Disaster Work in China: Tasks and Competences for Social Workers

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Abstract

The purpose of this paper is to report on a study that seeks to explore and clarify what are the tasks and competences required of social workers in disaster work and to contribute to a discussion on the participation of social workers in disaster work. Based on literature review, a list of tasks was first generated and then classified into six broad clusters, using broad themes mentioned in the disaster literature. A survey questionnaire was administered to training workshop participants in Sichuan, China. The sample size was 67. The study results indicated perceptions of a division of labor among government officials, social workers, and other disaster responders. Competences requiring moderate to high level of competency could be broadly grouped together under similar themes: mental health, group work, and community. As mental health is currently not seen as part of the core curriculum of social work education, it may be useful to incorporate mental health course(s) as electives, if not as a foundational requirement.

The role of social workers in disaster management is generally recognized within the profession: social workers have much to contribute in disaster response, given their basic knowledge and skills in crisis intervention, family dynamics, bereavement, group work, information and referral, outreach and engagement, and the application of strengths perspective (Cosgrove 2000, Newhill and Sites, 2000, Yanay and Benjamin, 2005). Nonetheless, while many social workers and social work students have responded to disasters with good intentions, they are often not trained in disaster relief (Chou 2003, Robb 2004). Worse still, they are unable to differentiate between those who need professional help and those who do not (Robbins 2002). Chou (2003), Colarossi *et al*. (2007), and Javadian (2007) draw attention to the limited training of social workers in disaster work. Also, training usually occurs after the event, as a knee-jerk reaction, to equip workers with basic knowledge to participate in disaster recovery (see Miller 2003, Hanson *et al*. 2005). The need for training has been identified in developing countries (Javadian 2007, Bian 2009), in places where there are ongoing threats of terrorism, such as the United States (Colarossi *et al*. 2007), and in countries where disasters occur frequently (Mathbor 2007). China is one such country. It is highly vulnerable to frequent and devastating hazards, such as earthquakes, floods, landslides, mudslides, drought, heat waves, snow storms, typhoons, and hurricanes, which affect about 300 million people annually and 70% of cities (Chen, 2009; Economic and Social Commission for Asia and the Pacific 2009). It is further reported that 33% of the world's earthquakes occur in China and that every province has recorded earthquakes of magnitude 5 or more on the Richter scale (Chen 2009). Of the disasters with the highest casualty rates in world history, the top three occurred in China: 1931 flood (1-4 million deaths); 1887 Yellow river flood (0.9-2 million deaths), and the 1556 Shaanxi earthquake (0.83 million deaths) (Economic and Social Commission for Asia and the Pacific 2009). Of the 25 most deadly

earthquakes on world record, 7 occurred in China, and of these, the most recent was the 2008 May 12 Wenchuan earthquake, with a magnitude of 8.0 on the Richter scale (Naranjo 2010).

Recognizing the need for training is the first step. Social workers, whether experienced or not, can benefit from specialized training in disaster management (Newhill and Sites 2000, Rock and Corbin 2007). Next, it is necessary to determine the broad competences required. A preliminary reading of the literature indicated that social workers were involved in tasks that seemed to range from familiar to the unfamiliar, such as helping to clear debris, arranging funerals, and helping families to identifying dead bodies. Perhaps, under chaotic, life and death conditions, people just get on with whatever tasks are required, irrespective of their professional identities. The purpose of the study, reported in this paper, then is to explore and clarify what are the tasks and competences required of social workers and to contribute to a discussion on the participation of social workers in disaster work.

A comprehensive approach to tasks analysis entails looking beyond the immediate and medium-term effects of disasters, and considering the root causes of disasters and opportunities for preventive disaster work. To take such an approach requires an analysis of the tasks performed by social workers in disaster management. In task analysis, data about a specific job are systematically collected to identify the basic work units (tasks) required to do the job, which would then facilitate job training (Blanchard and Thacker 2007). For example, if one of the required tasks in the job of disaster work is to assess the needs of individuals, families, or communities affected by disaster, the appropriate training would have to address the knowledge and skills required to assess needs at different levels of interventions.

To identify the tasks undertaken by social workers in past disasters, a search of relevant literature was undertaken. The inclusion criteria were developed and developing countries, and all types of natural disasters (earthquake, flood, hurricane, and tsunami). A decision was made to include September 11, 2001 terrorist bombing as much more was

written on this disaster than other disasters. Another inclusion criterion was whether the articles provided a description of the work carried out by social workers during and after the disaster crisis and the competences required for such tasks. As the literature was not voluminous there was no cut-off date for exclusion. The literature search covered social work journals and books. Forty-five articles meeting the criteria were further reviewed for tasks and competences identified.

