Emergency Department-Based Disaster Response System as a Social Welfare Resource

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Abstract

As the corrosion of a societal safety net progresses in the era of social welfare reform, there are few institutions that can still guarantee assistance to those in need. Emergency departments (EDs) in the hospitals are perhaps the only local institution where professional help is mandated by law, with guaranteed availability for all persons, all the time (including mass casualty incidents (MCIs) and disasters), regardless of the problem. Although the ED serves as a true social safety net, its potential as a social welfare institution generally goes underestimated, hampering its full development as an effective societal resource. More disadvantages may go through the ED than through any other community institution, making it logically a role not only for the treatment of acute illness, but also for the identification of basic social needs and the extension of existing community resources. It is especially true after the public health insurance has been implemented in Taiwan. By aiding completely incorporate the ED into the total care system, emergency physicians can become key persons in the design and implementation of integrated sociomedical systems of care. No matter what kind of insurance system has been adopted, the government should establish a good policy to back up the work of ED at any time.(Ann Disaster Med. 2005;3:60-68)

Key words: Emergency Department; Disaster Response; Social Welfare; Policy

Introduction

The global increase in human population makes critical impact on national finance and social welfare system. As the decay of a societal safety net progresses in the era of social welfare reform, there are few institutions that can still guarantee assistance to those in need. Emergency departments (EDs) in the hospitals are perhaps the only institution where professional help is mandated by law, with guaranteed availability for all persons, all the time (including mass

casualty incidents (MCIs) and disasters), regardless of the problem. The ED holds a special position in a society including ours. The ED is always easily accessible and 24-hour open, and thus becomes one of the few institutions available to help any person at any time without reservation. The guarantee of assistance is so essential that it has been incorporated in our national laws requiring EDs to treat everyone seeking care.^{1,2} Despite the immense social power inherent in such an arrangement, most

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physicians and civic leaders see the ED as a purely medical entity, rather than a vital social institution. Such kind of viewpoint underestimates the potential role for the ED in the total care system, which may be more important than the public or even policy-makers expect.

ED Crowding Versus Social Welfare Reform

There is a global trend of ED crowding.³⁻⁶ In the United States, both Medicaid beneficiaries and the uninsured are already overrepresented in the ED,⁷ even more of the country's uninsured8 may be forced to seek ED care as community clinics face an increasingly competitive health care marketplace. The same phenomenon is met in our society. After public health insurance has been implemented, the ED become busier and crowding. It is especially true after global budget policy has been practiced in 2004. Although the annual total visits were similar, the stasis of these care-seekers becomes more and more severe. The same story can be found in Canada. The loss of cross-subsidization from government and private insurance companies for many uninsured, the failure of primary/managed care to curb preferential ED use among high-risk groups, and the consistently high ED visit rates all point to an expanded role for the ED under health care reform. The growing ED patients continue to experience difficulties to convenient alternative care.10

According to our laws, no ED may deny coverage of emergency medical services to either illegal or legal aliens. Increased dependence on the ED for medical care not only seems inevitable under these circumstances, but actually appears intended by framers of the law.

Although the ED is not traditionally thought to be a major social welfare institution, it seems more and more elucidated under our social policy. The ED is therein figured out as the only component of the medical system and, the only component of the entire social welfare system, which is covered by our social policy for the disadvantaged.

Social welfare is to create a community that is healthy, safe and a good place to live, work and play depends on the public and private infrastructure. This interdependence, or the "in-between," is the common ground between disparate organizations and communities' social and economic infrastructure. When a community provides leadership and accountability by managing the interrelations among and between its various organizational infrastructural assets, community health and quality of life can be markedly improved. For example, in the United States, an individual's educational level correlates to his or her health status.¹¹

To be successful in the next stage of their evolution, ED and their back-ups, either in-hospital or inter-hospital, need to learn to manage the inter-agency or inter-department relationship. This requires communication among the various sections of society and also willingness to put aside the "expert's mantel". It is wise to have comprehensive listening, dialogue instead of debate, and getting the facts together before jumping to the pre-set solution.

Medical education has primarily focused on what goes on inside the walls of the hospital. This perspective needs to be expanded through outcomes research in population health. EDs can serve as mediators for clinical, community, and population-based research. This role can

be expanded to cover applied clinical research, community-based research on the determinants of health, health disparities, health policy, chronic disease management, outcomes research, and preventive medicine. EDs have better understand the interrelationship of education, public safety, and health. EDs also see the need to look at denominator issues (populations) as well as numerator issues (enrollees), and as such are better community laboratories than health maintenance organizations, one of the numerator-driven models in which individuals are covered rather than the community as a whole.

