Emergency Response Services, Ministry of Health and Family Welfare., 2015 (<http://nhsrcindia.org/category-detail/technical-specifications/ODgz>)
2. EMS – A Practical Guide, Judith E. Tintinalli, Peter Cameron, C. James Holliman; People Medical Publishing House, Shelton, Connecticut, USA- 2010. (p 253-291)
3. Policy for the Management of Medical Devices, London Ambulance Services HHS, March 2017
4. Constructional and Functional Requirements for Road Ambulances (National Ambulance Code)-AIS 125; Department of Road Transport and Highways, Government of India, June 2013
5. Gazette of India, MOHFW, GOI, (extra ordinary) REGD. NO. D. L-33004/99, No. 70, Part II, section -3, sub-section 1, Dt 31st January 2017.
6. NABH Guide Book to Accreditation Standards for Hospitals (4th edition) Dec, 2015.
7. Technical specifications of Medical Devices for Emergency Response systems, MOHFW, GOI, NSHRC, 2013.
8. Annual Ambulance Committee Recommendations, GVKEMRI, 2014-15.
9. Medical equipment specifications, GVKEMRI, 2014
10. Manual of Medical equipment, GVKEMRI.

The Essential Prehospital Care Refresher Course

Peter Acker¹, Danielle Mianzo¹, Elizabeth Pirrotta¹, Matthew C. Strehlow¹, Swaminatha V. Mahadevan¹

Introduction:

For a number of years, Stanford Emergency Medicine International (SEMI) has partnered with GVK Emergency Management and Research Institute (EMRI) to provide high quality emergency medical training to thousands of health care providers, both in the pre-hospital and hospital settings. The goal of these emergency medicine-focused courses has been to empower health care providers to provide expert care to their patients in order to save lives. While Stanford University had previously created courses for paramedics, physicians and EMT (Emergency Medical Technician) trainers, they had not been involved in any curricula addressing the educational needs of the roughly 10,000 practicing EMT-Basics (EMT - B).

Materials & Method:

During the summer of 2013, Stanford University and GVK EMRI performed a large-scale assessment of their practicing

EMTs. To our knowledge, no prior studies had assessed the capacity of practicing EMTs in resource-poor countries to retain critical, life-saving knowledge and skills from their inaugural prehospital care training programs. This assessment involved a written test designed to measure each EMT's knowledge, as well as a hands-on practical skills test to assess their procedural competence. Theoretical knowledge was assessed through a 60-question multiple-choice exam testing fifteen essential subjects; the exam was validated prior to the study with American EMTs and Indian EMT instructors. Clinical acumen was assessed through an Objective Structural Clinical Examination (OSCE) of nineteen vital skills. Five examiners observed the participants performing each OSCE skill and determined whether they passed/ failed by utilizing a predetermined checklist.

The first *Essential Prehospital Care Refresher Training Course* was taught

Address for Correspondence
Peter Acker

MD, MPH, FACEP, Clinical Assistant Professor, Stanford University, Email: packer@stanford.edu

from November 14-16, 2013, in Hyderabad, Andhra Pradesh. The Hyderabad course instructors included Dr. S.V. Mahadevan, Dr. Peter Acker, Dr. Danielle Mianzo, Dr. Vijay Anand, Mr. Suresh Babu and Mr. Vimal Megavarnan. The course was put on with the assistance of the GVK EMRI Andhra Pradesh Emergency Medicine Learning Centre (EMLC), including Dr. G.V. Ramana Rao, who is currently the Director EMLC & Research department. The Hyderabad refresher course participants included 32 EMT instructors from Andhra Pradesh, Tamil Nadu, Karnataka, Meghalaya, and Madhya Pradesh.

The second *Essential Prehospital Care* Refresher Training Course was taught from November 22-23, 2013, in Ahmadabad, Gujarat. The Ahmadabad course instructors included Dr. Peter Acker, Dr. Danielle Mianzo and Dr. Swapneswar Sahu. The course was put on with the help of the GVK EMRI Gujarat EMLC, including Dr. Jayraj Desai and Ms. Meghavi Panchal. The Ahmadabad refresher course participants included 23 EMT instructors from Gujarat, Assam, Himachal Pradesh, and Karnataka.

Overall, the course participants were EMT-instructors from nine states within India and represented mixed educational

backgrounds, including doctors and EMTs. Prior to each refresher course, these participants took a 30 multiple-choice question (MCQ) pre-test and following the course, they took a 60 MCQ post-test. Their test results were entered into a Red Cap database and differences between pre- and post-test scores were analyzed using the Wilcoxon signed rank sum test paired by participant.

Results:

Initial assessments were performed in 3 states – Karnataka, Gujarat, and Tamil Nadu – and included 255 practicing EMTs. All study participants had undergone the GVK EMRI EMT-Basic training course at the onset of their career and had an average length of experience of 39 months in the field. The knowledge assessment (written examination) mean score was 47.2%(range 28-70%) for all study participants. Of the fifteen clinical skills assessed, participants scored highest on practicums pertaining to suctioning (62.1%) and oxygen administration (79.4%). Lowest practical skills performance was demonstrated on neurovascular assessment before/after splinting (pass rate 2.8%), log-rolling (5.2%), pelvic binding (6.7%), and bag-mask ventilation (6.7%).

Of the fifty-five course participants (EMT-

instructors), fifty took both the pre- and post-tests. For the pre-test, their mean score was 72.3% (SD 10.6%) and for the post-test, their mean score was 85.3% (SD 9.6%), corresponding to a mean improvement of 13.6% (SD Δ 8.3%, $p < 0.001$). Of the thirty topic areas assessed, participants showed the greatest initial competency in cardiac monitoring (98% pre-test average), CPR (96% pre-test average), and ventilation (92% pre-test average). The greatest improvement was seen in extremity hemorrhage control (Δ +74%), OPA/NPA usage (Δ +42%), and EMS roles and responsibilities (Δ +32%), while decreased performance occurred in documentation (Δ -18%), airway obstruction (Δ -9%) and ventilation (Δ -5%).

Discussion:

This novel assessment indicated that many essential concepts and critical pre-hospital skills were not retained by the EMTs and highlighted the need for a highly focused training strategy to address these deficiencies. In response to this need, during the fall of 2013, Stanford faculty created a new EMT refresher course curriculum. Rather than replicate the GVK EMRI 6-week foundation training, this new curriculum focused on knowledge and skills essential to the optimal delivery of pre-hospital

emergency care - primarily life-saving skills, at each step in the patient care process: Activation of EMS personnel by the emergency call center, the initial assessment and treatment of the patient by the EMT, patient monitoring during transport, consultation between the EMT and call center physician, and transfer of the patient to a healthcare facility. The resulting *Essential Prehospital Care Refresher Training Course* comprised high quality lectures and hands-on skills workshops to be delivered over a two-day period (*Figures 1, 2*).

While this initial data suggested that the inaugural refresher course was very effective in addressing a number of educational deficiencies, a potential limitation of our analysis was that the MCQs were not validated prior to testing; furthermore, no control group was available against which to compare the performance of participants. We will also need to determine the reasons for the decreased performance in certain subject areas.

In addition to the pre- and post-testing, we also solicited direct feedback from the course participants regarding the course (*Figure 3*). The information gathered from the course feedback forms as well as the MCQ testing has already prompted a

reassessment of both pre- and post-tests, and revision of the teaching materials themselves, prior to their wide-scale deployment to practicing EMTs.

Our next steps include the video taping of the course lectures and development of a printed course syllabus. Subsequently, trained EMT instructors will disseminate the new refresher training curriculum to practicing EMTs in their home states.

Based on the success of the inaugural refresher course, plans are also in place to develop a second refresher training course focused on common medical chief complaints, such as seizures, chest pain, and abdominal pain. This follow-up refresher training program will be piloted in near future. The course content will again be focused on the most essential information and skills that EMTs need to possess in order to save lives.

Conclusion:

Our novel assessment of practicing Indian EMTs during the summer of 2013 identified critical gaps in their knowledge and skill retention following their initial EMT training, and highlighted the need for a highly focused educational intervention. In response, the *Essential Prehospital Care* Refresher Training Course was developed and deployed in

India in November, 2013. We found the course was an effective teaching tool for EMT instructors leading to improvement in their knowledge across numerous key prehospital care content areas. The next steps include assessment of this training course utilizing practicing Indian EMTs and development of other focused refresher training programs (e.g., medical, trauma, pediatric, obstetric).

