Chapter 13 Humanitarian Basic Plastic Surgery

Bishara S. Atiyeh, MD, FACS

13.1 Introduction

Elsewhere in this book, several chapters abundantly demonstrate how the basic spirit of Health for All (Mahler, 2003) and the strategy of Primary Health Care, with its overriding principle of health as a human right (Gunn, 2000) underpin the philosophy and practice of humanitarian medicine. This, however, should not be interpreted as a second class medicine, reserved for simpler diseases and "cheaper" procedures. Indeed the right of the patient requires that, within all possibility, and barring irrelevant practices or frivolous demands, no life-saving or socially supportive needs be witheld. Thus, the accounts of essential cardiac surgery (Christenson, 2003) complicated urogenital reconstruction (Dewan, 1998) meticulous geriatric patient education (Assal, 2005) are concrete examples of extensive, scientific, necessary humanitarian medicine, as is humanitarian basic plastic surgery.

The spectrum of plastic surgery as seen by most people is based on television extreme makeover shows, thinking that this is what plastic surgery is all about (Dukes). Plastic surgery, however, is a well-defined specialty, which encompasses reconstructive surgery as well as cosmetic (aesthetic) procedures (Knipper), going from the very simple interventions up to the very complex micro-vascular reconstructive surgery (Dukes), sophisticated craniofacial surgery (American Academy), and management of burn injuries and their complications (McIndoe). It is far from being a luxury surgical service. Several branches of plastic surgery are deeply committed to humanitarian service with a great desire to enhance the quality of human life (American Academy). The term commonly used nowadays is "humanitarian plastic surgery" (Knipper).

However, several questions remain to be clearly answered. What is the place of plastic and reconstructive surgery within the field of general surgery in developing countries? (Micheau and Lauwers, 1999) Must the reparative motivation of plastic surgery intervention remain the only trace of a plastic surgeon's skill and humanity? During a plastic surgery humanitarian mission, can this surgery be aesthetic? Can aesthetic surgery be humanitarian (Knipper, 2003)?

13.2 Humanitarian Medicine

Disasters, unfortunately, and help, fortunately, are as old as humanity. As long as man has had a beating heart, some adrenaline, and a reflex for protection, he has had compassion and the urge to help. This is the natural and noble drive for humanitarian medicine (Gunn, 2000). And this was the drive that, in face of mounting natural disasters, conflicts, and social degradation, led a group of concerned citizens to establish, in 1984 at the World Health Organization, the Brock Chisholm Trust that was subsequently registered in Palermo, Italy, as the International Association for Humanitarian Medicine Brock Chisholm, to promote and support the right of health for all and access to appropriate medical care. To take the full measure and social significance of the concept of Humanitarian Medicine, it is worth to consider its formal definition (Gunn, 2000). Unfortunately, at present the "right to health," acclaimed, recognized and required everywhere, does not seem to get all the universal attention it deserves and is even precarious in terms of promotion, dissemination, and protection (ZENIT) (Masellis and Gunn 2002).

Historically, assistance in emergencies has evolved from early wound dressing and pain relief, to specialized techniques like emergency medical services and Disaster Medicine; to institutionalized mechanisms like the Red Cross, to concepts, like disaster prevention, and socio-political arrangements and Humanitarian Medicine (Gunn, 2000). The first "thorough study" of humanitarian intervention was published by Rougier in 1910: "Unfortunately, the conclusion which emerged from this study is that it is neither possible to separate the humanitarian from the political grounds for intervention nor to assure the complete disinterestedness of the intervening States." Whenever one power intervenes in the name of humanity in the domain of another power, it cannot but impose its concept of justice and public policy on the other State, by force if necessary (Boyle). Irrespective of this fact, international humanitarian law and human rights provide the normative context for those who try to deliver medical and emergency relief to war and disaster zones (Leaning, 1999) or to communities living in underprivileged areas. Unfortunately, unlike most professional activities, humanitarian relief is not subject to monitoring by professional bodies (JAMA, 2001) nevertheless, the key principles of international humanitarian law of relevance to physicians are neutrality, non-partisanship, independence, and humanitarianism with commitment to promoting the welfare of sick and injured people, treating everyone according to medical need. Physicians and other health care workers are protected from hostile action to the extent that they understand these principles and abide by the rules that flow from them. They must take no political sides in any conflict, be unarmed, and directed only by professional dictates (Bruderlein, 1999; Leaning 1999).