The review showed that most, if not all, of the tasks were undertaken in the response and recovery phases of disaster. As there was minimal literature reporting on social work involvement in the mitigation and preparedness phases, beyond a general call to social workers to get involved in the reduction of disaster risks, it was not clear what specific tasks were required. Of the natural disasters reported in the social work literature most were about earthquakes (1999 Taiwan chi-chi, 2001 Gujarat, 2003 Bam, and 2008 Sichuan).

For the purpose of this paper, a list of tasks was first generated and then classified into six broad clusters, using broad themes mentioned in the literature: assessment; communication and education; social and mental health interventions; emergency relief, mobilization, and coordination; capacity building; and documentation and research. Based on the identified tasks a list of competences was then generated (guided by literature) and grouped broadly into specialized areas (specific to disasters) and generalized areas (also applicable to non-disaster social work settings).

To verify if the tasks and competences were indeed relevant in a specific social-cultural context survey research was conducted in Sichuan, China, where a major earthquake occurred in 2008 and unprecedented social work response was generated. It was also chosen as the research site because the author has ongoing research work on disaster policy there and several colleagues were involved in post-disaster reconstruction work.

Methodology

The survey method was chosen mainly because the questions were fairly straightforward, and it was easier and less costly to administer. As Sichuan is a big province (land area of 485,000 square kilometers and a population of about 87 million, as of 2007) and the target respondents are dispersed all over the province, in different counties, it could be administered when they congregate in groups, as in attending training workshops.

A draft of the survey questionnaire (in Chinese) was pilot tested in June 2010 with four social workers (via email), who were personal contacts of a graduate student and working in Shenzhen, a special economic zone in the south. Based on their feedback on items that were ambiguous in meaning and tasks that were unfamiliar to the mainland Chinese context the questionnaire was revised accordingly.

The questionnaire (Chinese and English versions are available, upon request) consisted of three sections: Section I provided a list of 36 tasks. Respondents were asked to consider whether the tasks were appropriately handled by social workers, other disaster responders (e.g. doctors, nurses, psychologists, priests, first aiders), and/or government officials. They were allowed to check against more than one category but cautioned against a "laundry list" mentality of checking all categories. Section II provided a list of competences, grouped into disaster-related and generalized areas of social work practice. There were 18 and 5 items, respectively. Respondents had to rate the level of competences required by social workers in China, according to a 4-point likert scale: 0=Not at all; 1=Low; 2-Moderate; and 3=High. Section III requested information on personal particulars.

The questionnaire was administered in two training workshops that were organized by the Department of Applied Social Sciences, The Hong Kong Polytechnic University, and funded by the Keswick Foundation; both were held over three days. The first workshop, held in July 2010, in Chengdu, capital city of Sichuan province, was for personnel (social workers, program managers, administrators, etc) of 14 non-governmental organizations (NGOs) and

aimed at capacity building of NGOs, and conducted by trainers from Hong Kong. The topics covered were disaster risks reduction, community development, and team development and growth. Twelve of these NGOs had participated directly in relief and post-disaster reconstruction work in Sichuan, following the devastating Wenchuan earthquake, which occurred in the early afternoon of 12 May 2008. The second workshop was held in September 2010, in Guangyuan city, for frontline social workers, social work educators, primary and secondary teachers, and prefecture-level education bureau officials, on the specialized topic of life education (specifically on person and the environment), which were conducted by trainers (non-social workers) from Taiwan. The frontline social workers were deployed in various school social work stations, which were set up, in different quake-affected counties in Sichuan. These stations were established in response to the needs of school children and teachers affected by the Wenchuan earthquake. The teachers were mostly from the schools in which the social work stations were located, and hence, they had some familiarity with social work. There was no obligation on the part of the workshop participants to complete the questionnaire, though a small token of appreciation (one ballpoint pen) was given to those who returned the questionnaire.

Data analysis

The number of participants in the first workshop was 30, of whom 23 responded, giving a response rate of 77%. As the questionnaire was administered on the last day of the workshop, a number of participants had left by then and was not able to participate in the survey. In the second workshop, copies of the questionnaire were distributed at the start of the workshop. The response rate was 84% (number of participants=58). Of the 49 copies returned, 5 were incomplete, and so only 44 were usable. As the number of participants for each workshop was small, it was decided to combine the responses to make up a bigger sample size of 67 for statistical analyses. As the use of ANOVA statistic did not show any statistical differences in

the response between social workers/social work educators (*n*=27) and the rest (*n*=36) (missing data=4) for the 55 items in section I of the questionnaire, the presentation of findings would be based on the overall sample. For section II, statistically significant difference (when corrected for 32 number of comparisons made, *p*-level was set at a more stringent level of less than or equal to.009) between the social workers/social work educators and the rest was found for only one item. The results would also be reported for the sample rather than sub-samples.