900	PRE-TEST
930	EMS ROLES & RESPONSIBILITY (OVERVIEW)
945	ROUTINE MEDICAL/TRAUMA MANAGEMENT (OVERVIEW)
1000	PRE-ARRIVAL PREPARATION
1015	SCENE-SIZE UP
1030	INITIAL ASSESSMENT
1045	GENERAL IMPRESSION
1100	POSITION PATIENT
1115	TEA BREAK
1130	CIRCULATION
1145	AIRWAY
1200	BREATHING
1215	EXTREMITY HEMORRHAGE CONTROL (PROCEDURE)
1230	CPR (PROCEDURE)
1245	AED (PROCEDURE)
100	LUNCH
200	SUCTIONING (PROCEDURE)

215	MANUAL AIRWAY MANEUVERS (PROCEDURE)
230	OPA/NPA (PROCEDURE)
245	VENTILATION (PROCEDURE)
300	TEA BREAK
315	PROCEDURE PRACTICE (HANDS-ON)
415	RAPID MEDICAL/TRAUMA EXAM
430	BASELINE VITAL SIGNS
445	DAY 1 OVERVIEW

Figure 1: Essential Prehospital Care Course, Day 1

930	OXYGEN ADMINISTRATION (PROCEDURE)
945	CARDIAC MONITORING (PROCEDURE)
1000	IV ACCESS (PROCEDURE)
1015	GLUCOSE CHECK (PROCEDURE)
1030	MEDICATION ADMINISTRATION (PROCEDURE)
1045	NEBULIZATION (PROCEDURE)
1100	FLUID ADMINISTRATION (PROCEDURE)
1115	TEA BREAK
1130	PROCEDURE PRACTICE (HANDS-ON)
1230	HISTORY

1245	REASSESSMENT
100	LUNCH
200	COMMUNICATION
215	DOCUMENTATION
230	AMBULANCE OPERATIONS
245	LIFTING/MOVING
300	TEA BREAK
315	POST-TEST
415	TEA BREAK
430	WRAP-UP/GRADUATION

Figure 2: Essential Prehospital Care Course, Day 2

Overall, how would you rate the quality of the Stanford Instructors?	Poor	Fair	Average	Good	Excellent
The level of the medical information discussed is appropriate	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The lecture topics are helpful	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Overall, how would you rate the quality of the lectures	Poor	Fair	Average	Good	Excellent
Overall, how would you rate the quality of the practical skills sessions?	Poor	Fair	Average	Good	Excellent

I would like to watch a video of the lectures again.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I would recommend a similar course to a peer/colleague.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I believe these sessions will allow me to educate EMT's more effectively in the future.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My level of knowledge about these emergency medicine topics BEFORE the course was:	No knowledge	Beginner	Some Knowledge	Knowledgeable	Expert
My level of knowledge about these emergency medicine topics AFTER the course was:	No knowledge	Beginner	Some Knowledge	Knowledgeable	Expert
Overall how would you rate the course?	Poor	Fair	Average	Good	Excellent

- Overall my favorite part of the course was (please list specifics):
- How will the content of these sessions be helpful to you (CIRCLE all that apply)?
 - A. To increase my personal knowledge
 - B. To provide improved patient care
 - C. To improve my teaching of EMT students
 - D. I am unsure of the usefulness
 - E. It will be useful in other ways (please describe below)
- What topics addressed today were unclear, please list specifically:
- Please make any other comments to help improve the course here:

Figure3: Essential Prehospital Care Refresher Course Feedback Form

Effectiveness of CBR Training on ASHA Workers

Authors: Ankita Brahmroutu¹, Purva Rajendra², Rajini Danthala³, GV. Ramana Rao⁴

Abstract

Introduction: The ASHA (Accredited Social Health Activist) worker program was set up by India's Ministry of Health and Family Welfare in 2005. The goal of the program was to bridge the gap between citizens in rural areas of India to the health facilities that they may need, specifically with women's health, neonatal care, and hygiene. According to the Memorandum of Understanding (MoU) between District Medical Health Office (DMHO)- Rangareddy District and GVK EMRI on 8th August, 2012, 100 ASHA workers from the Shameerpet & Medchal Mandal were trained in the Community Based Resuscitation (CBR) Programme; it was a 01 day programme. The main objective of the programme was to train the ASHA workers in Basic life Support (BLS), normal delivery, and recognition of emergencies and management.

Objectives: The main objectives of this study were to identify the usefulness of CBR training in service delivery by ASHA workers, obstacles in applying the skills, and determine the need if any, for future training.

Methodology: The study used both qualitative and semi-quantitative methods: Focus Group Discussion (FGD) & telephonic interviews through stratified random sampling. Telephonic interview were conducted using semi-structured questionnaire prepared in light of the findings of the FGD. Quantitative Data Analysis using Microsoft Excel was an appropriate method to determine the degree of the impact.

Results: FGD was conducted for 09 ASHA workers, and the remaining 91 ASHA workers were interviewed over phone. Out of 91 members, we received a response from 52 members. The age group range of participants in the study was 35-48 years, majority (57%) had passed SSC & Backward Class (OBC) category. 55% of participants said common emergencies in their area of work are related to pregnancy. 90% of ASHA workers called 108 in emergency situations. 90% of ASHA workers said the CBR training was excellent. 62% of them used it in conducting deliveries, 12% in pregnancy-related emergency handling.

Discussion: From the CBR training, ASHA workers utilized the advantage of some life-saving skills and the

Address for Correspondence

Ms. Ankita Brahmroutu

Address: 3237 Bay Hill Lane, Round Rock, TX, USA 78705, Mail ID: ankitavb@utexas.edu,

Contact number: 512-983-8006

training has improved their confidence level to perform more effectively in villages. Their increased social recognition from their ability to perform as an ASHA worker has led to some health improvement in rural India. Most of them are satisfied by the work they were doing, but need proper resources and financial support to continue health improvement in their village.

Conclusion: ASHA workers are in constant contact with the rural people of their village, especially pregnant women. The CBR program was effective and helpful in emergency cases, because it was more skill-oriented than other trainings ASHA workers had experienced. The CBR training has made the ASHA workers psychologically feel better about the work they were doing.

Key words: Community-Based Resuscitation (CBR) Programme, ASHA worker, Rural area, Pregnancy-related emergencies, Delivery, Immunization

Title: Effectiveness of CBR Training on ASHA Workers

Introduction

The ASHA (Accredited Social Health Activist) worker program was set up by India's Ministry of

Health and Family Welfare in 2005 by the National Rural Health Commission (NRHC) specifically. The goal of the program was to bridge the gap between citizens in rural areas of India to the health facilities that they may need, specifically with women's health, neonatal care, and hygiene. "Along with Nurse didi, the Anganwadi behen, Self Help Group (SHG) members and the male Multi Purpose Workers (MPW), you will have some assignments to do in the village, like water disinfection, or attending the Antenatal Care (ANC) clinic/health day¹." This quote, from Book Number 1 for training the ASHA workers written by the National Health Systems Resource Center (NHSRC), states the beginning skills that ASHA workers are expected to master and

is an example to what an ASHA worker's role in her village is. The current training for ASHA workers include being able to communicate between rural area patients and hospitals, developing a health plan that includes sanitation efforts, working fluently with other healthcare workers in villages, counseling patients, ensure that patients receive the right help, treat simple illnesses such as colds, dispensing the right vitamins, and maintaining records. Since ASHA workers interact with pregnant women at every stage, Community Based Resuscitation (CBR) training includes useful and necessary skills to have.

The CBR training that was conducted at GVK EMRI on August 23rd and 24th of 2012.

It included 100 participants from the Rangareddy and Shamirpet mandal. The training included: learning to escort patients to the hospital before, during, and immediately after child birth, controlling difficulties during pregnancy and child birth, resuscitations for every age, mal presentations (shoulder dystocia and breech), and Postpartum hemorrhage². It has been about 11 months since the training, and the Focus Group Discussion (FGD) and telephonic interview of research project evaluated the retention and usefulness of this training for future plans regarding ASHA worker training. The reason the FGD method was considered the best method for conducting the evaluation of the CBR training was because an FGD provides depth into a particular issue, which a survey cannot do. It allows participants to agree and disagree with each other and can accurately represent a population. Opinions, beliefs, relationships between ideas, and feedback can all be explored in a FGD. We were not able to perform FGD for all, so for remaining ASHA workers, they were evaluated by telephonic interview. Evaluating the CBR training's impact can best be done by receiving input from the participants in a meaningful and in-depth manner through an FGD.

Literature Review

There have been quite a few studies done

on ASHA workers concerning their performance, retention, and the health outcomes of their community. A comprehensive study done at Columbia University in 2011 concludes that the impact of the ASHA worker program all lies on the ASHA workers individually, and after qualitative and quantitative data, it was found that ASHA workers are not meeting their responsibilities. They cannot articulate what their specific roles are in their community, and some did not complete their training³.

In an evaluative study done in Seth GS Medical College and KEM Hospital in India in 2012 regarding ASHA workers knowledge retention, it was found that the trainings that ASHA workers experienced was not enough for them to remember months later. It was suggested that periodic refreshers should be done, and "In the future training sessions, more emphasis should be given to high risk cases requiring prompt referral⁴." CBR training was specifically designed to train ASHA workers in emergency situations in hopes of broadening their range of skills.

In a study evaluating the ASHA workers in Karnataka in 2012 however, the ASHA workers were found to be operational in the three villages studied and the conclusion was that, "Special training of ASHAs should be undertaken since one of

the primary objectives of the ASHA programme is to improve social justice⁵." Social justice may include preventative measures for infectious diseases and assisting patients in times of dire need, such as deliveries. The CBR training is a special training for emergency situations, and could improve the quality of life in rural areas of India.