The practice of humanitarian medicine involves more than just the application of medicine or medical knowledge to the treatment of a patient as a person, who should not be viewed as a mere body requiring medical attention. Any physician practising humanitarian medicine must view the patient as someone possessing his own unique personal history and treat him in the context of being a member of a family even of a larger human family with neighbours and friends, not just in the context of being simply a patient (What is humanitarian medicine? http://www.medschoolchat.com/displayarticle65.html). Indeed, there is no need for a surgeon to go on a humanitarian mission in order to do humanitarian work. In principle, anything a physician does should be humanitarian, regardless of where in the world the treatment is being provided (Knipper). However, according to J. Habermas, the necessary conditions and limitations of humanitarian medicine and the main valid engagement should be a communicative action which means a true partnership with the local health care specialists (Montandon et al., 2004). Of paramount importance is the meaning of this commitment as well as the way in which the humanitarian action is perceived by the recipient country (Baudet et al., 1999; Gunn, 2000). Assistance and cooperation of local medical staff is essential in the pre-selection of cases to be operated while each single medical mission team provides all the necessary supplies for surgery, which invariably takes place in small hospitals provided by the local authorities (d'Agostino et al., 2001).

13.3 Humanitarian Action and Basic Plastic Surgery

Throughout the developing countries Primary Health Care is necessarily considered a priority, and hospitals used mainly for emergency operations are usually few in number and badly equipped; elective surgery is considered a luxury (d'Agostino et al., 2001). The demand for reconstructive surgery, however, is extremely high due to the high birth rate and consequently large number of patients, as well as the shortage of both medical staff and supplies (d'Agostino et al., 2001). Children, in particular, with congenital diseases and/or other non-congenital anomalies who are fortunate enough to reach a hospital will often be treated by general surgeons lacking specific training; those children suffering from disabling conditions are often neglected and left to live with their anomalies for the rest of their lives (d'Agostino et al., 2001).

Several humanitarian charitable organizations are sending at present plastic surgery teams to developing countries or areas (Dewan, 1998; Nicolai et al., 1998). In a humanitarian mission, plastic reconstructive surgery usually is only one modality, in a vast array of treatment approaches (Knipper). Accomplishment of humanitarian missions in plastic surgery, however, is stirring a lot of interest (Alfandari et al., 2004) and humanitarian plastic surgery is becoming much demanded so that more and more surgeons are attracted by this type of commitment (Montandon et al., 2004) which provides an opportunity of reflection about team training, the type of relation with the country where the mission is being conducted, and the type of right team required (Alfandari et al., 2004). Based on data collected from several missions and by consensus, the International Task Force on Volunteer Cleft Missions outlined recommendations for future volunteer cleft missions that are applicable to all plastic surgery humanitarian missions. These recommendations are related to (1) mission objectives, (2) organization, (3) personal health and liability, (4) funding, (5) trainees in volunteer cleft missions, and (6) public relations. The task force believed that all

volunteer missions should have well-defined objectives, preferably with long-term plans. It decided also that it was impossible to achieve a successful mission without good organization and close coordination and advised that efforts should be made, and care taken, to ensure that there is minimal morbidity and no mortality (Yeow et al., 2002). The mission director must be an experienced surgeon in order to select the most reliable and the simplest procedure (Baudet et al., 1999). As ambassadors of goodwill and humanitarian aid, the participants in such missions must make every effort to understand and respect local customs and protocol while providing top-quality surgical service, training local doctors and staff, developing and nurturing fledgling reconstructive programs, and, finally, making new friends (Yeow et al., 2002).

In such humanitarian missions, plastic surgery is mostly practised in an unfamiliar and demanding environment and under challenging conditions and difficult circumstances (Knipper). Though some missionary hospitals tend to be well-equipped (d'Agostino et al., 2001), the facilities and working conditions for surgery are usually poor (Knipper). Moreover, the disorders and pathologies encountered may be far removed from the conditions seen in one's home country; the range of procedures to be performed may be vast (hand surgery, burn scar revision, orthopaedics and traumatology, maxillofacial surgery, etc.). The surgeon participating in such missions must be conversant with all aspects of plastic and reconstructive surgery (Knipper).

The technical and material limits, the constraints for the patients to travel to the hospital, to pay for costs, and the difficulties of follow-up require the selection of patients in whom the disease can be treated in a single stage procedure (Voche and Valenti, 1999). Three types of diseases are usually managed: (1) congenital anomalies, (2) post-burn, and (3) post-trauma sequelae. Due to the absence of hand rehabilitation locally, reconstructive tendon surgery is inadvisable to avoid disappointing poor results and discredit this part of hand surgery. For reason of complexity and unreliability of electromyographic examination, brachial plexus injuries as well cannot be treated except the simplest cases needing one or two tendon transfers. Concerning skin coverage and reconstructive surgery, experience has shown that pedicled local and loco-regional flaps and even micro-surgical transfers are adapted and reliable techniques due to the imperative of single stage procedure (Voche and Valenti, 1999).