Advances in information systems technology can provide the infrastructure to help us with the task of outcomes research and will provide the basis to improve quality, increase accountability, and assist individuals with the ability to provide self-care for chronic disease management. Institutions that have often achieved excellence in medicine, medical education, and research now need to enter into the community where they are no longer the experts. They have to risk being the student and give up command and control and share resources to build a new accountability with the community. If we engage the community successfully in this relationship, building trust and establishing new capability and capacity, such as community responsive care, EDs will survive, evolve, and continue their tradition of service. The complexity of their challenge in the future will not lessen, for that is the nature of community.

Equality of ED Services

Though ED should be considered as a location where the disadvantaged can be reached,¹³ most of them may have not assumed responsibility for the social care. In the United States, some community clinics had previously used public insurance reimbursement to finance social and health service coordination for the poor, but competition for managed care contracts will likely force many clinics to scale back such assistance. 14-16 The same situation is found in Taiwan. The health maintenance organizations such as the Institute of National Health Insurance do not include general preventive social services and measures. A strong linkage between socioeconomic status and health has been demonstrated in multiple studies¹⁷ not only can poor health lead to disability and social disarray, but social disadvantage can lead to health problems. 18-22 Even the ED acts as a kind of social service agency on holidays or weekends,²³ but social service resources are commonly lacking here nowadays.²⁴ Some efforts at social screening and intervention have been successfully piloted in the ED,²⁵⁻²⁷ but vital services are often unavailable when needed most.²⁴ Although some EDs do have full-time social workers, many do not. Others have recently coped with dramatic cutbacks in their professional staff due to financial burden. In addition, there is still no agreement on what an adequate screen for social need in this setting is.²⁸

The Social Work of the Emergency **Department**

What the ED can do for the social care of the disadvantaged may be based upon a comprehensive system for social screening, evaluation, and coordination in conjunction with emergency medical care. The ED could become a social triage center, to which ED patients identified

with pressing social needs could be referred for screening evaluation and service coordination, using preexisting community resources. The social triage center would be located in the ED and staffed by social workers, and could be as small as a desk or as large as an office center. It would build on the current model of medical social work and case management, formalizing and expanding the ED as outpost of the local welfare office, and establishing it as an integrated community resource. At present, social workers at EDs in Taiwan always manage the problems of child abuse, sexual assault and some suicide cases more than the problems of the disadvantaged. The upgrading of the concepts in social care should be urged for both emergency physicians and social workers.

However, the support for the social care is decaying whereas health care system in general including ED practitioners has only expanded. Some hospitals have already identified the ED encounter as a valuable opportunity for expanded service coordination^{29,30} where multidisciplinary ED discharge planning has been proposed.^{31,32} A comprehensive system of coordinated sociomedical care for all high-risk ED patients remains to be built up. The concept of targeted social intervention in the ED has been developed with preliminary benefits.²⁵⁻²⁷

Some researches suggested all patients presenting to the ED would be screened by a short panel of questions built into the standard triage history or registration interview, designed to detect hidden social needs. The questions would reflect basic material, economic, social, and health factors important to maintain a minimum standard of well-being. 33-34 The items to be addressed are often never asked of the most

disadvantaged and are usually absent from standard medical evaluations, and the answers can profoundly reflect on overall well-being. If any major deprivation is identified, the patient would be referred to the social triage center for a more complete social evaluation for further social care and referral if needed. This process would be designed not to interfere with the formal medical encounter, and could occur in the social triage area just before formal discharge.

When a community became more aware of a hospital-based social triage system, there is a concern that any referral system could be quickly overwhelmed. Although such an outcome could only be tested by time, the social deprivations included in the screening instrument are of such fundamental importance to basic health that many communities would already have the capacity to handle aid referrals by means of a combination of public and private resources. The charitable service system is so fragmented in many communities, however, that the coordination of such services can be more of a problem than the availability of the services themselves. In Taiwan, there are not enough charitable institutions organized by the government. The basic need for the disadvantaged is usually provided by non-government organizations (NGO) instead of the government. 35-37 The phenomenon is worse than Euro-American countries and may urge the EDs to find more social resources to provide complete aids for those in need. The linkage between ED and social resources may be therein somewhat different from other countries.

Resources are usually limited in any one community, and no system can satisfy everyone. But relatively simple assistance at a crucial time, or a key referral or eligibility determination, can

have important and long-lasting effects. A recent U.S. study suggested that poor families may choose to "heat or eat" during the wintermonths, noting lower body weights among inner-city children during this period. 38,39 If the ED is a primary institutional contact for many such families but social needs are not formally addressed here, then meaningful opportunities for local resource use will almost certainly be lost.

