PROJECT REPORT:

PARAMEDICS IN PAKISTAN

10/01/01

As a country already claiming one of the largest ambulance services in the world, Pakistan has now built an emergency rescue service with advanced clinical skills rivaling that of many developed nations. But can it sustain and expand this service in the face of Pakistan's mountainous challenges? Report by Benjamin Gilmour

Pre-hospital Care in FATA

The initial focus of the 'Paramedics in Pakistan' project, made possible by the support of the Sir Edward Weary Dunlop Asia Fellowship, was to assess the viability of recruiting and training paramedics in Pakistan for work in the Federally Administered Tribal Areas (FATA). This study was to be done in consultation with host organization Frontier Development and Support (FDS), one of the few NGOs with access to tribal agencies, and cooperation from FATA authorities in Peshawar.

The semi-autonomous region along the Afghan border remains Pakistan's poorest province with a population of around 4 million and is currently the focus of anti-militant operations by the Pakistani Army and the US via unmanned Predator Drones. Before upheavals in the area after 9/11, the tribal areas were estimated to have 1 doctor per 8000 people, while the rest of Pakistan benefited from 1 doctor per 1000. These official figures did not reflect the anecdotal evidence suggesting very few doctors registered as working in FATA ever turned up for work at the Basic Health Units (BHUs) scattered through the province, despite taking wages for their attendance. Since the military operation and local resistance movement began in 2005, the doctor-to-population ratio may now be closer to 1:50,000.

Given the Pashtun people of FATA – most living in remote villages – have very poor access to health care, my study was intended to explore the viability of a primary

health care model driven by qualified lay-people. A careful selection of locals trained to the level of Advanced First Aiders or basic Paramedics would allow villages immediate access to emergency medical care and referral in the absence of doctors. This system of using paramedics and nurse practitioners as substitutes for doctors in remote towns where they are lacking, is now commonly encountered worldwide. Even here in Australia, the government uses Extended Care Paramedics (ECPs) and Clinical Nurse Practitioners (CNPs) to cover doctor shortages in rural areas.

Despite cooperation from FATA locals and Secretariat officials, the initial objective of the project could not be met however due to the severity of the army operations, oppressive curfews in agencies where I intended to make my village level studies and the high risk of kidnapping or assassination. Canvassing villagers in FATA and examining their current facilities or lack there-of would be imperative to a study such as this. Thus, the objective of my project shifted to an assessment of Pre-hospital Care in Pakistan's cities with the hope that this knowledge and building of relationships with ambulance services will assist in any future 'Village Paramedic' program for the tribal areas when the security situation improves. My study therefore represents not only an examination of 'Paramedics in Pakistan' but groundwork for eventual primary health care projects in FATA.

As a qualified Australian paramedic, this new direction of focus also provided an immediate opportunity to exchange knowledge and skills with Pakistani emergency medical services.

Pakistan's Ambulance Services

Numerous ambulance services exist in Pakistan, almost all of them 'transport' fleets manned by drivers with no training in pre-hospital care. The absence of litigation laws and policy on ambulance services make it possible for any individual to own a van for transporting the sick, injured or dead. Hundreds of these ambulances can be found parked outside city hospitals and main intersections, the drivers haggling with patients and their relatives over transport fees as they would with a taxi. Occasionally these

ambulances hear about an accident and respond themselves to emergencies in the hope of pressing a vulnerable casualty for a fare.

Adding to the chaos are services like Karachi-based 'Chhipa' operated by political parties. These ambulances will usually have the face of the party's representative emblazoned on the side and are heavily subsidised. The objective of these services is to 'be seen', activating their lights-and-siren continuously, even for routine errands, giving the public a favourable impression of the party or candidate. These services also respond to the scene of major incidents when alerted by their supporters in the hope that their ambulances will appear on national television for additional political marketing value.

