Innovations in Community Crisis Intervention --
Adopting the ACT and AtCER MODEL in
The COVID-19 Outbreak

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ABSTRACT
Early studies tended to focus on the roles and functions of the social workers in the rescue stage however the need of an action model to guide disaster social work is not unaddressed. After the September 11 terrorist attack in 2001, Albert R Roberts outlined superbly the Assessment, Crisis intervention and Trauma Treatment: the Integrative ACT Intervention Model (2002). This is one important attempt to guide social workers’ response to natural and human disasters. By hindsight, the ACT Model has its limitations especially in not being able to discuss how social work can help the community to develop resilience and build social capacity. After the 2008 Sichuan earthquake, Social Workers Across Borders (hereafter referred as SWAB) a social worker volunteers organization rose to the challenge and acted immediately and continually from response to reconstruction phase. The ACT model was adopted as our major intervention approach. Again in 2020, to combat the COVID-19 outbreak in Wuhan, SWAB was invited as early as Jan 23rd, to provide training to professional volunteers composed of medical students, psychological counselors and social workers who are going to support on the web those suspected patients staying in guaranteed hotels and home. Later the services were extended to patients who were taken care of in cabin hospitals. SWAB immediately employed the ACT Model in formulating our training and later guide social workers’ interventions. Particularly in response to the very specific nature of this critical incident which is a community outbreak, the ACT Model was expanded to incorporate community work approach and skills. An supplementary model given the name of AtCER is introduced and experimented. This paper will present the concepts of AtCER and discuss how it can be applied to COVID-19 response.
ROLES AND FUNCTIONS OF SOCIAL WORKERS IN DISASTERS

As the happenings of natural disasters particularly earthquakes increased in the last two decades, studies on disaster began to emerge and expand (Seroka, C.M., Knapp, C., Knight, S., Siemon, C.R., and Starbuck, S., 1986; Dufka C.L., 1988; Banerjee & Gillespie, 1994; Webster, 1995, Dodds and Nuehring, 1996). These early studies mainly focused on the roles and functions of the social workers in the rescue stage. The Kobe earthquake occurred in Jan 17, 1995 and the 921 earthquake in Taiwan occurred in 1999 sparked off a number of studies on the roles and functions social workers played in restoring survivors’ mental health. In 2001, the 911 incident gave rise to even more research and efforts in order to develop a more scientific and systematic intervention practices in case of future catastrophes. The needs to develop work manuals were recognized and the danger of inappropriate assessments on the mental states of the survivors through untrained volunteers was raised. After the earthquake in Iran 2003, Mohammad Reza Iravani enlisted the techniques social workers can apply in the helping including situational supporting, hopefulness making, consoling, assuring, concentrating and solution developing. In Asia, social work practitioners and educators have also tried to develop post disaster actions guidelines from rescue stages to reconstruction stages. Chou Y.C. et el (2001) highlighted the social workers’ roles in the stages of Emergency Response, Recovery Response and Preparedness Response and our respective social work education tasks. Feng Y Joyce also stressed the significant functions social workers can perform in disaster work such as integration of resources, planning and advocacy, support other rescue workers, respond to clients’ needs and case management (2000).

THE ACT SOCIAL WORK INTERVENTION MODEL

All the above discussions, mainly on roles and functions, have helped social workers to better master their roles in reaction to disasters. The contributions of social workers to the recovery of individuals and to the reconstruction of communities are also better recognized. However few researches have been conducted to identify effective approaches in disaster work. Obviously the context of natural disasters has imposed numerous limitations on field researches. It is first unpredictable. Second it involves ethical considerations if survivors are treated differently by social workers.