In analyzing the results for section I, the following procedure was used. As respondents could select one to three categories (social workers, other disaster responders, and government officials), the total frequency count added up to more than 67 for each item. In the calculation of percentages for each category in table 1, the sample size of 67 was used as the base. To interpret the data on perceptions of appropriate responsibility for each task, it was decided to use the grouped response as a reflection of primary versus secondary task responsibility, using a cut-off point of 66% (two-thirds majority). To further differentiate between major and minor secondary responsibilities for each task, another cut-off point of 33% (one-third minority) was used. Hence, the grouped response was interpreted as perceptions of primary responsibility, major secondary responsibility, and minor secondary responsibility. For section II, frequency count (as a percentage of total respondents) was used.

Results

Sample description

The mean age of the respondents was 28 years old (*s.d.*=6.47) and ranged between 20 to 47 years. There were more women (71%) than men. The mean number of years of work experience was 5.3 (*s.d.*=6.84), with a wide range of 0 month to 30 years. Two were social work students, and hence, they had no work experience. A majority of the respondents had a bachelor's degree (69%) whereas another 15% were educated, up to master's degree level.

There were more non-social workers (57%) than social workers (40%), who were younger in age (mean age=23 versus 31) and had less working experience (mean years=1.3 versus 8.2) than the former. Another 3% were social work educators, who were older (mean age=33) and had more years of work experience (mean=6.0) than the social workers.

Findings

The results of tasks analysis is presented in table 1. For the first category on assessment, the results for the item "assess the severity of disaster situation" could be interpreted as showing government officials (82% of sample) to hold primary responsibility whereas other disaster responders (31%) and social workers (27%) were to hold minor secondary responsibility. For three of the other assessment tasks—conduct needs assessment of disaster population; identify possible PTSD and long-term impact among affected disaster population; and identify disaster populations—social workers were seen as having primary responsibility (73% to 76%). However, other disaster responders (48%) and government officials (40%) were to share major secondary responsibility. One task was viewed as appropriate for both social workers (70%) and other disaster responders (66%), that is, "assess acute stress disorder, PTSD, depression, and possible suicide ideation," suggesting a shared responsibility.

For the next category on communication and education, most respondents thought it was more appropriate for government officials (88%) to carry out the task on collecting and disseminating information on the disaster, with fewer respondents identifying social workers (43%) and other disaster responders (30%) as appropriate. There appeared to be a clear mandate that government officials (88%) were more apt in managing the task of dealing with the media, as compared to social workers (16%) and other disaster responders (15%). The item on "provide liaison with government agencies and NGOs," was a task more appropriate for social workers (70%), in contrast with government officials (34%) and other disaster

responders (18%). For the item on public education the indication was less clear, as only 64% indicated government officials and 55% indicated social workers.

Of the 11 tasks in the third category on social and mental health interventions, 6 tasks mostly related to counseling, and work with children and families were deemed to be an appropriate responsibility of social workers (79% to 90%). It is clear that case management is most appropriately handled by social workers (90%), with other disaster responders (24%) and government officials (7%) having a minor secondary responsibility. For the two tasks requiring counseling—bereavement and crisis—other disaster responders were also seen as appropriate, though to a lesser extent (45% and 40%, respectively). Assisting the police to deal with the concerns of families with missing persons was seen as a task appropriate for both government officials (58%) and social workers (48%). As for operating a telephone helpline, there was no clear preference, as all categories were thought to be appropriate in handling this task: social workers (55%), disaster responders (48%), and government officials (40%). Two items related to debriefings—critical incident stress debriefing and group debriefing for employees and executive groups of organizations—seemed to be a shared task between social workers (54% and 60%) and government officials (52% and 36%). However, a closely related task—conduct debriefing for relief workers—was thought to be more appropriately dealt with by government officials (66%), rather than by social workers (40%) or other disaster responders (25%). The results suggested perceived differences in task responsibility, according to the target group for intervention: relief workers versus employees and executives.

In the next segment on emergency relief, mobilization and coordination, the results showed more variation in perceptions: five tasks seemed to be the primary responsibility of government officials (distribute supplies to disaster victims/survivors; provide financial aid; provide assistance with basis needs; organize and mobilize community for recovery and

restoration; and raise funds); three tasks were more appropriately handled by social workers (assist victims to access aid from government, NGOs, and other sources; mediate between conflicting groups or parties; and conduct outreach to disaster victims who are unaware of aid and other services); and one task should be the primary responsibility of other disaster responders (help to clear debris and assist in other physical relief). There were three tasks for which there was no clear identification of who could be considered as having primary responsibility: identify dead bodies; arrange funerals on behalf of victims' families; and coordinate services of various groups, local organizations, and relief agencies. Of these three, two were to be shared—identify dead bodies (other disaster responders and government officials); and coordinate services of various groups, local organizations, and relief agencies (social workers and government officials). Though the task on arranging funerals appeared to be less clear cut, it still turned out that government officials were seen as more appropriate (55%) than other disaster responders (33%) and social workers (27%). The demarcation of task responsibilities appeared to be along the lines of physical and financial relief by government officials and other disaster responders versus psychosocial assistance such as outreach/advocacy/mediation by social workers.

