ABSTRACT

“POLYTRUAMA IN RURAL INDIA”

Injuries, trauma and polytrauma constitute as one of the most serious health problem to the extent – polytrauma is the major killer of the present day not only in a specific area or state or country but all over the world. Most people think that injuries are mainly a problem of rich countries, this is not so. The data available from developing countries suggest that in every sphere of activity the proportion of persons, who are injured or killed, is similar or higher than that of industrialized or urbanized countries.

With increase in urbanization and industrialization more and more patients of injuries of varied type are increasing day by day. Not only urban area is getting affected, industrialization and increase in the automobiles even the rural areas are affected significantly, giving rise to more and more trauma rather poly-trauma patients, who require not only urgent treatment, but also different types of attitude, approach, dedication, planning, preparedness and the well coordinated as well as timely team-work to have an effective outcome of a “GOLDEN HOUR”.

The problem remains unsolved; this is partly because there are many myths prevalent regarding the control of injuries.
The present study was conducted in the form of survey in rural area of our state (MS) with following aims and objectives:

1. To collect baseline data of poly-trauma patients in rural India.
2. To categorize type of the traumas sustained
3. To evaluate in brief the existing health care system
4. To formulate and suggest an ideal infrastructure for trauma patients that too, to suit the Indian conditions

And existing exhaustive literature related to injuries, trauma and polytrauma was reviewed thoroughly and present scenario with various parameters was co-related in turn so many conclusions could be drawn as well as future suggestions could be made.

For the small, a government hospital i.e civil hospital, as well as all the private clinics who are catering services to the public of Jalna city proper and catchments/drainage area of the same.

We found:
1. Environment as stimulus influences our behavior and determines our needs. Health problems scenario in present day environment in a developing country like India, in which communicable disease and malnutrition have come largely under control to a significant level. Where as the problems of poly-trauma, accidents and mass-casualties are becoming one of the leading causes of morbidity and mortality. So each event makes us to realize to what extent we’re unprepared in handling such situations not only at periphery, even including so many teaching institutes except one or two. Every such encounter
forces us to think of growing needs to strengthen our whole Indian Health Care Delivery System particularly our Trauma Care System.

2. **Trauma is also a disease** like any other disease but requiring urgent and different type of approach to have very good outcome based on the principle of a “GOLDEN HOUR”, because poly-trauma has emerged as a **major killer** of present day. This involves, nearly all the age-groups, but more particularly younger age-groups.

3. Management of any trauma victim start from the time patient is injured, evacuated, resuscitated, operated in hospital, discharged and rehabilitated.

4. It can be said that there is a lot to be done about the maintenance of roads & lack of driver friendly road signs. There is dire need of education of those who are supposed to implement traffic regulation. National and state govt. should realize that, it is not money, which brings the roads, but it has been proved in several parts of the world that roads bring the money.

5. Even though it has been proved, poly-trauma is also a disease like any other and one of the major killer, in spite of that **existing literature review** shows that in the present scenario **poly-trauma** is being **neglected** by everybody and hardly any steps are being taken to treat them effectively once again proving that poly trauma is the most neglected disease of Modern Society. (Trauma has become the third highest cause of death in humans after heart disease and malignancy.)
1. Males dominated the study significantly nearly 80%
2. Adults dominated the study significantly (52%)
3. Even extremes of age had polytrauma (28%)
4. Majority patients were from rural area (72%)
5. Vehicular accidents were the major chunk of study (49.6%)
6. Extremities' injuries were more common (68%)
7. Significant no. of patients had associated head injury (20%)
8. Nearly 45% could be treated at first medical center
9. Nearly 32% were compelled to get referred to higher centers
10. Pre-hospital emergency medical service was non-existent
11. No means of transportation or very meager or poor or delayed transportation means were available compelling to lose the importance of the golden hour.
12. Reasonable communication system was available.
13. Wherever the ambulance was present, was nothing but white taxies.
14. Even though each and every medical care center, casualty, and/or emergency service was having, but hardly it could cater a vital service to the polytrauma patients.
15. Few only had all the specialists required to treat the polytrauma patients.
16. Even not a single medical center had specifically designated trauma care center.
17. Inadequate emergency beds.
18. Inadequate or no reductive measures.
19. Inadequate man power, quantity as well as quality wise.
20. The composition of traffic and accident patterns in India is not only different from those prevailing today in high-income countries.
21. But they are also substantially different from those prevailing HICs in the past.

22. Pattern of road use has a significant influence on the type of road traffic crash experienced in India.

23. It indicates that road safety policies in India would have to focus on the VRUS (Virulent Road Users) like pedestrians, bicyclist, motorized two-wheeler, three-wheelers and designs of vehicle exteriors.

24. Major efforts have to go into road design for traffic calming suited for these conditions.

25. In the cases of morbidity and/or mortality following polytrauma, there’s an unlimited scope for service to the injured victims for saving the lives.

26. Carrying out a survey of Jalana District approached considerable sections of Marathwada’s rural population, problems were identified and strategy could suggest.

27. Such a study with rural bios, encompassing demographic environmental and clinical profiles, polytrauma (their various aspects) would stimulate others.

28. The proper use and design of safety helmets will go long way towards protecting the motorcyclist but even that is not being implemented.

29. Change is always met with resistance.

30. Conventional concepts of polytrauma require review and proportionate modification.

31. Configuration of polytrauma in younger age-group dominance.

32. At the periphery communication, accessibility, rescue team present is almost none.
33. At the casualty level no specific trainee in handling of trauma patients.

34. Male population dominated the study

35. Younger age group involvement was the feature of the study

36. Road traffic accidents were the measure cause of morbidity and/or mortality following polytrauma.

37. Most of the time was wasted in approaching to a proper medical aid center.

38. So hardly there was any use of golden hour, reflecting lack of pre-hospital triage system.

Proper strategies if developed can save so many lives and also helps to reduce morbidity by:

a. Carrying out not only prospective study of polytrauma
b. But also retrospective study to have wide data for analysis and to know the existing as well as changing trends, of polytrauma outcome.

to achieve the same

a. Political priorities.
b. Adequate organization.
c. Sufficient budget.
d. Exchange of no how
e. Specific solution related with road assessment.
f. Specific solution to road safety and traffic policies.
This study also has helped to get so many collateral benefits and conclusion such as to study the existing literature extensively, number and nature of injury and trauma in the city as well as peripheral area and all over the country as well as world. It has also helped to know vastness of the trauma problem concluding so many things like –

“Though
All injuries can’t be prevented
Remember,
‘Accidents’ and Injuries are not “Acts of GOD”
And
There is no difference between injury and disease.

SO
“LIFE saved is a FAMILY Saved”
Always Remember

‘GET THE RIGHT PATIENT
TO THE RIGHT HOSPITAL
AND IN RIGHT TIME’

‘Injury, Trauma and Polytrauma are the disease like any other.’
Polytrauma is a major killer of the present day for modern society.

For a trauma victim,
It’s not the life,
But the quality of life;
It’s not the function,
But the quality of function that matters.

“LIFE saved is a FAMILY Saved”