The need for an action model to guide disaster social work is quickly recognized by social work
educators and professionals. Albert R Roberts outlined an intervention framework superbly in his long article “Assessment, Crisis intervention and Trauma Treatment: the Integrative ACT Intervention Model”. (Roberts, 2000)

The Robert’s ACT Model can be presented as follows : (Roberts, 2005)

![Figure 1: ACT Model](image)

**A Assessment:**
- Assessment/Appraisal of Immediate Medical Needs, Threats to public safety and property damage
- Triage Assessment, Crisis Assessment, Trauma Assessment and
- Biopsychosocial and Cultural Assessment

**C Crisis response:**
- Connecting to support groups, the Delivery of Disaster Relief and Social Services,
- Critical Incident Stress Debriefing (Mitchell & Everly’s CISD Model)
- Crisis Intervention (Albert Roberts’ Seven-Stage Model) Implemented,
- Through Strengths Perspective and Coping Attempts Bolstered
**Treatment:**

- Traumatic Stress Reaction, Sequela, Posttraumatic Stress Disorders (PTSD);
- Ten Step Acute Trauma and Stress Management Protocol; (Lerner & Shelton)
- Trauma Treatment Plan and Recovery Strategies Implemented;

**SWAB, RESPONDING TO THE COVID-19 OUTBREAK**

On January 23, 2020 announced by the Epidemic Prevention and Control Headquarter of Wuhan that the citizens should not leave Wuhan without special reason by land, by water or by air. This is actually a result of the plan made by the CPC Central Committee a day before to implement comprehensive and strict control over personnel outflow for the whole Hubei province and particularly the city of Wuhan. This is the milestone of the impact stage of the epidemic as there are many warnings deliberately circulated from different sources four to six weeks ahead. SWAB was immediately drawn to action.

**Table 1: List of Actions by SWAB 2020**

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 22</td>
<td>SWAB published the Article on website “Social Workers to respond to the Novel Corona Virus 2019 Appeal”. We advocates that social workers must rise to meet the challenges of this epidemic to protect and help the vulnerable groups;</td>
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<tr>
<td>2</td>
<td>Jan 25</td>
<td>Web based training provided to the first batch of professional volunteers for Wuhan including medical students, social workers and psychological counselors, on “Crisis Interventions through web based platforms”;</td>
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<tr>
<td>3</td>
<td>Jan 29</td>
<td>Second web based training for professional volunteers of Wuhan on “Community based Crisis Intervention”;</td>
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<td>4</td>
<td>Jan 30</td>
<td>With the support of a Hong Kong Charitable Fund, SWAB was able to donate 120 Life Support Respirator and delivered them to 13 hospitals in Wuhan. Some medical protection supplies like hats and shoes wraps were also sent to these hospitals timely.</td>
</tr>
<tr>
<td>5</td>
<td>Feb 6</td>
<td>A special web based training for social workers in Dong Guan, Guangdong Province, on “Community Prevention, Preparedness and Crisis Intervention”;</td>
</tr>
<tr>
<td>6</td>
<td>Feb 7 onwards</td>
<td>Provide supervision services to professional volunteers groups including members of medical students, social workers and psychological counselors. In order to do so a group of experienced social workers with CISM basic training were recruited to serve as supervisors, also on voluntary basis. Up to March 15, we have conducted more than 25 sessions of group supervisions, averaging one</td>
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hour per session. Supervision services were later expanded to groups serving Chinese students and residents living in Korea.