Studies have been conducted using the FGD method on ASHA workers as well. The World Bank in Washington D.C. in 2012 had an objective of studying the performance motivation of community health workers, and how it affected the ASHA program. Using surveys and FGDs, the study concluded that "the CHW programme could motivate and empower local lay women on community health largely. The desire to gain social recognition, a sense of social responsibility and self-efficacy motivated them to perform." However, there needs to be more amendments kept in place to make sure the proper training and supervision is met⁶. This study displays the important aspect of motivation. If it has been proven that community health workers have the desire to do well in society, then the FGD that was conducted over the CBR training focused on the ASHA workers knowledge and application, and there will be less doubt as to whether or not the training competence was due to lack of interest in the workers.

The FGD method was the best method for this study. A FGD does not discriminate based on people who can read or write. Considering many of the ASHA workers have little education, it is best to talk in person with them. These workers may also feel uncomfortable with a one-on-one interview and thus will not be able to speak their mind. A focus group eliminates that element, and introduces a more comfortable environment with a group of participants who are all very similar to one another. A study that provides some evidence to these claims was written in 1995 by researchers at the University of Glasgow. "A method that facilitates the expression of criticism and the exploration of different types of solutions is invaluable if the aim of research is to improve services⁷." Since the objectives of this study is to determine the need, if any, for future training and assess the knowledge and impact of CBR training on ASHA workers, there needs to be a way to receive honest opinions. The FGD is a method that "facilitates the expression of criticism." If there is criticism regarding the CBR training, the trainings can be modified and improved for future ASHA worker classes.

Rationale

ASHA workers play a crucial role in the wellbeing of rural areas of India. They are one of the few types of healthcare workers

that provide trained assistance for pregnancies, women's health, and emergency cases. The CBR training is necessary for ASHA workers; it includes critical life-saving techniques that help solve common emergency situations, such as CPR for adults and newborns, normal delivery practice, shoulder dystocia, maternal resuscitation, PPH, and mal presentations. As quoted from MoU between DMHO-RR and GVK EMRI on 8th August, 2012: "CBR course is expected to upgrade the ASHA workers skills as per the recent expert recommendations...Increase the confidence among ASHA workers by enhancing the life support skills while accompanying the pregnant women en-route to institutional delivery...Benefit the community by increasing access to the quality of care under NRHM...Assist other healthcare provider more efficiently." These points illustrate why CBR was an essential training for the ASHA workers. Equipped with the knowledge gained in this training, ASHA workers have the ability to assist a larger variety of patients, and ensure the safety of mothers and their children. An assessment of the CBR training and its usefulness is necessary and important to understand, as it indicates how the healthcare in rural areas of India is changing, and what future plans need to be implemented to continue to improve the healthcare in rural India.

Research question

How has CBR training benefitted ASHA workers?

Objectives

- To assess the usefulness of CBR training in service delivery by ASHA workers.
- To assess the ASHA workers knowledge gained from the CBR training.
- To determine the need if any, for future training.
- To identify any obstacles in applying resuscitation skills.

Methodology

The study uses both qualitative and semi-quantitative methods. To make the study statistically competent inclusion of more than 9 ASHA workers as subjects had become imperative in order to study the benefits of CBR training which was given to 100 ASHA workers in total. Out of 100 ASHA workers who received CBR training 9 participants were selected for Focus Group Discussion through stratified random sampling. 6 participants were selected randomly from the Rangareddy mandal and 3 from the Shamirpet mandal based on the proportion of them who received training from these mandals.

The FGD was arranged in a board room in GVK EMRI Campus. The participants were

assigned a number that only the researchers were aware of, to make it easier to identify the participants. There was a voice and video recorder during the entire session, and there was a moderator, as well as a guide to the moderator to keep the moderator on track. Additionally, 2 observers were in the room (people who understand the study and either understood Telugu or read the facial expressions and body language of the participants). These observers were assigned general topics to analyze during the session, such as “tone of the participants” or “emotional responses of the participants.” Please refer to Appendix A for more information over the researcher roles and a complete list of topics the observers were assigned. Appendix B displays the questions to be asked to the participants. At the beginning of the discussion, the study was explained to the participants; a form (Appendix C) with basic information about the participant was signed, indicating consent. A script of the beginning and end as to be told by the moderator is written in Appendix D.

The means of analyzing the data was through a Qualitative Data Analysis. This method included transcribing the entire session, categorizing every statement into a code: concern, knowledge, and responsibility, then further categorizing these codes into relations with the

objectives through enumeration and tables⁸.

Through the opinions of the participants and their ability to correctly explain the procedures done in various case scenarios, a conclusion was made as to what kind of impact the CBR training had in the rural communities of the ASHA workers. The tone of the conversation will be noted, and any comments that trigger an emotional response from other participants will be analyzed as well.

CBR training conducted in GVK EMRI was given to a sample of 100 ASHA workers. Since the FGD covered a group of 9 of these ASHA workers, telephonic interviews were conducted with an intention to include all the 100 ASHA workers, as to increase the strength of the study.

On calling the remaining ASHA workers for telephonic interview, 52 of the 91 responded. The telephonic interview was conducted using semi-structured questionnaire prepared in light of the findings of the FGD.

Quantitative Data Analysis using Microsoft Excel was an appropriate method to determine the degree of the impact. The analysis included looking for trends and unexpected responses in the commentary and telephonic conversations.

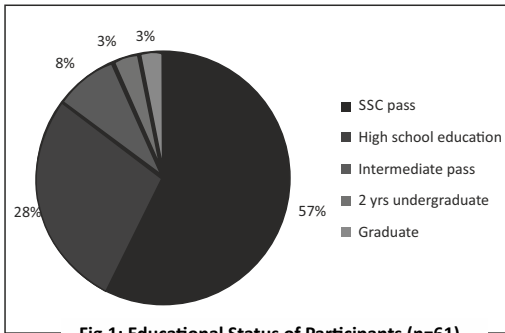


Fig.1: Educational Status of Participants (n=61)

Findings and Results:

The age group range of participants in the study was 35-48 years.

Education Status: The educational status of participants of both the Focus Group Discussion and the telephonic interview is depicted in Figure 1.

All the participants had 8 years of involvement in the ASHA worker program. In terms of education, out of 61 participants, a majority (57%) had passed SSC, while 28% received high school education less than SSC. 8% of them were Intermediate pass, 3% had undergone 2 years of undergraduate education, and the remaining 3% were graduates.

The methodology followed for further analysis of findings from FGD and telephonic interview is “Parallel Synthesis” wherein both are analyzed independently and parallel to each other.

The ASHA workers were all very engaged in the discussion, and they participated actively. Table 2 displays a summary of the points discussed for each of the questions asked to the participants. At the end, the ASHA workers seemed satisfied and eager to help with the study. There were about 3 dominating participants, but the moderator managed to receive a few important words from the quieter participants as well.

Table 2: Discussion Points in FGD

Sl. No	Facilitator Question	Answer from participant
1.	How has your work as an ASHA worker been so far?	<ul style="list-style-type: none"> - Antenatal check-up - Immunization - Emergency situation assistance - Record maintenance - Educates villagers about health, family planning, and 108 usage - Calls 108 in most cases for the patient - Distributing tablets - Active role play a role in DOT program
2.	Let's talk about some emergency situations you have been in. What happened and how did you handle it?	<ol style="list-style-type: none"> 1. Spots on the patient's skin; she had never seen that kind of snake bite before. She immediately called 108 and made sure the patient's skin condition did not get worse. The patient made a full recovery. 2. Patient experiencing chest pains. She advised the

		<p>patient to sit down and not have anything until the ambulance came. The patient did not listen to her, had the tea, and expired en route to the hospital due to heart attack.</p> <p>3. Drunken man falling from a building. He was bleeding and unconscious. The ASHA worker used first aid procedures and called 108. She did not have enough resources like cotton and gauge-roll to give the first aid. Despite the ASHA worker's objections the wife of the patient insisted she take her husband to the hospital by means of auto rickshaw before the ambulance arrival. The patient died en route to the hospital.</p>	
3.	Knowledge about CBR training	<ul style="list-style-type: none"> - BLS Protocol: Check the response by shake and shout; Check the breathing, Check the carotid pulse, If Pulse is absent, Chest compressions with two hands in adult and with two fingers for babies. - Ratio is 30 compressions and 2 ventilations - Procedures for choking - Procedure to conduct a normal delivery - We gain a good amount of knowledge from CBR training but there is very less scope for us to practice it in real scenarios. 	
4.	What was your experience before and after the CBR training?	<ul style="list-style-type: none"> - Our confidence, skill set, performance level has increased - Everyone in the village started recognizing and respecting us - Our ability to react to emergency situations has improved - We need to have more resources to help our villagers like first aid kit, basic medications etc... 	
5.	Imagine a situation where you conduct a delivery and the newborn is not crying. What would you do?	<ul style="list-style-type: none"> - Clean the baby and keep him warm with a towel - Rub the back & Flick the sole - Check the skin color - Check the breathing and pulse - Do the chest compressions with two fingers or thumb encircle if required. 	
6.	A 22-year-old female patient of unknown duration of pregnancy complains of abdominal pain. What to do?	<ul style="list-style-type: none"> - Call the attenders - Ask the victim whether her water has broken or not - Ask whether she is having back pain or feels fetal movements - Dial 108, and we educate women to call 108 in case of emergency on their own - After CBR training we are able to Manage/conduct deliveries with confidence. 	
7.	How do you feel about treating Post partum hemorrhage; share your experience if any?	<ul style="list-style-type: none"> - We will ask the medical history like - Have had this case many times, -Ask how frequently they are changing pads, since how long she is having this problem, & Observe the victim how much sick she is because of bleeding. - Call 108 if urgent. 	

