Ethical Issues of Disaster Medicine: Taiwan’s Experience of Typhoon Morakot

Joh-Jong Huang¹, Vincent Shieh², Ming-Yii Huang³,⁴*, Huei-Wen Angela Lo⁵*

¹Department of Family Medicine, Yuan’s General Hospital, Kaohsiung, Taiwan
²Graduate Institute of Gender Education, National Kaohsiung Normal University, Kaohsiung, Taiwan
³Department of Radiation Oncology, Cancer Center, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan
⁴Department of Radiation Oncology, Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan
⁵Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

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In Taiwan, there are sufficient supplies and well-trained medical professional manpower to be mobilized during disasters. Also known and famous in the world are Taiwan’s well established and fully equipped medical delivery system and the public health system. These are high level, enthusiastic, experienced medical staff. However, vulnerable areas subjected to disasters in Taiwan are often located at the remote mountain sites, and most victims are aboriginals. These people are viewed as marginalized with inferiority within the power hierarchy. This study surveyed the conflicts of public health administration during Typhoon Morakot disaster in 2009. Since disasters destroyed local endogenous social relationships, the rescue actions of mobilization and postdisaster reconstruction were under the exogenous efforts with “mercy” hegemony. Ethical issues came from the power struggle and practice, and all showed explicit control and suppression characters.

Key Words: autonomy; disaster; ethics; medical care; power struggle

Introduction

Taiwan is located at the Asian subtropical area, with mountain area covered two-thirds. In the past, there were as many as 3–4 typhoons coming across Taiwan. Every typhoon bring Taiwan heavy rain fall with some flood in the mountain area. Typhoon Morakot with 3000mm rain fall in around 48 hours tremendously damaged southern Taiwan on August 8–9th, 2009 and induced floods with mudslides in the mountain area of Kaohsiung State. It is the heaviest rain fall in a single typhoon in Taiwan history.

While the typhoon damaged southern Taiwan, the government of Kaohsiung state initiated the rescue actions. The rapid response of the public health system successfully and effectively satisfied physical trauma care needs during the emergent and urgent period of the disaster, via massive mobilization of health care personnel and supplies under well structure public health system. The rescue program of the public health system was established immediately to supply and maintain the health care needs in the disaster associated damages. There were statistical reports on disease monitoring, living environment monitoring, public health education activity and health screening reports from the working stations setup in the rural area and every shelter. The directing center of the Health Bureau held a daily
meeting to judge the needs of the refugees, to monitor the refugees’ health state, to resolve the difficulties and conflicts of the public health administration, and to launch new programs for the different stages of the postdisaster rescue policy. The Health Bureau also cooperated closely with Kaohsiung Emergent Operation Center to recruit and arrange the medical care manpower for the disaster damaged area. This study is to review the processes and outcome of the public health of the disaster to exam the discrepancy and its ethical effects.

Materials and Methods

The study was designed to collect and review the official records and documents of the rescuing programs and the directing center of the Health Bureau of Kaohsiung State and its subsystem organizations during the flood emergent and urgent periods. Included were the meetings records, working diaries, statistical results of the disaster associated epidemiology, various working programs, formal documents of the departments of the Health Bureau. There were a total of 25 items of the official records and documents obtained. Characters and main themes of the disaster issues of the associated public health system activities were retrieved and revealed.

Review of several focus groups on the personnel’s experience were performed to reveal and reexamine the actual processes of the disaster work about 6–9 months after the Morakot disaster. The main issues discussed in the focus groups were the problems of the rescue work they experienced and their suggestions of further preparation for the disaster associated rescue programs. There were medical doctors, public health nurses, volunteers, mental health counselors, administrators, assistants who were invited to attend the focus groups.

Both the contexts and opinions of the records, documents and interviewed personnel’s texts were theme-categorized and cross-checked. All the dos and don’ts were extracted and their meanings condensed and examined.