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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>7 Feb 8</td>
<td>Two Online courses on Crisis Intervention, one for Social Work Teachers the other for healthcare social workers were released through East China Institute of Technology Publishers. The series is commissioned by the China Association of Social Work Education. Each series compose of 5 lectures, one hour each in duration.</td>
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<tr>
<td>8 Feb 15</td>
<td>An online training on Community Crisis Intervention was delivered to social and community workers serving Wuhan. The Model of AtCER was formally introduced. Concepts of positive psychology were also discussed and experiences were shared on how to apply these concepts to promote community recovery in the Town of Leigu after the Sichuan earthquake.</td>
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<tr>
<td>9 Feb 19</td>
<td>Web based supporting services were began to serve those Hong Kong residents who have to stayed in Hubei. This is organized directly by SWAB office at Wuhan which has a small team of 3 social workers.</td>
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<tr>
<td>10 Feb 20</td>
<td>Social Work support were provided to 5 other groups of Hong Kong residents in Hubei. A total of 20 social workers who have Hong Kong experience were recruited to help. Hong Kong residents have a lot of anxiety in these days as they also experienced difficulties in getting daily supplies like milk powder, masks and prescribed medicine.</td>
</tr>
<tr>
<td>11 Feb 24</td>
<td>SWAB with its Wuhan office launched a support services to more than 50 Rural Older People’s Welfare Homes neighboring the City. Need assessments were conducted. Disinfection supplies were given to 23 of these homes in addition to emotional support for their residents as well as staff. Basic Food including eggs and rice seeds donated by Wuhan local merchants were also delivered to these homes.</td>
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Below we shall discuss how these actions were guided by the ACT Model and how eventually we supplemented it with the community work approach.

**THE SCIENCE AND ART OF ASSESSMENT**

**Medical and Life saving assessment**

The ACT Model put a lot of emphasis on assessment. A triage should be developed for the purpose to save lives and provide personal safety. However the Wuhan Outbreak and consequential Lock Down of the city shocked all residents and the world as early warning signals were missed and neglected by the public. It is therefore not surprising that the most pressing and primary need is the need for medical care. Number of suspected infected cases skyrocketed within two weeks.

According to a latest article published on Science, the trends of infection explosion in January 2020 is shown in the following figure.
The same source estimated that before January 23 the lock down of Wuhan City the number of screened in cases, 444 confirmed and hospitalized, among them deceased 17 and cured 28, for the Hubei Province, composed of only 14% of the total. In other words there were 86% of undocumented cases or the total can be estimated at more than 3000.

In face this critical public health incident, those who suspected that they have caught the disease were desperate for a hospital bed. The shortages of medical facilities have led to chaotic situations in all hospitals and even worse, cross infections. The crowded environment of hospitals and assembly of suspected patients in turn caused many medical professionals also infected by the corona viruses. According to this assessment we all tried very hard to raise funds and solicit supplies of medical equipment to meet the unprecedented demands. (Please refer to Item 4, Table 1)

**Basic Needs**

The Quarantine enforcement in Wuhan has imposed tremendous strains on the city’s capacity to assist vulnerable groups. They include older people living by themselves, families with disabled persons, single parents who need to look after their children after closure of schools and people suffering from chronic diseases like cancers and diabetes who cannot go to regular hospital visits because there is no public transportation. Moreover all of them have problems of getting food and daily supplies. Milk Powder shortage has driven a lot of young mothers to the verge of collapse. Fortunately the city has improved significantly in supply services within two to three weeks. Moreover, it is astonishing for outsiders to find how mutual help mushroomed in the process. For example a Food Delivery person decided to taxi nurses and doctors home for free,
first by himself and later found a big group of volunteers. Also local merchants, whose business suffered from the incident, still donate food and hygiene supplies to neighboring older people’s homes. (See Item 11, Table 1)

**Psychological Assessment**

Too many people are under extreme stress. Anxiety is readily apparent for all groups because life is a big Uncertainty. The quarantined people are uncertain about when normal logical life can be resumed. The suspected are uncertain about a hospital bed is available. Patients are uncertain about whether they will die or be rescued.

One difficult issue that social workers have to resolve is how to identify those who need psycho-social support most, from other survivors. Considering assessment tools, most manuals (Roberts, A. R., 2005, Ehrenreich & McQuaide, 2001) recommend using the General Health Questionnaire (GHQ), Self-Reporting Questionnaire (SRQ by WHO), the Brief Symptom Inventory (BSI), the Beck Depression Inventory (BDI), the Derogatis Symptom Checklist (SCL-90), the Center for Epidemiological Studies Depression Scale (CES-D) and other measurements listed in the Diagnostic and Statistical Manual V. However these tools are too time consuming to use in the case of a massive disaster like COVID-19.