After going through the list of questions and getting feedback from everyone, the entire session was transcribed. Along with the **thematic analysis** of the session, the notes taken from the moderator and two observers were recorded and analyzed as well. Every comment was categorized into a type of answer, such as “knowledge, skills” or “complaints.” From that data, the types of comments were then narrowed down into a more broad code. The three codes represented a theme in relation to the objectives: to assess the usefulness of CBR training in service delivery by ASHA workers, to assess the ASHA workers knowledge gained from the CBR training, to determine the need if any, for future training, to identify any obstacles in applying resuscitation skills. The codes were: concerns, knowledge, and responsibility. From each code, a summary and statement was made concerning both the research question and applicable objectives. The list is found in Table 3. Judging by the participants' non-verbal cues, many workers did not seem satisfied with their work. Only a few ASHA workers dominated the conversation, while the others either agreed or sat silently. It seems that there needs to be much more support for the ASHA workers in terms of their ability to help. They seem to be

expected to do more than assist patients to the hospital and treat simple illnesses. They are becoming the “little doctors” of the villages, as stated by several workers during the FGD. By increasing their skill set and knowledge, they can become more helpful to patients in diverse emergency situations.

Table 3: Findings of FGD

Sl. No	Objective:	Summary
1.	To assess the usefulness of CBR training in service delivery by ASHA workers	<ul style="list-style-type: none"> - The CBR training was effective to ASHA workers because it gave them more confidence with handling pregnant women - Created a better relationship between ASHA workers and the villagers and other health workers in the village by improving knowledge & communication skills
2.	To assess the ASHA workers knowledge gained from the CBR training	<ul style="list-style-type: none"> - Remembered the basic topics covered - Could handle the situations asked, but have not had the experience - Do not use many of the techniques they have learned, such as dealing with PPH, and its prevention

3.	To determine the need if any, for future training	<ul style="list-style-type: none"> - May not need more emergency training, But they want to have a knowledge in recognition of a real emergency. - Requesting for a refresher programme once in a year - Their needs are in the areas of supplies and financial support from Government - Wanted more training in premature births, Dysmenorrhea management, and what to do about various body pains
4.	To identify any obstacles in applying resuscitation skills	<ul style="list-style-type: none"> - Less chance to practice what we have learned in CBR training, it creates Lack of experience. - Lack of supplies for management of deliveries or bleeding. - Lack of general resources availability like cotton, gauge roll, betadine etc..

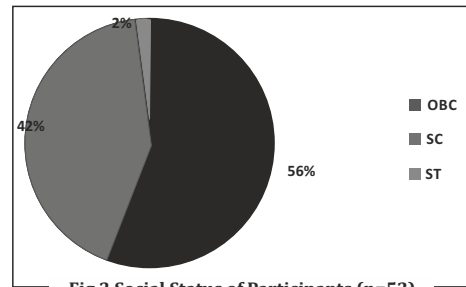


Fig.2 Social Status of Participants (n=52)

Out of a total of 52 participants, a majority 56% belong to Other Backward Class (OBC) category, 42% belong to Scheduled Caste, and 2% belong to Scheduled Tribes.

Common emergencies in work area:

When asked about the common emergencies which they come across on a daily basis, ASHA workers' response was depicted in Figure 3:

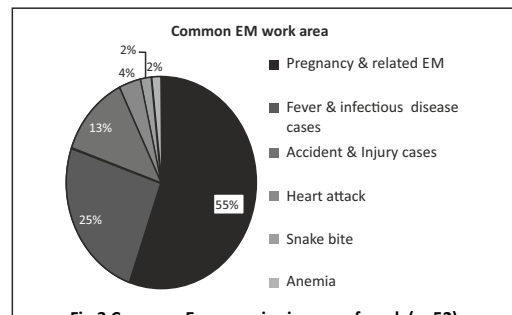


Fig.3 Common Emergencies in area of work (n=52)

As shown in Figure 3, 55% said common emergencies in their area of work are related to pregnancy, 25% said they are fever and infectious disease cases, 13% said accident and injury cases are most common, while 4% identified most common emergency as heart attack. Very few (2%) mentioned snake bite and anemia, respectively.

Findings of Telephonic Interview:

Social status: At the time of FGD social status was not directly asked to the participants to avoid any level of discomfort caused by it. The social status of participants in telephonic interview is depicted in the figure.2:

Response in Emergency situations:

On facing emergency situations when asked about their response, the reactions of ASHA workers are as depicted in Figure 4:

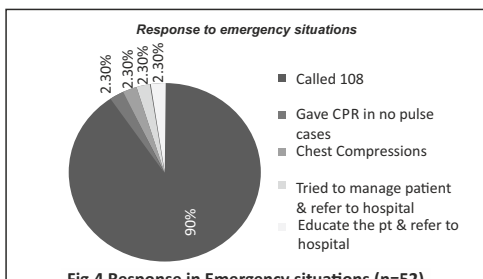


Fig.4 Response in Emergency situations (n=52)

As shown in Figure 4, 90% of ASHA workers called 108 in emergency situations. 2.3% each of the remaining ASHA workers said they gave cardio-pulmonary resuscitation in no pulse cases, gave chest compressions, and tried to manage or educate the patient and refer to hospital.

When asked how often they used 108 training, out of total 52 ASHA workers, about 38% said regularly, while 62% said rarely.

Experience of CBR Training: When asked to the ASHA workers about how they found the CBR training, they responded as depicted in Figure 5:

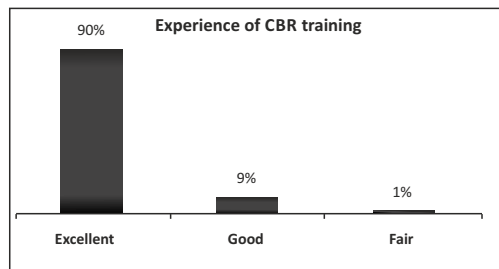


Fig. 5 Experience of CBR training (n=52)

Out of 52 ASHA workers, 90% said that the CBR training experience was Excellent, 9% said it was good, and a remaining 1% said it was fair. No ASHA worker responded in negative sense to the experience.

Perceived use of CBR Training:

When asked if the CBR training had been put to use, 26 of the 52 ASHA (50%) workers responded that they have used the CBR training in some way or the other. Their responses are as depicted in Figure 6:

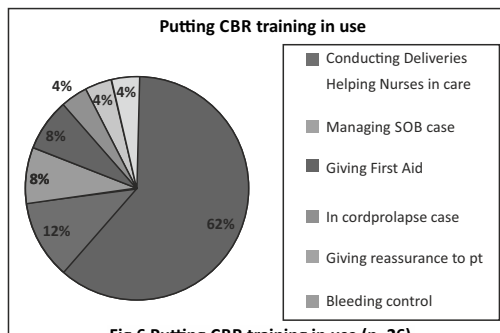


Fig.6 Putting CBR training in use (n=26)

As shown in Figure 6, out of total 26 ASHA workers who had put the training in use some way or the other, 62% said they had used it while conducting deliveries, 12%

said while helping Sister in the hospital, 8% said in handling a case with a breathing problem, 8% said for giving first aid, 4% used it in cord pro-lapse case, giving reassurance to the patient, and bleeding control, respectively.

Aspects of CBR training put in use:

When asked for what purpose they have used CBR training, 15 ASHA workers said they have used it for recognition of emergency, 7 said they have used it for giving medical advice, 16 ASHA workers said for management of emergency, and the remaining 15 said for provision of care as depicted in Figure 7.

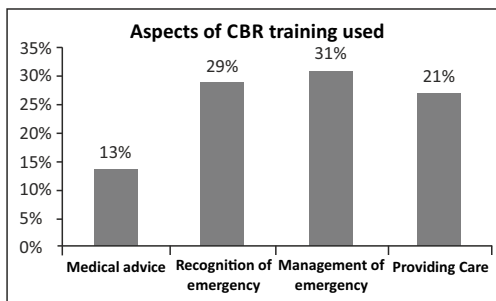


Fig.7: Aspects of CBR training used (n=52)

Effect on service delivery after CBR training: When asked to the ASHA workers if there has been any change in the service they give to their beneficiaries after the CBR training was conducted, their response was as depicted in Figure 8.