13.4 Essential Aesthetic Surgery?

Aesthetic surgery is still considered as extravagant surgery undertaken to beautify patients who are not really ill, as opposed to the "real" surgery provided by the "humanitarian" surgeon whose aim is to help those in actual need. How can one envisage cosmetic surgery then when the object of a humanitarian mission is to meet the most basic demands for surgery (American Academy of Facial Plastic and Reconstructive Surgery)? How does one reconcile these two perceptions?

Even though many surgeons may feel that "humanitarian aesthetic surgery" is a contradiction in terms, any reconstructive surgery procedure must address the aesthetic dimension even when performed for "humanitarian" reasons (Knipper). It must be remembered that, barring frivolous demands, it is not for us to decide what is and what is not important to a given patient. The ultimate objective should always be the patient's well-being by meeting his/her needs.

Moreover, there is no need to "justify" aesthetic by reconstruction because aesthetic belongs, in itself to reparation and reconstruction. Only the very intention behind an intervention will decide whether it is an "unnecessary" aesthetic or a regular "plastic" intervention. There is nevertheless no reason to feel guilty whenever the technical gesture of a procedure is also aesthetic, since what really motivates the surgical intervention is not for us to decide (Knipper, 2003). Irrespective of the motivation, the surgical technique will be the same, and the surgeon will always try to do his very best achieving the best result. All this illustrates that our definitions are of minor importance, compared with the mere satisfaction we bring to the unfortunate patients, which, hopefully, will be a "beautiful" satisfaction (Knipper, 2003). In practical terms, and however paradoxical it may sound, we have learnt not to do aesthetic surgery, but to do surgery with a view to achieving an aesthetic result, even when working on a so-called humanitarian mission (Knipper; Knipper, 2003). The form reconstruction will take is very subjective and case-specific, and only the final result will have the last say. Hopefully, this surgical result will be aesthetically, functionally and humanly acceptable (Knipper, 2003). What a little girl with cleft lip wants is to look better with a more cosmetically appealing lip. In the final analysis, definitions of plastic, reconstructive or aesthetic procedures do not matter. Whether the cleft lip repair is undertaken for functional or aesthetic reasons, the needs and technical details remain unchanged, with the surgeon aiming at the best, useful pleasing result. What really counts is that the patient will be pleased and, as we hope, will be happy (Knipper, 2003, McIndoe, 1981).

Indeed these debates on justification become totally irrelevant when one considers the surgery needed for the disastrous and shocking facial disfigurements and totally dishonourable "honour amputations" that are inflicted in some countries as punishment on young women or helpless men in the name of honour, culture, or face-saving (what a misnomer!), as described so vividly and painfully by Mughese Amin (2007). Here surgery becomes truly humanitarian, and the problem a matter of human rights (Gunn, 1999)

13.5 Conclusion

Problems and/or questions often raised by humanitarian plastic surgery include the motives, sufficient training of the mission's team, choice of surgical techniques, post-operative follow-up, assessment of the results, availability of resources, and possible innovations (Montandon and Pittet, 1999). Various plastic surgery humanitarian missions have emphasized the importance of the long-term involvement of the same team, at the same site, with the same programme to pass on knowledge and, for the surgeon, to experience the richness of the people and area being visited (Dewan, 1998; Micheau and Lauwers, 1999).

Humanitarian plastic surgery missions are often a substitute, filling temporarily a gap in local capabilities. Plastic surgery missions should be training missions and are essential for the development of reconstructive surgery in developing countries. This training must be progressive and adapted to the country's needs. For that regard, several simple plastic surgery techniques are sufficient to treat a large number of patients (Saboye, 1999). Analysis of the type of operations required for any humanitarian plastic surgery mission shows that the techniques most frequently in demand are simple procedures (skin grafts, local flaps, etc.). This "basic" essential plastic surgery invariably is commensurate with local possibilities and corresponds to the population's real needs (Micheau and Lauwers, 1999) and well-being.