Results

In this study, the contexts and opinions of the records, documents and personnel’s interviewed texts showed the whole picture and a comprehensive process of the disaster associated rescue performance. The rescue work of medical care during the typhoon Morakot flood disaster in the Kaohsiung state began at the time when the first medical team were taken by the first helicopter to the isolated village in the mountain areas. It was the dawn of August 11th, just after the peak flood flow, but still during rather unstable weather conditions. There were many isolated villages in the mountain areas where roads and bridges were severely damaged. Worse, the communication was also destroyed during the flood with almost no information available during August 8th and 9th, the first and second days of the typhoon Morakot flood disaster. With compromised medical resources and limited food supply, people in the villages of disaster area needed emergent air mobilization to safety area. From August 11th to 18th, there were a total of 374 flights of helicopters with 5721 persons taken from the isolated villages, and then the day with the most number of flights was August 14th as 119 flights took 1984 refugees to safety. Among them, 38 staff of 23 medical teams were sent to the isolated villages via helicopter transportation for the emergent care of the injured refugees trapped in these areas. All the refugees were first taken to Chi-San Rescue Site at the Chi-Shan town in the mountain area of Kaohsiung State but outside the disaster-damaged area and than allocated to further medical care or to the shelters, which were at first set up temporarily at 19 temples and churches, and then relocated to four military camps about 2 weeks later.

The public health system started to work at the very beginning of the disaster. There were three medical centers and three more mid-sized hospitals in the Kaohsiung area. All the hospitals were supervised by the medical system of National Institute of Health, instead of being publicly or privately funded. According to the disaster information noted from the mountain area, the Health Bureau of Kaohsiung State organized a directing center to arrange the medical staffs for on-site rescue service. Under the directing center of the Health Bureau, there were five health centers of the towns damaged by the flood, a frontline work station of Chi-San Rescue Site, and later a public health provision system of infectious control and monitoring, water and food hygiene, medical care for the 19 temporal shelters at temples and churches, and four military camps. In the mean time, the well-established public health system also began to survey the living and health condition and followed up of the people registered in the managed diseases programs, such as tuberculosis, HIV, mental diseases, suicide, Methadone Maintenance Therapy and long-term care.

The main approach of the disaster medicine extracted from themes of the study materials clearly showed that the church-based and tribe-oriented approach was the main theme in the public health system during this disaster. However disaster associated physical injuries were obvious and received
immediate care at the beginning, and mental trauma and other psychological stress received little attention till later due to the ignorance or lack of support from the Department of Health of the central government. Only after the disaster emergency, programs for the traumatic mental health problems were launched according to the basic doctrines as tribute-based church-oriented rules. The official documents and reports showed that those doctrines were set up by the local health bureau due to the consideration that most of the refugees were at the state as minority, aboriginal people at the low socio-economic, marginalized state. Mental health professional staff was recruited and briefly trained on the culture- and power-sensitive approaches for the victims. In addition, volunteers were also recruited and organized from the refugees in the disaster damaged area. Most of those volunteers were the key persons in the tributes or villages; they were trained and did the very first screening work of mental health problems, especially post-traumatic stress disorder, depression, alcoholism and domestic violence. Positive findings of possible disaster associated mental health problems of the refugees were noted via screening questions incorporated in the daily usual talk between the trained volunteers or the mental health professional staffs and victims. Once indentified, further psychological cares such as individual interviews, family interviews, small group activities, large group psycho-education, children play therapy or geriatric narrative activity were performed according to needs.

As we learned from the whole disaster associated rescue activities, all these rescue programs mainly focused on the biomedical needs of refugees, and most of the needs were presumed and designed by the extrinsic resources applied to the disaster damaged area. Minor aspects of the needs were noted from the refugees, and later their opinions further augmented the biomedical mainstreaming of the public health administration, such as 24-hour medical care service in the earlier temporal shelters and the later military camps instead of medical services being available at a 5-minute distance from most of the refugees’ temporal housing. The medical service records showed that not more than 15 patients visited the medical station in the temporal housing in a day, and 5–10 patients in most of the days. Also noted was the transportation service used for the refugees’ medication needs. There was daily transportation service from the temporal housing to Chi-Shan town, which was 60-minute away for some 10–20 refugees’ doctor’s visit, due to their pre-disaster medical care experience and chronic conditions, such as gout, hypertension and diabetes mellitus.

The in-depth interviews revealed that though during the Morakot flood the medical health care and disaster associated public health service were rather sufficient and well-structured; tremendous medical manpower and supplies were mobilized to satisfy any presumed needs “created” by the “would rather more than less” medical administration. Worse, the so-called and pretended rapid and accurate medical response to the disaster did not have psycho-social care action accompanying the medical personnel’s activity. The overwhelming life-saving and physical trauma needing medical care received most of the attention of the public health system, in addition to the strict infectious control and other public hygiene needs.