One major platform of providing emotional support is the web based chat room. Numerous group we chats were organized by disaster response groups, rescue teams, charitable organizations and social workers. WHO has promoted the Model of “Look, Listen and Link” for psychological first-aid. George Everly has developed his SEA Model (Speech, Emotions, Appearance, Alertness and Activity) for initial assessment. (Everly & Mitchell, 1999) Both are partially not applicable because face to face interaction is not possible.

For online counseling after this epidemic we suggest to use a “non-structured”, interactional mode of GHQ12. GHQ is useful to detect psychosomatic symptoms. It fits in well with oriental culture that find questions related to physical health easier to respond and to be exposed to strangers. Based on the General Health Questionnaire, special attention was paid on ability to sleep, wake up in midnight, intrusive thoughts, loss of appetite, distressing dreams, avoidance and disassociation. Then social workers can use open ended questions to tap more information about emotional feelings and social support network.
Social and Cultural Assessment
Another way of identifying the needy clients Ehrenreich and McQuaide (2001) suggested is targeting our mental health screening at certain vulnerable groups such as women, children and elderly. According to the latest population statistics released by the Wuhan Police Department, up to Nov 30, 2019, there were 9.064 million residents in the city and among them 21.46% were above 60 years of age. (hb.qq.com, 2020-01-17)
Our experiences also show that male adults also show severe psychological reactions and dysfunctions. This epidemic has the characteristics of family cross infection. Survivors’ guilt may be common. Adding to this list there are a lot of migrant workers in Wuhan who were trapped after the lock down.
Another social factor is about the sub-culture of the residents of Wuhan. The city though not as prosperous as other political and economic capitals in coastal region, it is famed for its history and its central location in China. It is an inland trading center before 1949, an industrial center after 1949, and a hub for higher education until now. Their people are proud, and pragmatic. As a result they are not at least at the beginning receptive to counseling services. They believe they have to handle their hardship on their own and by themselves. Indeed in one of the training sessions for professional volunteers a speaker was invited to talk about the culture of Wuhan.

CRISIS INTERVENTION AT THE CORE OF ACT MODEL
The seven stages of crisis intervention of Roberts are

1. Assess Lethality,
2. Establish Rapport,
3. Identify Problems,
4. Deal with Emotions,
5. Explore Alternatives,
6. Develop an Action Plan including signing a contract for safety, and
7. Follow Up.
Taking his 7 steps Crisis Intervention Approach, which is consistent with the Problem Solving Model in Social Work, Roberts discussed the protocol of triage assessment before using crisis intervention. He also suggested that it is sometimes necessary to move directly into trauma treatment before alternatives and action plans can be developed in his crisis intervention processes. (Roberts & Everly, 2006)

The Albert Roberts’ Crisis Intervention Model of course can be applied to the situations in Wuhan from the very stage through online counseling services. As mentioned above in the section of Needs Assessment, medical facilities and basic needs such as food supplies are most common requests. A lot of social work effort have been devoted to connecting resources and demands by bridging the expressed above the line and matching resources below the line. Social Workers have developed good contacts and relationships with doctors from different hospitals. There are many successful cases as doctors considered positively referrals from voluntary social work counseling services who can present the details of the patients’ physical conditions, subject
of course to availability of hospital beds. (Yu, 2020) Social Work services significantly bridge the gap of crisis communication between the patient and medical facilities which do not have any centralized communication platform.