Lastly, for the other two categories on capacity building and documentation/research, most of the tasks could be seen as mostly appropriate for social workers (72% to 79%) to carry out. Whilst it was not as clear that social workers were to be primarily responsible for undertaking research on disaster response and management, the results nonetheless still indicated that more thought that social workers (60%) were appropriate vis-a-vis government officials (46%).

In sum, the tasks appropriately handled by government officials were mostly those related to communication and education, and emergency relief, mobilization and coordination. For tasks deemed to be appropriate for social workers, these were mostly those classified

under assessment, social and mental health interventions, capacity building, emergency relief, mobilization and coordination, capacity building, and documentation and research. In contrast, only one of the tasks was deemed to be appropriately handled by other disaster responders only, that is, help to clear debris and assist in other physical relief (classified under emergency relief, mobilization and coordination).

Table 1 about here

In response to the 18 items asking about level of competences required for social workers, for specialized areas of knowledge and skills related to disaster work, the respondents mostly indicated a moderate level, except for four items (see table 2). When ranked according to the highest proportions of combined responses for moderate and high level of competencies (see table 2), the top eight items were as follows:

1. Identify and address the special needs of vulnerable populations in disaster situations (86%);
2. Assist individuals and families in recognizing and dealing with issues of grief, loss, and mourning (82%);
3. Incorporate knowledge of group process and interactions in working with small groups (81%);
4. Reach out to, organize, and mobilize disaster-affected communities (80%).
5. Assist communities in recognizing and dealing with issues of grief, loss, and mourning (80%);
6. Collaborate with other disaster responders and government officials (80%);
7. Incorporate knowledge of crisis theory and interventions in dealing with disaster survivors (76%); and

8. Incorporate knowledge of stress and stress management in dealing with survivors (75%).

Table 2 about here

It is noteworthy that at the bottom of the list was "relate to the mass media," which is congruent with the finding that dealing with the media is a task better handled by government officials. The competence of defining disasters and understanding the nature and root causes of disasters ranked somewhere in the middle (number 10).

As for the generalized areas of competences related to general social work practice, a response pattern of mostly moderate-level competency also prevailed, except for the item on assessment of needs and functioning (see table 3). There were almost equal proportions of respondents who considered this item to require moderate or high level of competency (39% and 40% of respondents, respectively).

Table 3 about here

Discussion

In discussing the results in a wider context, it is useful to first describe what the context is, since the development of social work education and social work profession in China is relatively new, uneven, and unlike most other countries.

Chinese context

In China, social work as a discipline has historically been coupled with sociology and taught as early as the 1920s, in a few universities, up till 1952 (Xia & Guo 2002, Law & Gu 2008). With the establishment of the People's Republic of China, sociology departments were closed

down in the 1950s, with the result that the teaching of social work was interrupted for a long period of time. When economic reform was introduced in 1978, the teaching of sociology resumed but it was only in 1988 that social work was reinstated in the department of sociology in Peking University and a few others. Beginning in 1999 there was a spurt of social work programs in universities and colleges all over the country, such that by 2006 the total count was about 200 (Law & Gu 2008). Each year, 10,000 graduated with a bachelor's degree in social work (Liu 2009). It looked as though spring has come for social work. In reality, students were assigned to study social work, having failed to gain entry into programs of their choice and with more financial prospects such as law, finance, and economics; and few graduates could find jobs as social work was not recognized as a career (Chang 2006). Moreover, social work was taught as an academic discipline rather than as a practice profession.

This is related to the nature of social work education in China. As there was a lack of social work educators, social work was taught by academics drawn from the social sciences and humanities, with no field experience. In 2004 the China Association of Social Work Education published teaching *guidelines* to standardize social work curriculum, including a list of 10 social work foundation courses: introduction to social work theory, casework, group work, community work, social administration, social policy, introduction to social security, and three sociology courses (emphasis mine to indicate there is no accreditation of social work education programs) (Xiong & Wang 2007). A survey of social work programs showed a longer list of 26 courses offered; however, counseling and child welfare courses were not commonly offered (Lou *et al*. 2006). Disaster management course was not listed. Though field education was recognized as important it was difficult to implement due to a lack of field instructors and field placements. Consequently, many social work programs were unable to meet the recommended number of 400 hours of practicum training. To overcome some of

these challenges, various universities in Hong Kong and elsewhere collaborated with universities on the mainland in offering short-term and joint graduate-level programs, aimed at staff development of social work educators without relevant social work qualifications. This has helped to develop a growing number of better qualified social work educators.