Social Care as a Public Service and **Professional Responsibility**

Some have suggested that intensive social intervention in the ED can decrease hospital utilization rates, 40-42 but evidence of cost savings is far from definitive. The impact of comprehensive social screening, referral, and service coordination in a broad community population remains still unproved. Few studies are designed to evaluate the cost-effectiveness of an EDbased program for social referrals, 43 and cost savings may be difficult to confirm in any program that generates additional service referrals.

Emergency physicians work daily at the interface of medicine and society and have a special obligation to expand their scope of practice. Emergency physicians need not compromise their primary mission to provide acute medical care, nor need they personally screen each patient for social needs. When the professional caregivers provide help for the disadvantaged, emergency physicians share a responsibility to identify the patient encounter formaximal medical and social benefit. Although vulnerable populations attract public and political attention, the association between emergency physicians and the development of health systems for the disadvantaged has not been fully established here. In fact, using their professional status to advocate for systems that address the social needs of vulnerable populations, emergency physicians can become leaders in the design and implementation of integrated sociomedical systems of care. Such systems can link the fields of medicine, pubic health, disaster medicine and social work into a single enterprise. By helping design and pilot integrated care systems, emergency physicians can position themselves to effectively lobby government, institutional, and community leaders for longterm support of successful programs. Although a more restrictive view of public assistance is now the law of the land, many Americans might support some additional measure of public funding for programs designed to ameliorate serious social need.44 Proof of cost savings is generally required of all new health system initiatives, especially those involving social issues, 40 but individual health care leaders have begun to reevaluate system goals, recently calling on medical centers to help solve "major societal problems." ⁴⁵ And although private charity is perhaps relatively small in scale, it can contribute the resources necessary to coordinate disparate parts of the local health and welfare systems, helping to ensure maximum effect in any one community.⁴⁶

The social safety net is decayed gradually in an era of social welfare reform, and few institutions guarantee assistance to those most in need. The hospital ED is perhaps the only local institution where professional assistance is obligated by law, with guaranteed availability for all persons for all the time. Although the ED serves as a true social safety net, its potential as a social welfare institution is generally underestimated More of the disadvantaged may visit the ED than other community institutions.

It is thus logical to establish ED a site not only for the treatment of acute illness, but also for the identification of basic social needs and the provision of social resources. When the traditional system for identifying need and coordinating social care has weaned, the ED gathering a prominent position driven by health care should be well-suited to help evaluate coordinated social care as an integral part of total community health in our country.

Expanded Role of ED Disaster Response in Social Welfare

The organization of available supplies and the organization of donations are two main problems regarded materials needed for a disaster response. The initial 24 hours of any disaster response usually rely on the available resources within the disaster-stricken community. An organized approach for sorting and distributing supplies to the disaster responders is essential to prevent either waste or want. Various strategies exist for accomplishing this task, and they should be an integral part of all disaster response programs. Disasters also result in massive donation programs. Although funding is usually the most critical need of a disaster area, massive amounts of materials ranging from blankets to medications usually arrive. The amount and nature of these donations can be so significant as to constitute a second disaster. 47 Staffing and resources must be allocated to manage the flow of such materials in an effort to organize and use needed items and to prevent the waste of the less useful materials. ED thus provides emergency care and disaster response which is one of the critical components of social care or welfare at the unusual times.

DMAT is an important component of di-

saster response. DMATs are categorized according to their ability to respond. A Level-1 DMAT can be ready to deploy within 8 hours of notification and then remain self-sufficient for 72 hours with enough food, water, shelter and medical supplies to treat about 250 patients per day. Level-2 DMATs lack enough equipment to make them self-sufficient but are able to deploy and replace a Level-1 team utilizing and supplementing their equipment which is left on site. Level-3 DMATs consist of teams in various stages of development. Some of the $\ensuremath{\mathsf{DMAT}}$ functions include triage of victims at the disaster site, providing medical care in austere conditions and maintaining casualty clearing. 48,49 DMATs can also provide care at a reception area when the patient evacuation team is activated. They can receive victims of the disaster in areas across the country that were unaffected and thus can handle the large quantity of injured people. After Chi-Chi earthquake, our government has been engaged in the establishment of a good disaster response system including DMATs since July 2000.⁵⁰ Taiwan Society of Disaster Medicine has also set up a registry program in our website (http:// www.disaster.org.tw) for Disaster Response HOspital and PErsonnel registry (Dr. Hope registry)⁵¹ under partial grant from the Department of Health since 2001. In general, the DMATs are composed of emergency physicians and emergency medical technicians and play the expanded role of social care in the social welfare system. On the other hand, the uneven distribution of DMAT personnel and related resources means need in reconsideration of social welfare reform.⁵²

In conclusion, ED plays an essential role in both medical care and social welfare, either

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