A research found that the needs presented to the hotline services after the outbreak of SARS in 2003, were mainly information seeking, availability of resources and then personal problems and emotions. The three aspects form the dominating request one after the other at different stages of crisis after the impact. (Leung & Wong, 2005) a similar pattern occurs in the Wuhan counselling services. It is important to point out at the early stage though the presented problems are information and resources needs, they are inseparable from emotional needs caused by anxiety, fear, helplessness, despair and exhaustion. Accurate information and medical advice help to stabilize emotions. For participating residents and patients, learning situations of other people from the online we-chat groups, promote normalization and enhance positive coping. Applying Crisis Intervention skills in this scenario social workers need to develop alternative action plans. We can do so only if we are better informed of the overall but always changing situations in the City.

It reminds us of the basic principles of Crisis Intervention namely Proximity, Immediacy, Expectancy, Simplicity, Brevity, Pragmatic and Innovative. (Mitchell, 2017) Most online services offered to Wuhan residents adopted an interdisciplinary approach, hosted by volunteers trained in social work, psychological counseling and medicine. (Yu, 2020) This is innovation. Many social workers told us that in online counseling services they have never done something like this before, and many counselors that they have to modify their normal ways of practice. This is innovation.

APPLICATIONS OF DEFUSING AND CRISIS MANAGEMENT BRIEFING

The ACT Model discussed the applications of Critical Incident Stress Debriefing (CISD) developed by Jeffrey Mitchell. (Roberts, 2005) In fact CISD has been expanded over the years by the two authors to a comprehensive and integrated management package named after Critical Incident Stress Management (CISM). CISM has 6 components namely (1) Assessment, (2) Strategic Planning, (3) Assisting Individuals in Crisis, (4) Informational Group Intervention; (5) Interactional Group Intervention; (6) Resilience. (Mitchell, 2017)

In the case of COVID-19 epidemic we discovered the Tactics of Crisis Management Briefing
(CMB) as part of Informational Group Intervention, and Defusing among Interactional Group processes, are very useful. As our social workers and professional volunteers first entered into various we-chat groups, already existed in the community or formed by social work agencies, they need to open up the dialogue. In our training and supervision sessions for these professional volunteers we introduced the Tactics of CMB and Defusing. (Please refer to Items 2, 6 and 10, Table 1) CMB composed of 3 major steps, Introduction, Information and Education. Information refers to the latest development of the incident and education is about effective coping to mitigate stressful reactions. From the feedback of professional volunteers of our supervision groups CMB is found applicable and useful because it can be repeated and conducted through writing, voice messages of video clips.

When we conducted supervision sessions with more than 20 professional volunteer groups now, averaging 10 persons each group, Defusing is used instead. In Defusing there were 3 major steps again, that of Introduction, Exploration and Education. Exploration refers to inviting members to share their feelings and emotions during online counseling services. Education refers to information giving on how to prevent burnout among volunteers themselves.

Therefore we can see how the ACT Model of Albert Roberts are applicable to guide our interventions.

THE NEED FOR COMMUNITY WORK APPROACH

To combat the epidemic social workers in Wuhan immediately found that they need to take care the whole community. Social workers involved can be professionally trained workers employed by social work agencies, as well as those community workers employed by the government to perform administrative and welfare duties at the grass-root level. Some social work professionals declined to consider the latter part of the social work career even though some of them have passed national examinations and obtained status of certified social workers. We can consider them as para-professionals or welfare workers.

In the face of community outbreak of this communicable diseases community workers were forced to work outside of their offices to visit the vulnerable people. They checked temperatures and traced the suspected patients and followed up on those cured. They become the lay health educators telling people to wear masks and stay at home. Then they have to bring food and daily supplies for older and sick people, to their doors. Social workers in China never in our short
service history are assigned to adopt the community work approach. All community approach is a major recommendation of the United Stations for responding as well as preparing for disasters. This epidemic is an excellent example.

Unfortunately the ACT Model developed by Albert Roberts after the 911 terrorist attack in 2001, has not covered community work. Informational Group Interventions proposed by CISM, could be used in communities work. Interactional Group Interventions however could be applied only to a much lesser extent. In response to this lack of theoretical guidance, a Model of Community Crisis Intervention is adopted. It can be called the Assessment, triage, Crisis Management Briefing, Education and Recovery Approach (AtCER Model).