With the exception of occasional private hospital transport vehicles with doctor escorts, only two ambulance services staffed by medically trained personnel exist in Pakistan. These are *The Edhi Foundation* countrywide and *Rescue 1122* in the province of Punjab. What distinguishes these services from the others is their logistical infrastructure and coverage. They are also the only services with established emergency numbers and control rooms for dispatching ambulances.

During the course of this study, I was given unique access to both services, spending time in board rooms with senior executives, in training facilities and in ambulances responding to emergencies by day and night.

In addition to the access afforded me for completion of this study and my intended narrative non-fiction book, my personal paramedic training skills and ambulance development experience was drawn upon. The Dunlop Asia Fellowship allowed me to assist Rescue 1122 in particular, consulting with its training department, giving lectures and running scenarios for students of the Rescue Academy in Lahore.

The Edhi Foundation, Karachi HQ

At 88 years of age with a long grey-white beard, Abdul Sattar Edhi still sits outside the first building he inhabited in Mithadar, one of the poorest suburbs of Karachi, in 1957. It was the same year he bought an old Hillman van for 7000 rupees ($100) and became Karachi's sole ambulance, serving a population of 11 million. Demonstrating

his fine principles and indicative of the problems he would later face when it came to progress, Edhi refused to touch up the paint-work of the Hillman and had the words 'Poor Man's Ambulance' written on the side.

In just over 50 years, Edhi would make it into the Guiness Book of Records as heading the world's largest ambulance service. By 2010, the Edhi Foundation claimed to have as many as 1,600 ambulance vehicles throughout Pakistan, boasting a response time of 2-3 minutes in metropolitan areas.

Some refer to Edhi as the 'Mother Teresa of Pakistan' as his work extends to social welfare, homes for the geriatric and destitute, orphanages, clinics for women, maternity hospitals and adoption services managed by his wife Bilquis. The Edhi Foundation's emergency services wing includes helicopters, disaster teams, marine rescue boats and beach lifeguards. But across Pakistan Edhi's name remains synonymous with the word 'ambulance' and the provision of this service is what he is most famous for. When a massive earthquake hit Pakistan 8th Oct 2005, Edhi mobilised 300 ambulances to the affected northern regions within 24 hours. And during the recent military operation in Waziristan, the man himself escorted a convoy of ambulances to the area along with 250 goats for slaughtering and distribution to the poor. Watching hundreds of people file past day after day to shake Abdul Sattar Edhi's hand as he sits in the laneway beside his Mithadar home is proof enough of the place the man has in Pakistani hearts.

To ensure his work continues after he dies, Edhi has involved his sons in all aspects of the foundation's operation. Even his 11 year old grandson Saad Edhi is the youngest participant in the world to attain Cardiac First Responder (CFR) training and has attended hundreds of accidents and major incidents since the age of 9, claiming to have helped carry 'more than 150 dead bodies'.

Despite the obvious dedication of the Edhi Foundation and the respect and adoration it deservedly attracts from the people of Pakistan, Abdul Sattar Edhi's unwillingness to evolve into a modern EMS system appears to be threatening Edhi's decades-long monopoly on Pakistan's ambulance service provision. Comparisons here can be once again made with Mother Teresa and the criticisms of the work performed by her Missionaries of Charity. In the absence of other available services

to the poor, the Missionaries of Charity in Calcutta provided homes for the dying and destitute, one of which I had the experience of working in at nineteen years of age in 1994. Here I witnessed first hand the controversy that would later afflict this organisation. Men and women brought into these homes were often treated as palliative regardless of whether they were or not. Had they been offered medical treatment, many may have recovered. The nuns were not qualified to provide this, nor did they seem to view this as an important consideration. Medical care was a 'luxury' the poor could not afford and therefore what was the point in entertaining the notion?