Noted from this study, mental health service took place not only late in the urgent period of the disaster but also in an incoherent approach. The disaster associated mental health issues were not shown in the daily meeting records or the doctrines and the standard of procedures of the public health system. Owing to the long term disaster adverse effects and the reconstruction needs, mental health service in the public health mobilization of typhoon Morakot flood disaster is dealt with at the later stage. And this can explain the chaos and the inconsistent services of mental health in the period of reconstruction post disaster. This came to skew the phenomenon that could describe the submissive integration of mental health services in the public health activities of the Morakot disaster.

From the records and documents, we knew that Mao-lin village of Kaohsiung state was also located in the mountain area with flood damage with deaths in that disaster. However, sightseeing with famous springs was the major economic activity in Mao-lin village. The buildings and roads were almost destroyed and people lived in village were heavily hurt by the environmental damage and subsequent economic decline. According to the records and documents, Mao-lin village was the last place where medical help arrived, and the last where mental health programs was launched, and possibly where the least resources were supplied. Compared with other areas, this might give rise to the notion that those who were hurt most got the most.

Discussion

In the past, reflection of the politics of disaster proclaimed that the rescue activities frequently showed the extrinsic power to destructively replace the intrinsic ability of the refugees and aboriginal tributes’ function. Because most of the victims were aboriginals and the minority, they were marginalized with inferiority within the power hierarchy before the disaster and even more marginalized after the disaster. To meet the medical care needs without
consideration of the power influence created by the unrealistic, pious, enthusiastic mercy actions of medical systems and aggravated the dependence of the victims.2,3 This surely was, is, and will be unethical and undoubtedly made up the secondary disaster with the powerless victims with their endless dependency. This is an unconscious attempt to obtain the superiority of the social mainstream state via keeping the victims persistently victimized for good.4

From the very beginning of the Typhoon Morakot flood disaster in Taiwan, both the rapid response of medical teams and subsequent public health intervention only dealt with physical injuries. This led to the very distant and loose integration of the mental health service to public health. The disruption of comprehensive bio-psycho-social module was unavoidable in that such situations required immediate medical action for physical harm.2 The public health doctrines became a gold standard in the relationships of this new hierarchy, built naturally to control the loss.4 And of course, the aftermath recovery and reconstruction were not the main concepts at the first glance, and biological first aid needs not only came into the spot prominently, but also disconnected with psycho-socio-cultural-spiritual needs.5 The hegemony of the public health and medical care system surely constructed the efficient-valued scientifically based hierarchy for the disaster associated service.1,2,6 Under this neo-doctrine, in the name of mercy, people were cared only because of their physical damage and this led the socially marginalized and inferior to more dependence.7 Any area or people without significant physical damage or injuries were marginalized or forgotten in the scope of the distribution of resources.8 This unrelenting power use without reflection distorted the reconstruction from the disaster and incarcerated the people in the disaster circumstances.1,2,8

The ethical issues of disaster medicine raised from this study imply that lack of cohesive and integrated rescue working training and notification led to the worsening of power imbalance in the original social hierarchy.4,5 Physical care was not enough but rather deviant for disaster injuries. That was due to the fact that once being labeled as physical victims with little mental intention, people used to getting more attention and resources from the rescue work, and entered a vicious cycle to be hindered from the reconstruction and recovery.9 These unsatisfying consequences raised the question of “who are the insiders?” From the rescue team’s stance, doing something good for the victims of the disaster was the main duty, but the reasons for doing something good were from people of power and denied the victims’ autonomy. And the reconstruction was designed and directed by the people with pious mercy at the higher part of the hierarchy.

By political correctness, mental health was presumed important.5 But in fact the disrupted public health work in the disaster treated mental health as an appendix, due to the implicit ideology of biomedical hegemony.6,9 This implies that a new model of bio-psycho-social base is needed to integrate mental care of the first response of public health system.9 Medical school education programs should be reformed as followings: a balance and fusion of bio-medicine and mental health, power-sensitive attitudes and skills, cooperation caring without domination, efficient communication strategy for the marginalized, de-professionalism in the fields. The new paradigm requires that the critical timing to launch the post disaster mental health care to be as early as the first time of the emergent public health response, and become more prominent in the later phase of reconstruction.

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