And in 2006 the central government put into place several regulations and measures to develop social work as an occupation and to recruit, train, and enlist social workers in building a harmonious society. But China is a big country (population of 1.3 billion people) and the development of social work varies, with the more advanced cities such as Beijing, Shanghai, Shenzhen, and Guangzhou taking the lead. Sichuan, being one of the less developed provinces in China, does not have as many resources for social work education and social work services. Though information on the number and profile of social workers in Sichuan province are not available, personal communication with a social work educator in Chengdu (on 14 February 2011) confirmed that prior to the 2008 Wenchuan earthquake there were limited job positions for social work. The establishment of a small number of school social work stations, after the quake, served to create job opportunities for social work graduates, from 2008 to 2010, though still limited in scope, as compared to cities such as Shanghai and Shenzhen, where there were government purchases of social work services.

The earthquake, however, helped to raise better awareness of the contributions of social work to society (Liu 2009). This was due to the estimated 1,000 social work educators and their students (no details about how many were local and how many were from other provinces) who participated in frontline relief work in Sichuan, after the quake (European Association of Schools of Social Work 2009). However, few stayed behind, beyond the immediate crisis period, as they returned to their various jobs and studies elsewhere.

Social work education and social work profession are relatively new in their stages of development in China and much more needs to be done to prepare social work students for

the field in general, not to mention being prepared to work in disaster situations. The results of this study should be seen in the light of the past and current state of development of both social work education and practice.

Division of labor

The results of the tasks analysis indicated perceptions of a division of labor among government officials, social workers, and other disaster responders. Most of the tasks that were deemed to be suitably carried out by government officials related to communication and education; and emergency relief, mobilization, and coordination. In addition, there were indications that certain tasks clearly belonged to the realm of government officials: provide assistance with basic needs (93%), provide financial aid (91%), deal with the media (88%), assess the severity of disaster situation (82%), collect and disseminate information on the disaster (73%), distribute supplies to disaster victims/survivors (69%), organize and mobilize community for recovery and restoration (69%), and raise funds (69%). The survey results perhaps reflected a general understanding of what government officials had done during the response and recovery phases of the Wenchuan earthquake and should continue to do, in future disasters. The Chinese government received high praise for their rapid and coordinated response to the Wenchuan earthquake. Having assessed the severity of the impact, losses, and need for resources, the central government mobilized supplies to meet basic needs for food and shelter; restored basic facilities for communication, transport, and electricity; and institutionalized a counterpart assistance policy whereby richer provinces were paired with seriously quake-affected counties for technical assistance and economic aid (UNICEF Office for China 2009, author in press). The perception that government officials were more apt in dealing with the media was perhaps reflective of the sensitivity of the Chinese government over media reporting, following the Wenchuan earthquake, as many school buildings

collapsed, resulting in the deaths of school children and teachers (Bristow 2009, Dickie, Dyer, and Anderlini 2009).

Similarly, there appeared to be certain tasks that were considered as more appropriately managed by social workers, which might be seen as falling within the professional domain of social work: assessment, social and mental health interventions, capacity building, and documentation and research. Clearly, social workers were to undertake tasks such as case management (90%), conduct outreach to disaster victims who are unaware of aid and other services (85%), conduct camps and other recreational activities for children (84%), provide bereavement counseling (79%), provide crisis counseling (79%), conduct needs assessment of disaster population (76%), and so on. Case management is considered to be a "staple of post-disaster recovery," in the United States, and encompass a comprehensive provision of functions, such as identifying or reaching out to clients, assessing their needs, planning for recovery, linking them to needed though fragmented services, monitoring outcomes of intervention, and advocating for them (Bell 2008, p. 16). Perhaps, in China, case management could also be a staple in social work, as such knowledge and skills might be useful, not only in disaster situation but also in other settings. As the current social work curriculum includes casework as one of the foundational courses it may be useful to build in more emphasis on the use of case management, if it is not already incorporated.