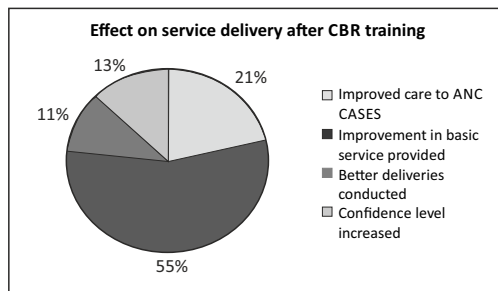


Fig.8 Effect on service delivery after CBR training (n=52)

As mentioned in Figure 8, 55% said there is an improvement in basic services provided, 21% said they provide better care to ANC cases, 13% said better and safer deliveries have been conducted, and the remaining 11% said that their confidence level has increased.

Need for better care: When asked to the ASHA workers about what services they need to provide better care for, their responses were recorded in Figure 9.

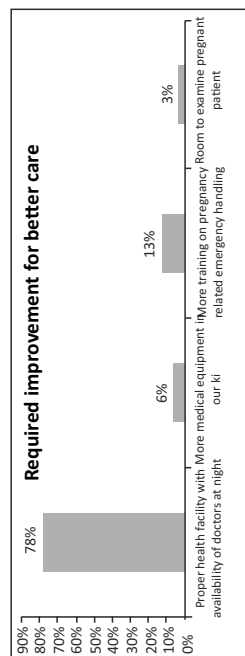


Fig.9 Services needed to provide better care (n=32)

As mentioned in Figure 9, 25 workers said they need proper health facilities with availability of doctors at night, 2 needed more medical equipment in their kit, 4 said they need more training on pregnancy-related emergency handling, and 1 said she needs a room to examine pregnant patient.

Feedback from patient about ASHA workers:

As shown in Figure 10, when asked about what feedback their beneficiaries gave about their service, 45% ASHA workers said they received good feedback, 32% said they got feedback as fair, and the remaining 23% said they had excellent feedback. When asked if they would recommend CBR training to their colleagues, 50 ASHA workers said they would while 1 did not respond to the question.

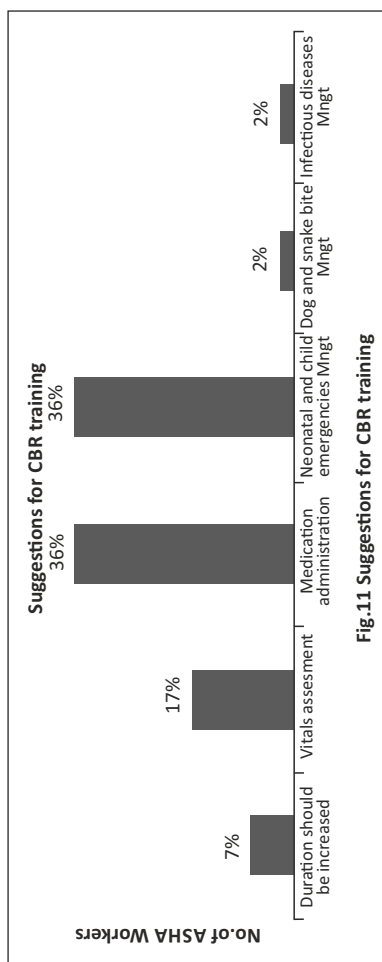


Fig.11 Suggestions for CBR training

When asked for any suggestions for CBR training, the response of the ASHA workers was as follows:

As shown in Figure 11, out of a total of 42 ASHA workers who responded to this question, 15 said they should be taught to give an injection, another 15 responded they feel the need for training on neonatal and childhood emergencies, 7 responded that they should be taught to take blood pressure, 3 said that the training should be of a longer duration, while the remaining 1% each responded that there should be training on dog and snake bite management, and training on diseases like pneumonia.

Conclusion

From the findings of FGD and telephonic interview mentioned above, it can be concluded that CBR training has not

necessarily helped ASHA workers to conduct more deliveries, but it was a training that ASHA workers said made them more comfortable and confident in assisting pregnant women and maintaining a relationship with them. The CBR training has definitely improved the knowledge and effectiveness of the ASHA program, as interpreted from the ASHA workers answers to the telephonic interviews. This was one of the objectives of the MoU. The practical aspect of CBR was greatly appreciated. The points shown in Table 3 and Figure 4 conclude that ASHA workers are doing better at identifying and assisting in emergency situations, advising patients, and first aid measures. This is displayed especially through the emergency situations the participants described, and their ability to safely and effectively handle a hypothetical emergency situation.

ASHA workers are in constant contact with pregnant women, and the chance of an emergency situation arising is high. The villagers and ASHAs have to have a strong and trusting connection for the ASHA worker program to remain effective and be helpful in emergency cases. Now, the participants are not as scared to go to villagers' homes and assist them. They now know they are equipped with a general understanding of how to

handle emergency situations. Since the training 11 months ago, the 9 ASHA workers in the FGD study had not utilized the CBR training skills. Even in PPH cases, which they see a lot, they are not able to help much, except change pads on a regular basis and send the patient to the hospital. The participants also said that compare to other trainings they have been to, the CBR training is better, because it is more skill-oriented. Despite the participants compliments for the program and their assurance that the CBR training has made them feel psychologically better, it was show through the PPH question that the ASHA workers are not utilizing their skills.

The future work of this study should focus more on the weaknesses in the ASHA program. The weakness lies in the inability for ASHA workers to help in their full extent due to a lack of supplies and money. The improvements do not necessarily lie in training, but giving more supplies to ASHA workers so that they have the means to help villagers in case of emergency. It was mentioned by mainly all the participants that even if they had to conduct a delivery, they have a shortage of the supplies. If there is a weak link between the government, ASHA workers, and the villagers, the healthcare in rural areas cannot improve greatly.

ASHA workers also said that reverse transportation is another huge issue, as the hospital does not bring the patient back in most cases, and ASHA workers have to pay out of their own pocket for a way to bring patients back home. There should be a method to follow up on reverse transportation and make sure that there is a sufficient amount of supplies. Once the weaknesses are restored, there can be more of a focus on strengthening the ASHA training and finding a way for the ASHA workers to implement their knowledge (perhaps through yearly refresher trainings). Also, the participants mentioned that if they were to have another training, they would want to know more about how to deal with various body pains (specifically menstrual cycle pains) and premature births. These areas, along with reverse transportation, the major complaint by ASHA workers about a lack of supplies, and an increasing amount of mistrust in the community between villagers and ASHA workers, are areas to be further researched and developed. Overall, the CBR training was useful for the ASHA workers, but training is not necessarily the next logical step. Firstly, the focus on financial support and confidence-building for ASHA workers should be addressed, and then new emergency training programs should be developed.

References

1. Hota, P. Reading Material for ASHA. National Rural Health Mission; 2005.
2. Author Unknown. Community Based Resuscitation Programme Report. GVK EMRI. 2012.
3. Bajpai, N, Dholakia R. Improving the Performance of Accredited Social Health Activists in India. Columbia Global Centers. 2011.
4. Shrivastava S, Shrivastava P. Evaluation of trained Accredited Social Health Activist (ASHA) workers regarding their knowledge, attitude and practices about child health. Rural Remote Health. 2012; (4). <http://www.ncbi.nlm.nih.gov/pubmed/23198703>. [2013 Jul 20].
5. Mony P, Raju M. Evaluation of ASHA programme in Karnataka under the National Rural Health Mission. BMC Proc. 2012; (6). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3467467/>. [2013 Jul 20].
6. Gopalan, S. Mohanty, S. Das, A. Assessing community health workers' performance motivation: a mixed-methods approach on India's Accredited Social Health Activists (ASHA) programme. BMJ Open. 2012; (5).

- <http://www.ncbi.nlm.nih.gov/pubmed/23019208>. [2013 Jul 20].
7. Kitzinger, J. Qualitative Research. Introducing Study Groups. *BMJ*. 1995; 311(7000): 299-302. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2550365/>. [2013 Jul 20].
 8. Johnson. Qualitative Data Analysis. <www.southalabama.edu/coe/bset/johnson/lectures/lec17.pdf?>. [2013 Jul 20].
 9. www.emri.in
 10. Community Based Resuscitation Training manual and final report by GVKEMRI.

Do all Poster abstract presentations get due recognition and publications compared to oral presentations?

Kumara V. Nibhanipudi

Introduction:

There are 2 types of abstract presentations, namely oral and Poster Presentations. Oral presentations compared to poster cost nothing. Poster presentations cost money paid by either the participant or the department. The participants take same amount of time and effort for both types of presentations. The other significant important differences between oral and poster presentations is the audience receptive/responsiveness behavior. Most of the organizers as well as endorsing national academies will publish only few oral presentations and no poster presentations. To the best of my knowledge, American College of Emergency Physicians (ACEP) is the only National Emergency Medicine (EM) organization compared to the rest, publishes all accepted abstract presentations both oral and posters in

their supplement to Annals of EM without prejudice or discrimination.

Methods:

Inclusion Criteria:

Those physicians who are willing to participate in the unanimous survey with no identifiers.