In the same way, Abdul Sattar Edhi spoke to me about advancement of his ambulance service. His fleet comprised mostly of aging Suzuki ambulance vans, covered in dents, coughing and spluttering and containing little more than a steel stretcher and an oxygen cylinder in the back. Anecdotally, Pakistan's middle and upper classes avoided rides in Edhi ambulances if conscious, often preferring to take taxis to hospital from accident scenes. In his moving autobiography, 'A Mirror to the Blind' Edhi responds to those critical of his unwillingness to advance. 'Luxury is not available where 12 cror [10 million] scream out for a basic service. This number is the majority of population in Karachi. Our goal is to cover the majority. A rich man will have to make do with the same vehicles that carry the poor to hospital. If 1 percent do not like our standards, ninety percent need them.'

When I asked him to classify his definition of 'luxury' he admitted he was not only referring to comfort, but to pre-hospital care. It was not that he was opposed to the notion of first aid, after all, Edhi's son Faisal, now in charge of ambulance services, had already fitted out select ambulances with bandages and splints. But whether or not it would appear, to the poor of Pakistan, that Edhi ambulances were getting 'too big for their boots', that they were no longer a service for ordinary people. As Edhi himself takes pride in simple clothing and diet of water and bread to identify with the needy, heading a modern ambulance service would be akin to him dressing in a suit and eating mutton while serving those with nothing.

It is not so much Edhi's low-standard of vehicle or equipment as much as the profile of employee that would make reform such a momentous task anyway. Almost 10,000 uneducated ambulance drivers get paid 7000 rupees ($100) a month, half the

wage Rescue 1122 medics receive in Lahore. As many large EMS services in the USA, Europe and Australia discovered during the coarse of the 1970s when the role of ambulances took the greatest leap from urgent conveyance to advanced pre-hospital medicine, making paramedics out of those who have been employed as drivers is near impossible. Employing attendants to join these drivers countrywide would be one solution to consider, even if forced to work with substandard vehicles and equipment. Reforming the entire service however would be more difficult than starting one from scratch.

Other problems exist too, particularly in regard to public perception. According to a survey I conducted among Edhi drivers in Karachi, patients and bystanders frequently inhibit attempts at treatment on scene. As one driver put it: 'When we pull up, the back doors open before we even stop, people throwing victim in. If we try and bandage someone at accident, people will demand us about what we are doing, why we doing this, and sometimes mob will attack us. No one understands about first aid, they understand about ambulance driving fast through traffic only.'

In Peshawar, where Edhi ambulances have been under extreme pressure since 2004 due to escalating terrorist activities in the form of assassinations and bomb blasts, I witnessed this rudimentary service's response to a suicide bomber's detonation at the Judicial Complex on 19th Nov 2009. Here, fifty people were injured and twenty killed. With only handful of ambulances, the Edhi Foundation evacuated victims in a matter of minutes. Meanwhile, a team of Edhi staff roamed the scene unattached to any vehicle, carrying basic first aid kits. This was one solution to the interference from members of the public, particularly the common displays of hysteria at the scene of such major incidents.

Abdul Sattar Edhi mentioned litigation as another factor in his hesitation to advance the service, along with comments on the public's psyche that if you 'start giving medicine, everyone will expect it, even those who don't need it.'

In terms of scope and logistics, the Edhi Foundation's work is truly remarkable and quite possibly unmatched anywhere in the world. The efficient logistics of this organisation in the unique Pakistani environment is worth examining and learning from. As Edhi's ambulance service still has some way to go in pre-

hospital care capability, drawing upon this service for assistance with training of 'Village Paramedics' however would not be immediately desirable. Despite this, maintaining a relationship with Adbul Sattar Edhi will be very useful due to his considerable influence and may assist in access to restricted areas, such as Waziristan and other volatile regions of FATA.

Rescue 1122, Lahore

Dr. Rizwan Naseer, a renown practitioner based in Lahore with a personal interest in emergency medicine, decided in 2004 to begin Pakistan's first ambulance service offering pre-hospital care. Unlike ambulances provided by the Edhi Foundation and others, his objective was to set-up a state-of-the-art Emergency Medical Service (EMS) like those in the USA, Europe and Australia, bringing medical intervention to the people of Pakistan in the home and at the scene of accidents.