The only task that was deemed to be appropriately handled by other disaster responders—help to clear debris and assist in other physical relief—brought to mind the efforts of the People's Liberation Army and police, who were at the forefront in the Wenchuan earthquake, clearing damaged buildings, bridges, roads, etcetera, and rescuing those trapped in collapsed buildings. Other disaster responders, namely, teachers and principals were also lauded for their efforts, in saving the lives of school children (Sim, 2009). The other task that disaster responders could share with government officials was clearly

related to the nature of emergency relief, that is, identify dead bodies. This demarcation of tasks serves to relieve social workers in China of having to do something, for which they are not professionally mandated to do and if undertaken, may increase the risk of experiencing trauma (Newhill and Sites 2000). However, it does mean that social workers will have to look out for symptoms of distress and fatigue among those tasked to do this potentially traumatic job. It is also necessary to provide regular debriefing of emergency relief personnel, not only for those involved in this particular task but for relief personnel in general. In the recovery phase of the Wenchuan earthquake, the distress experienced by government officials and cases of suicide were reported in the media and elsewhere (Hu 2009, Li 2009). Some had experienced loss of family members and properties and probably did not have the time and space to grieve over their losses. They are as much in need of psychosocial assistance as other earthquake survivors. However, the current social work core curriculum does not seem to put much emphasis on counseling, which may help explain why many local social work educators and students were engaged in group activities (such as organizing social-recreational activities, running women's embroidery groups, etc) and to some extent, community work, rather than counseling in the disaster relief phase.

An overall implication of the tasks analysis is that it may be helpful in clarifying the tasks that social workers can handle vis-à-vis government officials and other disaster responders in disaster management, as some have written about the lack of recognition by local governments, other disaster responders, and community residents as to the contributions that social workers can make in the Wenchuan earthquake, given the low public awareness of social work as a profession in China (see Bian *et al*. 2009, Chen 2009, Pei *et al*. 2009, Sim 2009).

Social work competences

The survey results with regards to competences show that identifying and addressing the special needs of vulnerable populations require moderate to high level of competency. Groups identified as vulnerable in disaster situations generally include children, older persons, persons with physical or mental disabilities, the homeless, and women (Hale 2007). In the case of Wenchuan earthquake, responding to the needs of school children, through organizing camps and recreational activities and establishing school social work reflected the priority given by institutions to this particular vulnerable group (see Zhang and Zhang 2008, Sim 2009). Children and teachers with disabilities were included in the target group of intervention (Sim 2009). Another vulnerable group that attracted attention was minority ethnic women (see Pei *et al*. 2009). However, there appeared to be less social work intervention focused on older persons. The greater attention given to children was most likely due to the desire to assist surviving children. Official report indicated 5,335 deaths of school children and damages to 14,000 schools, caused by the earthquake (Bai, 2009).

As for the other areas of competences identified by a majority of the respondents as requiring moderate to high level of competency, these could be grouped together under similar themes: (i) Mental health: Issues of grief, loss, and mourning; crisis theory and interventions; and stress and stress management; (ii) group work; and (iii) community work, including inter-agency collaboration. Of these, group work and community work are already listed as 2 of the 10 foundational courses in baccalaureate education. Mental health is currently not seen as part of the core curriculum of social work education. It may be useful to incorporate mental health course(s) as electives, if not as a foundational requirement.

Even though the competence of defining disasters and understanding the nature and root causes of disasters was considered as requiring moderate level of competency, given the international recognition of the importance of disaster risk reduction, it can be incorporated into the theme of community work, as community residents need to be aware of the risks

involved, living in geologically vulnerable sites. The torrential rain in many provinces, including Sichuan, Gansu, and Shaanxi (three provinces most affected by the Wenchuan earthquake), and subsequent mudslides experienced in August 2010 highlighted the high risks of secondary disasters in which disaster survivors continued to be exposed to.

Implications for training and education

There are several implications for training, arising from the survey results. Firstly, the core curriculum at the bachelor's level does not include disaster work intervention. It may be possible to incorporate disaster social work as an elective at the bachelor's level, perhaps for those universities located in disaster-prone areas. For the many who have already graduated, disaster intervention may be offered as a specialist job training program.

Secondly, whether to offer a course in disaster intervention at the master's level and whether to make it mandatory for social workers to attend at least one basic course, and if so, what should a basic course cover. In proposing changes to the social work curriculum, some possible barriers include lack of faculty experience and expertise, no explicit recognition of the importance of disaster content in curriculum, and a curriculum that is already fully packed (Healy 2009). However, with China's vulnerability to natural hazards, social work educators' participation in the Wenchuan earthquake and Yushu earthquake (April 2010), and the recent introduction of a master's degree in social work in 58 designated universities, all over China, there is scope to introduce at least one course on disaster work in the social work curriculum.

Thirdly, there is a need to develop specific learning objectives, culturally relevant course contents, and assessment of objectives for the course(s) to be offered. However, it would be necessary to prioritize the competences to be covered in the course, as it might be overwhelming to do too much in one course. In terms of responding to disaster needs, a top civil servant identified treatment of psychological trauma as being of top priority (Liu 2009). Caution, however, should be exercised in the teaching of mental health interventions reported

to lack evidence or of use under certain preconditions. For example, Halpern and Tramontin (2007, p. 276) reported that psychological debriefing "should not be used with primary victims or survivors of trauma, that it should not be used in the immediate aftermath of a disaster, that it should not be a stand-alone intervention, and that it should not be mandatory."