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Methodology:

It is an anonymous physicians survey study. No identifiers. This survey is with regards to poster versus oral abstract presentations. All the physicians(both attending and residents) were requested to answer the survey questionnaire by circling their preference of choice.

Survey questionnaire:

1. Are you attending or resident.
2. How do you like your abstract presentation:
oral only

Address for Correspondence

Kumara V. Nibhanipudi,
MD, FAAP, FAAEM

Prof. of Clinical Emergency Medicine, NYMC & Attending Physician, Metropolitan Hosp, Ctr, NY

- poster only
No preference either poster or oral
3. Recognition and responsive nature by Organizers as well as by physician attendees: with due recognition and appreciation for the poster presentations:
Agree
Disagree
Somewhat agree
4. All accepted abstracts both oral and poster presentations to be published. Source of funds, if needed to be incurred for publication as a supplement in a journal can be realized either from the collected registration fees and/or from total elimination or minimizing wastage expenses on conference organizers

as well on invited guest speakers

Agree

disagree

somewhat agree.

Results:

survey 1: #of participants: 100 attending Physicians.

For Survey 2: 100/100 no preference-circled for either oral or poster.

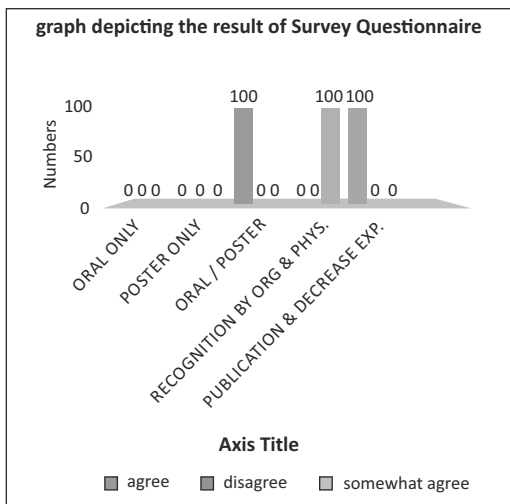
For Survey 3: 100/100 circled somewhat agree.

For Survey 4: 100/100 all circled agree.

Table: Survey questionnaire:

Circled answers	Prefer Poster Presentations only	Prefer Oral presentations only	No preference Either Oral or poster presentations	Recognition and responsive nature by Organizers as well as by physician attendees: with due recognition and appreciation for the poster presentations:	#4 publication of all abstracts (both oral & poster) as a Supplement to a journal and finances to be reimbursed either from collected registration fees and/or funds to be collected from minimizing expenditure spent on organizers as well as invited guest speakers.
agree	0	0	100/100	0	100/100
disagree	0	0	0	0	0
Somewhat agree	0	0	0	100/100	

Graph depicting the survey questionnaire



Statistics:

We used In Silico, Fisher exact test comparing survey results of agree, disagree and somewhat agree the resultant p-value is <0.0001.

Discussion:

According to Levinsky and others less than half of the abstracts presented at the Pediatric Academic Society (PAS) meeting were published within 8 years. Oral presentations were more likely to be published than poster¹

According to Yolcu and Ozcan, in their study to find out the rate of peer reviewed publication of full papers of abstracts at the annual meeting of the Oral and Maxillo Facial (OMF) Surgery Society of Turkey. A total of 1322

abstracts were presented between 2007 and 2012. Of these 390 presentations were oral and the remaining 932 presentations were poster. 19% of these were subsequently published in PEER reviewed journals. The percentage of publications for oral was 28% and posters were 15%²results1

National orthopedic meetings are used to disseminate current research through podium and poster abstract presentations. Not all of these abstracts go on to full-text journal publication. According to William et al in their determined the publication rates of podium and poster presentations from the American Orthopedic Foot & Ankle Society (AOFAS) annual meetings between 2008 and 2012.

Podium abstracts were significantly more likely to be published compared to posters. The AOFAS overall full-text journal publication rate was one of the higher reported rates compared with other national orthopedic society meetings, which have ranged from 34% to 73%. Overall full-text publication rate was 73.7% for podium presentations and 55.8% for posters. Podium presentations were published in a journal significantly more often than posters³.

Akash Patel and others studied to determine the publication rates of both oral and poster presentations at Congress of Neurological Surgeons (CNS) and American Association of Neurological Surgeons (AANS) meetings in peer-reviewed journals. The authors reviewed all accepted abstracts, presented as either oral or poster presentations, at the CNS and AANS meetings from 2003 to 2005. This information was then used to search PubMed to determine the rate of publication of the abstracts presented at the meetings. Abstracts were considered published if the data presented at the meeting was identical to that in the publication.

The overall publication rate was 32.48% (1243 of 3827 abstracts). On average, 41.28% of oral presentations and 29.03% of poster presentations were eventually published. Approximately one-third of all presentations at the annual CNS and AANS meetings will be published in peer-reviewed, MEDLINE-indexed journals. Oral presentations have a significantly higher rate of eventual publication compared with poster presentations⁴.

Karsten and his colleagues were of the opinion, that the quality of oral and poster conference presentations differ. They hypothesized that the quality of

reporting is better in oral abstracts than in poster abstracts at the American Burn Association (ABA) conference meetings. All 511 abstracts from the ABA annual meeting from 2000 to 2008 were screened. However they concluded that there is no difference between oral and poster presentations, as far as the quality of study design and quality of clinical trials.⁵

Uzun and his co-authors hypothesized that the full-text publication of abstracts presented at any given scientific meeting in peer-reviewed journals is accepted as a measure of scientific quality of that particular meeting. They tried to determine the full-text publication rate of abstracts presented at the 2005 Scientific Meeting of the Undersea and Hyperbaric Medical Society (UHMS). Overall, they identified 187 abstracts presented at the 2005 UHMS meeting and found that only one-third of the abstracts presented at the 2005 UHMS meeting were published as full-text articles within the succeeding five years⁶

As per Chan and his colleague that The publication rate of full text papers following an abstract presentation at a medical conference is variable, and few studies have examined the situation with respect to international emergency

medicine conferences. This retrospective study aimed to identify the publication rate of abstracts presented at the 2006 International Conference on Emergency Medicine (ICEM) held in Halifax, Canada. The full text publication rate was 33.2%, similar to previous emergency medicine meetings. English language barriers may play a role in the low publication rate seen⁷.

See comment in PubMed Commons below Carroll and other co-authors questioned The validity of research presented at scientific meetings continues to be a concern. Presentations are chosen on the basis of submitted abstracts, which may not contain sufficient information to assess the validity of the research. The objective of this study was to determine 1) the proportion of abstracts presented at the annual Pediatric Academic Society (PAS) meeting that were ultimately published in peer reviewed journals; 2) whether the presentation format of abstracts at the meeting predicts subsequent full publication;

They assembled a list of all abstracts submitted to the PAS meetings in general pediatrics categories in 1998 and 1999, using both CD-ROM and journal publications. Overall, 44.6% of abstracts

presented at the PAS meeting achieved subsequent full publication within 4 to 5 years. There were no meaningful differences between the presentation formats in their mean time to publication and their mean journal impact factor. Their study is inconclusive regarding superiority of one form of presentation compared to the other⁸

Conclusions:

From our survey study for abstract presentations, the mode of presentation does not matter either oral or poster; secondly there is somewhat agreement regarding recognition and receptive nature from both by the organizers and physician attendees. All definitely agree for publication in the journal of all abstract publications both oral and posters without any discrimination and funds to be reimbursed either from collected registration fees and /or realizing funds derived from minimizing expenditure spending on organizers as well as invited guest faculty

Limitations:

Smaller sample size

References:

1. Levinsky Y^{1,2}, Berger T^{1,2}, Brameli A^{1,2}, Goldstein T^{1,2}, Akerman E¹, Mimouni M3, Mimouni FB4, Amarilyo Gs
Publication outcomes of neonatology abstracts presented at the Pediatric Academic Societies meeting
J Perinatol. 2017 Apr 6. doi: 10.1038/jp.2017.46. [Epub ahead of print])
2. Ozcan A2. Publication rates in peer-reviewed journals of abstracts presented at the Oral and Maxillofacial Surgery Society of Turkey meetings 2007-2012. 2015 Nov; 53(9): 849-53. doi: 10.1016/j.bjoms.2015.07.005. Epub 2015 Jul 30.
3. Williams BR¹, Kunas GC², Deland JT², Ellis SJ². Publications Rates for Podium and Poster Presentations from the American Orthopaedic Foot & Ankle Society. Foot Ankle Int. 2017 Jan1:1071100716688723. doi: 10.1177/1071100716688723
4. Akash J. Patel, M.D.*, Jacob Cherian, M.D., Benjamin D. Fox, M.D., William E. Whitehead, M.D., M.P.H., Daniel J. Curry, M.D., Thomas G. Luerssen, M.D., and Andrew Jea, M.D. Publication patterns of oral and poster presentations at the annual meetings of the Congress of Neurological Surgeons and the American Association of Neurological Surgeons Journal of Neurosurgery Dec 2011 / Vol. 115 / No. 6 / Pages 1258-1261
5. Karsten Knobloch1 Uzung Yoon2, Hans O Rennekampff1 and Peter M Vogt1 –Quality of reporting according to the CONSORT, STROBE and Timmer instrument at the American Burn Association (ABA) annual meetings 2000 and 2008 BMC Medical Research Methodology 2011;111:161 DOI: 10.1186/1471-2288-11-161)
6. Uzun G¹, Mutluoğlu M, Bakir A, Senocak MS. 1Fate of abstracts presented at the annual scientific meeting of the Undersea and Hyperbaric Medical Society. 1Undersea Hyperb Med. 2013 Sep-Oct;40(5):387-93
7. Chan JW¹, Graham CA Full text publication rates of studies presented at an international emergency medicine scientific meeting Emerg Med J. 2011 Sep; 28(9): 802-3. doi: 10.1136/emj.2010.101667. Epub 2010 Sep 15.
8. Carroll AE¹, Sox CM, Tarini BA, Ringold S, Christakis DA Pediatrics.. Does presentation format at the Pediatric Academic Societies' annual meeting predict subsequent publication? Pediatrics. 2003 Dec;112(6 Pt 1):1238-41.