Given that Abdul Sattar Edhi's ambulance service was well-respected and covered the entire nation, in 2003 Dr. Naseer tried introducing the idea of advanced first aid trained personnel to Edhi himself, even offering to recruit and train medics to team up with Edhi drivers. In this scenario, the Government of Pakistan (GoP) would pay the wages of the medics. To Dr. Naseer, latching on to the impressive logistics already in place made sense. Despite numerous meetings however, Dr. Naseer became exasperated by Edhi's reluctance to advance and evolve into a modern EMS. Behind the cultural factors contributing to this attitude was Edhi's adamant independence and resentment of a government he saw as inherently corrupt. Like many of the poor in Pakistan to whom Edhi's work was dedicated, he was convinced of the GoPs disregard for it's suffering and downtrodden citizens. Why, after decades of neglect, would the approach of such a government change? Edhi was suspicious. Most significantly, however, were Edhi's personal principles as mentioned above in relation to the concept of 'luxury as an insult to the poor'.

Dr. Naseer realised he would have to create the service himself from scratch. With cooperation from the GoP, he traveled to Canada for his own personal EMS and Fire certifications. Upon returning to Pakistan, Naseer invited assistance from former and currently serving Army, Navy and Air Force physicians to assist in the

recruitment and training of 'Rescuers'. In November 2004 the first course of 200 recruits was trained in basic life support, complete with hospital placement time, before staffing 30 ambulances at strategic locations around Lahore, a city of 10 million people. Sydney, in comparison, operates 200 ambulances for a population of just 5 million. Initial doubts about the service's ability to meet its vow of a 7 minute response time were clearly justified. After a vigorous marketing campaign, the Rescue service, summoned by dialing 1122, was quickly embraced by the public and demand was high. Figures provided by the service show the average response times remained within 7 minutes for metropolitan areas as promoted, although an independent evaluation has not been conducted. Buoyed by favourable public response, the Punjab government approved an expansion that has seen the numbers of medics swell to 6000 within five years and the service made available to all 34 districts of the province.

In Lahore I stayed at a central ambulance station and worked for a month alongside frontline rescuers, attending a wide range of emergencies from the common road traffic accident (RTA) to falls and cardiac arrests. I spoke at length with medics shot at during the Sri Lankan cricket team terrorist attack in Lahore 3rd May 2009 and those first at scene of bomb blasts and building collapses involving mass casualties. In the little down-time the team at Central Station enjoyed, I was asked to perform demonstrations and lectures to assist in the advancement of the rescuers' knowledge. But my observation of Rescue 1122 frontline medics proved that due to the volume of work, the seriousness of trauma and medical cases attended, their discipline and efficiency, that a paramedic from Australia has just as much to learnt from these men and women as he has to teach them.

There is perhaps no emergency service in the world that has ever developed to the extent Rescue 1122 has in so short a period of time. With state-of-the-art locating and extricating equipment and military-style training on genuine rubble heaps, the service's Disaster Emergency Response Team (DERT), set-up after the devastating earthquake of 2004, is made up of 400 medics and 500 firemen highly skilled in search and rescue operations. Part to their competence, despite being so young a service, is the thoroughness of training and the large-scale 'surprise simulations' they engage in. Major incident and disaster exercises of this kind I have never seen

performed anywhere else, as the public and emergency services receive no fore-warning. In Lahore, I witnessed an example of such an exercise. A giant bonfire was ignited on the forecourt of an inner-city office block and heavy fire-crackers let off in the basement to simulate a terrorist attack. No one in the office block was informed in advance and only realised the incident was a drama when thirty actors covered in latex wounds and fake blood began spilling from the ground floor, collapsing theatrically at the foot of the building.