References

- Alfandari B., Persichetti P., Pelissier P., Martin D., Baudet J.: Myanmar mission. Ann. Chir. Plast. Esthet. 49: 273–290, 2004.
- American Academy of Facial Plastic and Reconstructive Surgery. http://www.ama-assn.org/ ama/pub/category/print/15930.html.
- Assal J.P. In: Understanding the Global Dimensions of Health. S.W. Gunn ed., Springer, 2005.
- Atiyeh B.S., Al-Amm C.A., El-Musa K.A., Sawwaf A., Dham R.: Scar quality and physiologic barrier function restoration following moist and moist exposed dressings of partial thickness wounds. Dermatol. Surg., 29: 14–20, 2003b.
- Baudet J., Martin D., Pelissier P., Genin Etcheberry T., Casoli V.: Humanitarian plastic surgery missions. Actions and considerations. Ann. Chir. Plast. Esthet., 44: 72–76, 1999.
- Boyle F.A. The 2001 Dr. Irma Parhad Lecture. Humanitarian intervention and international law. http://www.ucalgary.ca/UofC/faculties/medicine/PARHAD/documents/BoyleLecture.pdf

Bruderlein C., Leaning J.: New challenges for humanitarian protection. BMJ, 319: 430-435, 1999.

- Christenson J.T.: Humanitarian medicine applied in a highly specialized field: cardiovascular surgery. J. Humanitarian Med., 29–31, 2003.
- d'Agostino S., Del Rossi C., Del Curto S., Attanasio A., et al.: Surgery of congenital malformations in developing countries: experience in 13 humanitarian missions during 9 years. Pediatr. Med. Chir., 23: 117–121, 2001.
- Dewan P.: Surgeons overseas. Int. Fed. Surg. Colleges, 41-5, 1998.
- Dukes M.E. Plastic surgery: most is necessary. http://www.armymedicine.army.mil/hc/ healthtips/13/200409plasticsurgery.cfm.
- Gunn S.W.A.: Female genital mutilation. World J. Surg, 23: 1087, 1999.
- Gunn S.W.A.: Disaster medicine-humanitarian medicine. Prehosp: Disast. Med., 15:s53, 2000.
- Improving standards in international humanitarian response: the Sphere project and beyond. JAMA, 286(5), 2001. http://jama.ama-assn.org/cgi/content/extract/286/5/531
- Knipper P. Mission: Plastic surgery under challenging conditions, http://www.maitrise-orthop.com/ corpusmaitri/orthopaedic/118 knipper/knipper us.shtml.
- Knipper P.: Humanitarian aesthetic surgery. Ann. Chir. Plast. Esthet., 48: 288-294, 2003.
- Leaning J.: Editorials: medicine and international humanitarian law. BMJ, 319:393–394, 1999.
- McIndoe A: See Page G.: Tale of a Guinea Pig, Pelham Books, London and New York, 1981.
- Mahler H.: Health for all or hell for all? The role of leadership in health equity. J. Humanitarian Med. 3: 43–45, 2003.
- Masellis M. Gunn S.W.A.: Humanitarian medicine: a vision and action. J. Humanitarian Med., 2:33–39, 2002.
- Micheau P., Lauwers F.: What are the objectives of a humanitarian plastic and reconstructive surgery mission? Ann. Chir. Plast. Esthet., 44:19–26, 1999.
- Montandon D., Pittet B.: Humanitarian plastic surgery. Personal experience and reflections. Ann. Chir. Plast. Esthet., 44: 27–34, 1999.

- Montandon D. Quinodoz P., Pittet B.: Questioning humanitarian plastic surgery. Ann. Chir. Plast. Esthet., 49: 314–319, 2004.
- Mughese Amin M.: The dishonourable practice of "honour amputations" of noses and other body parts. J. Humanitarian Med., 7: 20–21, 2007.
- Nicolai J.-P.A., Grieb N., Gruhl L., Schwabe K., Pressier P.: Interplast: five years of the Cochin project. Eur. J. Plast. Surg., 21: 77–81, 1998.
- Saboye J.: Plastic surgery training missions in developing countries. A ten-year experience in Mali. Ann. Chir. Plast. Esthet., 44: 35–40, 1999.
- Voche P., Valenti P.: Our experience of humanitarian hand surgery in Vietnam. Ann. Chir. Plast. Esthet., 44: 64–71, 1999.
- What is humanitarian medicine? http://www.medschoolchat.com/displayarticle65.html.
- Yeow V.K.L., Lee S.-T.T., Lambrecht T.J., Barnett J., et al. International task Force on volunteer cleft missions. J. Craniofacial. Surg. 13: 18–25, 2002.
- ZENIT—The World Seen From Rome. Interview With Dr Michele Masellis. http://www.zenit.org/ english/visualizza.phtml?sid=8480 2005.