Lastly, as there are a number of tasks that are seen to be appropriately handled by at least two of the categories, it may be useful to offer and conduct joint and specific job-related training, so as to coordinate their efforts and to prevent service duplication and overlap.

Strengths and limitations of study

The strength of this study was that the sample included respondents who had intimate knowledge of disaster experience and hence, qualified to respond to questions asking about tasks and competences. Most of them were currently involved in disaster recovery work, though limited to work with children, parents, and teachers, and some were also involved in the response phase of the Wenchuan earthquake. Furthermore, most of the respondents were survivors of Wenchuan earthquake, having lived, worked, or studied in Sichuan when the earthquake occurred. The inclusion of respondents who were not social workers served to "validate" perceptions of what were appropriate tasks for social workers. The statistical analyses did not show the two groups—social workers/social worker educators and non-social workers—as holding different perceptions.

Two limitations of this study relate to the sample: small size and the use of convenient sampling. This may affect the generalizability of survey results to Sichuan province in particular and to mainland China as a whole. Also, as the study sample was drawn from those working in Sichuan and those whose disaster experiences were limited to the Wenchuan earthquake, replication of the study, with bigger samples, in different parts of China, is required.

In addition, replication of the study, in different parts of the world, could serve to identify core knowledge of disaster management for social workers.

Concluding remarks

Implementation of this survey is only an initial exploratory step to present preliminary results about what is required in developing the competences of social workers in mainland China to deal with disasters. Ongoing dialogue with Chinese social worker educators and social workers is required to review social work curriculum and develop specific courses to meet the goals of disaster work: assessing needs and post-traumatic symptoms; providing case management, bereavement and crisis counseling to disaster survivors; acting as intermediary and coordinating services of various groups and relief agencies; building capacity of relief workers, volunteers, and community residents; liaising and working jointly with government officials and other disaster responders.

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Table 1. Tasks Analysis (N=67)

	Item	Primary responsibility (at least 66% of respondents)	Major secondary responsibility (between 34% and 65% of respondents)	Minor secondary responsibility (33% or less of respondents)
A	**Assessment**			
1	Assess the severity of disaster situation	Government officials (82%)		Other disaster responders (31%) and social workers (27%)
2	Conduct needs assessment of disaster population	Social workers (76%)	Other disaster responders (48%) and government officials (40%)	
3	Assess acute stress disorder, PTSD, depression, and possible suicide ideation	Social workers (70%) and		Government officials (7%)

		other disaster responders (66%)		
4	Identify possible PTSD and long-term impact among affected disaster population	Social workers (75%)	Other disaster responders (57%)	Government officials (7%)
5	Identify disaster populations, that is, those who had been affected by the disaster	Social workers (73%)		Other disaster responders (33%) and government officials (24%)
B	**Communication and Education**			
1	Collect and disseminate information on disaster	Government officials (73%)	Social workers (43%)	Other disaster responders (30%)
2	Deal with the media	Government officials (88%)		Social workers (16%) and other disaster responders (15%)
3	Provide liaison with government	Social	Government	Other

	agencies and NGOs	workers (70%)	officials (34%)	disaster responders (18%)
4	Provide public education on disaster management		Government officials (64%) and social workers (55%)	Other disaster responders (21%)
C	**Social and Mental Health Interventions**			
1	Provide family liaison, information and support to families of disaster victims	Social workers (82%)	Government officials (40%)	Other disaster responders (27%)
2	Provide case management services	Social workers (90%)		Other disaster responders (24%) and Government officials (7%)
3	Conduct camps and other recreational activities for children	Social workers (84%)	Other disaster responders (34%)	Government officials (15%)

4	Initiate school mental health services	Social workers (79%)	Other disaster responders (37%)	Government officials (15%)
5	Assist the police to deal with the concerns of families with missing persons		Government officials (58%) and social workers (48%)	Other disaster responders (27%)
6	Operate telephone helpline		Social workers (55%), other disaster responders (48%), and government officials (40%)	
7	Provide bereavement counseling	Social workers (79%)	Other disaster responders (45%)	Government officials (3%)
8	Provide crisis counseling	Social	Other	Government