Paraphimosis

Kumara V. Nibhanipudi

This is a 5 yrs old, un-circumcised male child has come for a complaint of penile swelling for 3 days; no fever. no complains of dysuria, or hematuria. no vomiting. No diarrhea; The mother tried to retract the foreskin and unable to pull back to its normal position. 3 days back. On exam: no sign of distress. no signs of meningeal irritation. Chest: clear. No wheezing. Abdomen: non tender. No masses. No organomegaly. External Genitalia: prepubertal. Tanner I; Both Testes are descended and Penis: diffuse swelling over the shaft of the penis and swelling over the glans; slightly erythematous; no warmth; and tight constriction band as seen in Figure #1;

Plan:

Apply EMLA(Eutectic Mixture of Local Anesthetics) cream over the glans penis and over the shaft of penis and patient was observed 45 minutes for EMLA cream to take effect. The reduction was accomplished as follows: the thumbs of both hands were placed on the glans penis and fingers wrapped behind the prepuce. A gentle forceful pressure was applied to the glans with the thumbs and counter-traction was applied to the foreskin with the fingers as prepuce was pulled down and the entire foreskin got covered over the glans as in Figure # 2.

Address for Correspondence
Kumara V. Nibhanipudi,

Prof. of Clinical Emergency Medicine, NYMC & Attending Physician, Metropolitan Hosp, Ctr, NY



Figure # 1

Tight constriction band with edema of foreskin
No regional lymphadenopathy. Rest of the PE
unremarkable.
Imp: Paraphimosis



Figure # 2

Post reduction paraphimosis with foreskin over the glans

Discussion:

Paraphimosis is a real urosurgical emergency and present in uncircumscised males. Paraphimosis is an inability of the foreskin to return to its normal position after it is pulled behind the glans penis. Hayashi and his colleagues described that the paraphimosis is a condition in which the foreskin is left retracted¹

The most common cause of paraphimosis is iatrogenic, following Foley catheter placement, forceful retraction of the foreskin as in our patient, self-inflicted injury, or rarely secondary to penile erections. The patient is apprehensive, complains of penile pain, penile foreskin is

edematous distal to the constriction band and can palpate the tight constriction band. If the glans or prepuce appears to be black, auto-necrosis has begun, and if it feels non elastic with areas of discoloration, penile necrosis should be suspected.

In the management of paraphimosis the pain is the predominant factor. The usual management of pain is by using a combination of dorsal penile and ring blocks or by applying EMLA cream to the edematous foreskin and over the constrictive band and awaiting for an hour², or usage of hyaluranidase injection over the edematous foreskin³. Lastly, Using ice and osmotic agents might take 1-2 hours to have an

effect and should not be used when arterial compromise is suspected, Regardless of the method chosen, when In our patient we applied EMLA cream over the entire edematous foreskin and over the constricting band and waited for an hour. Reduction is applied as described in our management. The other method of reduction of paraphimosis is surgical emergency dorsal slit⁴. Later on the ultimate management for successful reduction of paraphimosis is circumcision.

elderly men. Am J Emerg Med. 1995 May;13(3):351-3).

References:

- 1 (Hayashi Y1, Kojima Y, Mizuno KKohri K Prepuce: phimosis, paraphimosis, and circumcision ScientificWorldJournal. 2011 Feb 3 ; 1 1 : 2 8 9 - 3 0 1 . d o i : 10.1100/tsw.2011.31)
2. Axel S. Merseburger, Markus A. Kuczyk, Judd W. Moul - 2014 - Urology at a Glance - Page 362 – usage of 2% lidocaine gel or EMLA cream Ax Google Books Result<https://books.google.com/books?isbn=36425485982>.
3. (Little B1, White M.Treatment options for paraphimosis. Int J Clin Pract. 2005 May;59(5):5913.)
4. (Williams J C Morrison PMRichardson Paraphimosis in

Good Samaritan Law

Dr. G.V. Ramana Rao

Road Accident and Sustainable Development Goal:

Every one minute one road traffic accident (RTA) occurs in India and one fatal road accident occurs every fourth minute. Nearly 480,000 RTAs and 150,000 deaths were reported in the year 2016 in India. Though, the number of road accidents decreased, number of deaths, in fact, increased over the earlier years. But, the 2030 Agenda for Sustainable Development Goals (SDG-3.6 and 11.2) includes an ambitious target to reduce road traffic deaths and injuries by 50% by 2020. It is hoped that this target will leverage renewed momentum for the Decade of Action for Road Safety 2011–2020. If still today some 1.25 million people die from road traffic crashes every year at the global level, and millions more are injured, it is because policy makers particularly those in low and middle income countries continue to find road safety solutions out of reach. Global policy framework

provides a powerful focus to galvanize governments and the international community into action on road safety policy. World Health Organization Report on prehospital trauma care systems has categorically stated that “Even the most sophisticated and well equipped pre-hospital trauma care systems can do little if bystanders fail to recognize the seriousness of a situation, call for help, and provide basic care until help arrives. Bystanders must feel both empowered to act, and confident that they will not suffer adverse consequences, such as legal liability, as a result of aiding someone who has been injured.” Hence, involvement of bystanders is a must in the context of reduction of Indian Road Traffic Accident related deaths.

Introduction to Good Samaritan Laws:

Good Samaritan laws offer legal protection to people who give reasonable assistance to those who are, or who they believe to be injured, ill, in

Address for Correspondence

Dr. G.V. Ramana Rao

Director Emergency Medicine learning, Care & Research

GVK Emergency Management & Research Institute, Hyderabad. email: ramanarao_gv@emri.in

peril or otherwise incapacitated. In essence, these laws protect the “Good Samaritan” from liability if unintended consequences result from their assistance. Its purpose is to keep people from being reluctant to help a stranger in need for fear of legal repercussions should they make some mistake in treatment.

Good Samaritan laws take their name from a parable found in Bible, attributed to Jesus referred to as the “Parable of the Good Samaritan” which is contained in Luke 10:25-37. It recounts the aid given by a traveller from the area known as 'Samaria' to another traveller of a conflicting religious and ethnic background who had been beaten and robbed by bandits.

Duty to assist, imminent peril and reward or compensation, obligation to remain and consent are the common features of Good Samaritan Law. The furnishing of medical assistance in an emergency is a matter of vital concern affecting the public health, safety and welfare. Prehospital emergency medical care, the provision of prompt and effective communication among ambulances and hospitals to safe, effective care and transportation of the sick and injured are essential public

health services. Only first aid provided without intention of reward or financial compensation is covered in Good Samaritan Law. Medical professionals are typically not protected by good Samaritan laws when performing first aid in connection with their employment.

Bystanders and impediments to help RTA victims:

A study on impediments for bystander care in India, conducted by TNS India Private Ltd. for SaveLIFE Foundation (July-2013). The study covered various categories of bystanders and potential Good Samaritans across seven cities of India to develop a first-hand account of factors that hinder bystanders from coming forth as first responders to assist a seriously injured victim on the road.

The survey was carried out among 1,027 road-users across Delhi, Hyderabad, Kanpur, Ludhiana, Mumbai, Indore and Kolkata.

Within each location the survey was conducted at busy city intersections as well as along highway stretches leading to the city.

Three broad categories of respondents

were covered during this survey, viz. Pedestrians, vehicle owners and patrons at roadside establishments.

Major findings of the study:

74% of bystanders are unlikely to assist a victim of serious injury irrespective of whether they are alone at the spot or in the presence of others regardless of whether there were others on scene or not.

88% of respondents who were unlikely to assist injured victims stated that they were reluctant to help for fear of legal hassles, including repeated police questioning and court appearances.

77% of respondents who were unlikely to assist injured victims also stated that hospitals unnecessarily detain Good Samaritans and refuse treatment if money is not paid for treatment.

78% of respondents belonging to the lowest socioeconomic bracket (probably the poorest people on the road) are unlikely to come forward to assist a victim. 72% of middle income and 70% of upper-income respondents stated that they would not come forward to help the injured victims.