Upon my departure, Dr. Naseer was being summoned to the Northwest Frontier Province (NWFP) in order to assess the possibility of expansion to an area where pre-hospital care is in high demand due to weekly bombings and skirmished between the army and insurgents. A few weeks earlier I'd discussed ambulance services with Dr. Shiraz Afridi, head of the Lady Reading Hospital A&E in Peshawar and it was apparent to me just how desperately this province needed an alternative to the Edhi ambulance's scoop-and-run. With clear understanding and practice of triage, combined with clinical skills for early intervention and safe transport, Rescue 1122 paramedics would be a welcome development in other provinces. Some doubt the Pakistani government's ability or even desire to design and coordinate capacity building like this in regions where they face hostility from the local population. Positive signs were evident to me however that the GoP is looking for ways to improve the lives of those in poorer provinces, even if they persist in pro-longing the wars along the Durand line, Balochistan and Kashmir.

In regards to the potential of a 'Village Paramedic' program in FATA, it is my impression that when the war in Afghanistan scales down and security improves, Rescue 1122 would be ready to collaborate on such a project. The service's training and curriculum is an ideal base on which to build a team of rural medics in FATA, given that the absence of doctors is problem unlikely to change, even in the long term.

Overview & Impact of this project

By completing an assessment of paramedics in Pakistan, my understanding of the challenges faced by health worker's in the country has been expanded. During the coarse of this study I forged strong ties with health and social services icon Abdul

Sattar Edhi, Health Department officials in Islamabad, the executive team of Rescue 1122 and countless paramedics and rescuers in three provinces of Pakistan.

Significant frontline experience on emergency ambulances in Karachi and Lahore, along with A&E experience in Peshawar has enriched my own pre-hospital care knowledge and allowed me to share what I have learnt over a decade working with the Ambulance Service of NSW with Pakistani colleagues. An example of how my recent consultation with Rescue 1122 has resulted in policy change is the use of mouth-to-mouth resuscitation. After witnessing medics performing mouth-to-mouth as a matter of routine, I discussed the subject with the CEO Dr. Rizwan Naseer who issued a directive stipulating that medics should use bag-mask ventilation only, as is best clinical practice in modern EMS worldwide.

Despite limitations on access to the tribal areas of FATA, I believe the outcomes of this study, both as an exchange of knowledge and as groundwork for future projects, has made it a success.

Participation numbers

Lectures and demonstrations I delivered in Lahore were attended by an approximately 500 student rescuers, 30 qualified medics and members of the executive team. These included perhaps 15 women participants. These female participant numbers are high for Pakistan, a country where social taboos about women in physically-demanding professions are still prevalent and few women have applied for rescuer positions despite encouragement in job advertisements.

Acknowledgements

'Paramedics in Pakistan' will form an important component of my forthcoming narrative non-fiction book titled 'Mondo Ambo'. Having made this section of my book possible, Asialink and the Dunlop Fellowship will be acknowledged and logos included in the final publication. Copies of the book will be forwarded to Asialink, most likely in the first quarter of 2011.

During my research period, I also shot film footage with a broadcast quality HDV

camera. Screen funding bodies have shown interest in seeing 'Paramedics in Pakistan' become a feature documentary about ambulance workers worldwide. Should this project come to fruition, Asialink and the Dunlop Fellowships will again be credited.

Comments & Responses

After working with Dr. Mohammad Farhan, head of the Rescue Academy in Lahore on issues of clinical protocols, he sent me an email stating that 'Pakistan will never forget your contribution to our ambulance service.' Many other medics with whom I worked and shared knowledge continuously expressed their gratitude for my assistance to the improvement of Rescue 1122.

The Dunlop Fellowship has allowed me to make strong connections with the 'Paramedics of Pakistan', learning from them and assisting them in their remarkable development. This grant has also been extremely helpful in broadening my understanding some of the strengths and weaknesses in Pakistan's health sector.
By gaining a clearer picture of this system, I have more to offer aid organisations like Australian/Pakistani NGO *Frontier, Development & Support (FDS)* planning future primary health initiatives in poorer areas of Pakistan.

LINKS

www.rescue.gov.pk

http://www.edhifoundation.com/

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