		workers (79%)	disaster responders (40%)	officials (6%)
9	Conduct critical incident stress debriefing		Social workers (54%) and government officials (52%)	Other disaster responders (25%)
10	Conduct group debriefings for employees and executive groups of organizations affected by disaster		Social workers (60%) and government officials (36%)	Other disaster responders (24%)
11	Conduct debriefing for relief workers	Government officials (66%)	Social workers (40%)	Other disaster responders (25%)
D	**Emergency relief, mobilization and coordination**			
1	Help to clear debris and assist in other physical relief	Other disaster responders (67%)	Social workers (40%) and government	

			officials (39%)	
2	Distribute supplies to disaster victims/survivors	Government officials (69%)	Social workers (39%)	Other disaster responders (31%)
3	Identify dead bodies		Other disaster responders (58%) and government officials (54%)	Social workers (10%)
4	Arrange funerals on behalf of victims' families		Government officials (55%)	Other disaster responders (33%) and social workers (27%)
5	Provide financial aid	Government officials (91%)		Social workers (18%) and other disaster responders

				(16%)
6	Provide assistance with basic needs, i.e. shelter, food, clothing, etc	Government officials (93%)		Social workers (21%) and other responders (7%)
7	Assist victims to access aid from government, NGOs, and other sources	Social workers (72%)		Government officials (33%) and other disaster responders (22%)
8	Organize and mobilize community for recovery and restoration	Government officials (69%)	Social workers (63%)	Other disaster responders (9%)
9	Mediate between conflicting groups or parties	Social workers (75%)	Government officials (48%)	Other disaster responders (16%)
10	Conduct outreach to disaster victims who are unaware of aid and other services	Social workers (85%)		Government officials (15%) and other disaster

				responders (12%)
11	Coordinate services of various groups, local organizations, and relief agencies		Social workers (64%) and government officials (42%)	Other disaster responders (10%)
12	Raise funds	Government officials (69%)	Social workers (49%)	Other disaster responders
E	**Capacity Building**			
1	Organize, manage, and develop volunteer support	Social workers (72%)	Government officials (42%)	Other disaster responders (12%)
2	Train relief workers, volunteers, and community residents	Social workers (79%)		Government officials (27%) and other disaster responders (19%)
F	**Documentation and Research**			
1	Undertake research on disaster response and management		Social workers	Other disaster

			(60%) and government officials (46%)	responders (30%)
2	Evaluate effectiveness of interventions	Social workers (72%)	Government officials (37%)	Other disaster responders (30%)

Note: Frequency count adds up to more than 67, as respondents can select more than one category.

Table 2. Rank order of specialized areas of competences related to disaster intervention

Rank order	Item	None	Low	Moderate	High
1	Identify and address the special needs of vulnerable populations in disaster situations	3%	11%	33%	**53%**
2	Assist individuals and families in recognizing and dealing with issues of grief, loss, and mourning	0%	18%	32%	**50%**
3	Incorporate knowledge of group process and interactions in working with small groups	0%	18%	34%	**47%**
4	Reach out to, organize, and mobilize disaster-affected communities	2%	18%	**43%**	37%
5	Assist communities in recognizing and dealing with community-level issues of grief, loss, and mourning	0%	19%	**43%**	37%
6	Collaborate with other disaster responders and government officials	2%	18%	**49%**	31%
7	Incorporate knowledge of crisis theory and interventions in dealing with disaster survivors	0%	24%	34%	**42%**
8	Incorporate knowledge of stress and stress management in dealing with disaster survivors	2%	24%	**42%**	33%
9	Use advocacy, monitoring and evaluation	2%	24%	**41%**	33%

	to engage and develop disaster-affected communities				
10	Define disasters and understand the nature and root causes of disasters	0	27%	**52%**	21%
11	Foster inter-disciplinary and inter-organizational collaboration	5%	24%	**49%**	22%
12	Gather and provide information to disaster victims	3%	27%	**54%**	16%
13	Demonstrate awareness of appropriate application of group debriefings	2%	31%	**48%**	19%
14	Demonstrate awareness of normal reactions to trauma, etc	0	34%	31%	34%
15	Handle issues related to co-occurring mental health and substance abuse, etc	5%	30%	**52%**	13%
16	Demonstrate knowledge of and skills in public education	3%	**36%**	**40%**	21%
17	Demonstrate knowledge of guidelines, procedures, and policies for assistance	2%	**39%**	**40%**	20%
18	Relate to the mass media	9%	34%	**45%**	12%

Table 3. Generalized areas of competences related to general social work practice

	Item	None	Low	Moderate	High
1	Assessment of needs and functioning	2%	19%	**39%**	**40%**
2	Reach out to, organize, and mobilize communities	0%	18%	**43%**	39%
3	Demonstrate awareness of conflict situations and mediate conflicts	0%	25%	**40%**	34%
4	Organize and manage volunteers	0%	18%	**45%**	37%
5	Demonstrate knowledge of and skills in training	0%	16%	**48%**	36%