58% respondents admitted that if they

had to, they are more likely to help a victim of road accident than of violence.

88% respondents expressed the need for a supportive legal environment to enable Good Samaritans to come forward and help injured victims on the road.

38% of all bystanders feel that bystander responsibility ends with calling the emergency numbers.

77% respondents are aware of which emergency numbers to call to report an accident.

In a landmark ruling on March 4, 2016, Supreme Court stated that it would pass an order on the recommendations of a three-member committee, chaired by its former Judge K.S. Radha Krishnan and comprising former Secretary of Road Transport Ministry S. Sundar and scientist Nishi Mittal, which had demanded protection for those saving accident victims. Chronology towards Good Samaritan Law in India are as follows:

- i. 2012:** Public Interest Litigation (PIL) filed by SaveLIFE Foundation.
- ii. October 29, 2014:** The Supreme Court directed the Centre to issue the necessary guidelines with regard to the

protection of Good Samaritans until appropriate legislation was not made by the Union Legislature.

iii. May 13, 2015: In a gazette notification, Ministry of Road Transport and Highways (MoRTH) notified the said guidelines. As per the guidelines, the disclosure of personal information by a Good Samaritan who brings an injured person to the hospital was made voluntary. They also provided that a Good Samaritan would not be liable for any civil or criminal liability.

iv. January 22, 2016: MoRTH issued Standard Operating Procedures (SOPs) for the examination of Good Samaritans by the police or during trial.

v. March 4, 2016: The Supreme Court reserved the judgment making the guidelines and SOPs binding on all states and union territories of India.

vi. March 30, 2016: The Supreme Court approved the guidelines issued by the Centre.

The guidelines lay down the following:

1. The Good Samaritan will be treated respectfully and without any

discrimination on the grounds of gender, religion, nationality and caste.

2. Any individual, except an eyewitness, who calls the police to inform them of an accidental injury or death need not reveal his or her personal details such as full name, address or phone number.

3. The police will not compel the Good Samaritan to disclose his or her name, identity, address and other such details in the police record form or log register.

4. The police will not force any Good Samaritan in procuring information or anything else.

5. The police will allow the Good Samaritan to leave after having provided the information available to him or her, and no further questions will be asked of him or her if he or she does not desire to be a witness.

Even when Good Samaritans agree to become witnesses, the guidelines accord them protection and comfort. They ensure that:

1. If a Good Samaritan chooses to be a witness, she will be examined with utmost care and respect.

2. The examination will be conducted at a time and place of the Good Samaritan's convenience and the investigation officer will be dressed in plain clothes.

3. If the Good Samaritan is required by the investigation officer to visit the police station, the reasons for the requirement shall be recorded by the officer in writing.

4. In a police station, the Good Samaritan will be examined in a single examination in a reasonable and time-bound manner, without causing any undue delay.

5. If a Good Samaritan declares himself to be an eyewitness, she will be allowed to give her evidence in the form of an affidavit.

The guidelines also specify that the concerned Superintendent or Deputy Commissioner of Police are responsible in ensuring that all the above-mentioned procedures are implemented throughout their respective jurisdictions.

Extraordinary Gazette Notification No. 126, published by the authority of Government of India, on May 13th 2015, highlights that:

Central Government considers it necessary to protect the Good Samaritans from harassment on the actions being taken by them to save the life of the road accident victims and, therefore, the Central Government hereby issues the following guidelines to be followed by hospitals, police and all other authorities for the protection of Good Samaritans, namely, :-

(1) A bystander or good Samaritan including an eyewitness of a road accident may take an injured person to the nearest hospital, and the bystander or good Samaritan should be allowed to leave immediately except after furnishing address by the eyewitness only and no question shall be asked to such bystander or good Samaritan.

(2) The bystander or good Samaritan shall be suitably rewarded or compensated to encourage other citizens to come forward to help the road accident victims by the authorities in the manner as may be specified by the State Governments.

(3) The bystander or Good Samaritan shall not be legally responsible for any civil and criminal liability.

(4) A bystander or good Samaritan, who

makes a phone call to inform the police or emergency services for the person lying injured on the road, shall not be compelled to reveal his name and personal details on the phone or in person.

(5) The disclosure of personal information, such as name and contact details of the good Samaritan shall be made voluntary and optional including in the Medico Legal Case (MLC) Form provided by hospitals.

(6) The disciplinary or departmental action shall be initiated by the Government concerned against public officials who coerce or intimidate a bystander or good Samaritan for revealing his name or personal details.

(7) In case a bystander or good Samaritan, who has voluntarily stated that he is also an eye witness to the accident and is required to be examined for the purposes of investigation by the police or during the trial, such bystander or good Samaritan shall be examined on a single occasion and the State Government shall develop standard operating procedures to ensure that bystander or good Samaritan is not harassed or intimidated.

(8) The methods of examination may

either be by way of a commission under section 284, of the Code of Criminal Procedure 1973 or formally on affidavit as per section 296, of the said Code and Standard Operating Procedures shall be developed within a period of thirty days from the date when this notification is issued.

(9) Video conferencing may be used extensively during examination of bystander or good Samaritan including the persons referred to in guideline (1) above, who are eye witnesses in order to prevent harassment and inconvenience to good Samaritans.

(10) The Ministry of Health and Family Welfare shall issue guidelines stating that all registered public and private hospitals are not to detain bystander or Good Samaritan or demand payment for registration and admission costs, unless the good Samaritan is a family member or relative of the injured and the injured is to be treated immediately in pursuance of the order of the Hon'ble Supreme Court in Pt. Parmanand Katara vs Union of India & Ors [1989] 4 sec 286.

(11) Lack of response by a doctor in an emergency situation pertaining to road accidents, where he is expected to provide care, shall constitute

"Professional Misconduct", under Chapter 7 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulation, 2002 and disciplinary action shall be taken against such doctor under Chapter 8 of the said regulations.

12) All hospitals shall publish a charter in Hindi, English and the vernacular language of the State or Union territory at their entrance to the effect that they shall not detain bystander or good Samaritan or ask depositing money from them for the treatment of a victim.

(13) In case a bystander or good Samaritan so desires, the hospital shall provide an acknowledgement to such good Samaritan, confirming that an injured person was brought to the hospital and the time and place of such occurrence and the acknowledgement may be prepared in a standard format by the State Government and

disseminated to all hospitals in the State for incentivising the bystander or good Samaritan as deemed fit by the State Government.

(14) All public and private hospitals shall implement these guidelines immediately and in case of noncompliance or violation

of these guidelines appropriate action shall be taken by the concerned authorities.

(15) A letter containing these guidelines shall be issued by the Central Government and the State Government to all Hospitals and Institutes under their respective jurisdiction, enclosing a Gazette copy of this notification and ensure compliance and the Ministry of Health and Family Welfare and Ministry of Road Transport and Highways shall publish advertisements in all national and one regional newspaper including electronic media informing the general public of these guidelines.

The above guidelines in relation to protection of bystander or good Samaritan are without prejudice to the liability of the driver of a motor vehicle in the road accident, as specified under section 34 of the Motor Vehicles Act, 1988 (59 of 1988:).

Though the law is applicable all across, Karnataka State was the first state to pass the bill in Legislative Assembly (2016) with a title Good Samaritan and Medical professional (protection and regulation during emergency) where in definition of Good Samaritan used was a person who, in good faith, without expectation of

reward and without any duty of care or special relationship, voluntarily comes forward to administer emergency care to an injured person. In addition, protection for good Samaritan from civil and criminal liability; Rights of Good Samaritan; establishment of Good Samaritan Fund; educational institutions to impart training on first aid and emergency to students; organization of awareness programs and work shops were also clearly mentioned. In addition, no person shall detain a Good Samaritan for any purpose in a hospital where such Good Samaritan has brought the injured person, in accordance with the rights granted under the act.

In conclusion, Good Samaritan Law is an important milestone in India, through which, citizens can help the road traffic victims and persons in emergency without any fear and seek satisfaction of giving back to the society.

1. Road Accident Report 2016- Ministry of Road Transport and Highways, GOI
2. https://en.wikipedia.org/wiki/Good_Samaritan_law
3. <http://www.canadian>

lawsite.ca/goodsamaritan.htm

4. <http://www.goodsamaritanday.org/info/kit.pdf>
5. <http://savelifefoundation.org/gsl-microsite/>
6. Save LIVES - A road safety technical package. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.
7. Study on Impediments to Bystander Care in India, © SaveLIFE Foundation; July 2013
8. WHO Report titled "Prehospital Trauma Care Systems, 2005.
9. The Gazette of India, Extraordinary, May 13, 2015, Ministry of Road Transport and Highways.
10. Legislative Assembly Bill 35 of 2016, Karnataka, 14th LA and 12th session.



GVK EMERGENCY MANAGEMENT AND RESEARCH INSTITUTE

Devar Yamzal, Medchal Road, Secunderabad - 500 078 Telangana, India.

Tel : + 91 40 2346 2600, 2346 2602 - Fax 2346 2178

www.emri.in