Figure 4: AtCER of Community Crisis Intervention

The AtCER Model was first presented at a training for professional volunteers who are starting their community based counseling services. (Action Item 8, Table 1) It is also useful to conduct community screening of suspected cases immediately after the outbreak. When most cabin hospitals were closed after mid-March of this year, the AtCER Model can be used to follow up the ex-patients with the focus changed from health to mental health concerns. We are aware of the delayed effect of post traumatic stress and it is important to organize early intervention. Death is a taboo in many cultures. In Chinese culture it is difficult to ask people even friends to
talk about the deaths of their loved ones. Condolences however is important for emotional ventilation. To encourage family members of the deceased patients to ventilate their emotions, under appropriate conditions, is not an easy task. One of the way is to convey concern messages through community education information.

Community Health and Mental Health Educational and Promotional Projects supplemented by case and group work, in collaboration with mental health professionals, psychological counselors, charitable and volunteer organizations, should be launched as soon as possible. As significant number of ex-patients live in any estate in Wuhan, it is possible to carry out mental health education along with home visits. Until March 12, there were altogether 44491 verified cases of corona viruses from the city of Wuhan. Six city districts have recorded more than 5000 ex-patients. Community leaders and youth volunteers can be trained to identify and report people who exhibit depressive symptoms. Here social workers should employ their community organizing skills to build mutual support network. Albert Robert is right to point out that social workers, unlike mental health workers, have to look at disasters with a wider perspective. (Roberts, 2005)

**CISD and Treatment**

At present situations do not provide perfect conditions for conducting CISD in Wuhan. It is possible to conduct the exercises for those first responders including medical staff sent from other provinces who have now returned after closing of the cabin hospitals. It is also too early to talk about treatment methods as post traumatic disorders are likely to emerge in a few months after the outbreak. Possibly Cognitive Behavioral Therapy will be required in addition to other brief interventions of social work.

Another possible options that we can adopt is positive psychology programs. (Seligman & Csikszentmihalyi, 2000) It have been employed by SWAB in the post disaster community recovery services in the town of Leigu of Beichuan, from 2009-2012. Training on positive therapy was provided briefly to our professional volunteers also in mid-February. (Please refer to Item 8, Table 1)
DISCUSSION

To summarize the following practices in line with ACT Model are observed in the interventions after community outbreak of the communicable disease:

In terms of Assessment:

a. Assessment is fully recognized by local social work educators as necessary and important in terms of response planning;
b. Vulnerable groups targeting strategy, confirmed and suspected patients in this case, served as a good pointer to high mental health needs;
c. Simple triage assessment technique, non-structured and memorized GHQ as recommended, works well in the intervention practices. Hard copy questionnaire is not adopted;
d. Prior training sessions, though brief, were generally conducted to prepare professional volunteers;
e. Online training programs were immediately produced and launched to provide in supplementary learning;
f. Talks were arranged to enhance cultural sensitivity in disaster assessment;

In terms of Crisis Response:

a. Connecting of resources and demands was the major task at early stage of interventions; Problem solving however is difficult because medical resources are extremely scarce;
b. Crisis Management Briefings were used in online counseling to break the ice, to stabilize emotions and to encourage positive coping;
c. Defusing helps professional volunteers ventilate their own feelings and learn new coping skills;
d. The AtCER Model outlines how professional volunteers can design community crisis interventions services;
e. Mutual help is emerging in many communities stimulated by the commitment of community workers;
f. We should provide CISD to First Responders including medical teams, however its value is not fully recognized by the authorities;
g. Interdisciplinary community health and mental health projects should be launched and again
it requires strong administrative leadership.

**In terms of Treatment:**

a. There is a shortage of mental health professionals to conduct treatment, nay say education;

b. Stigma and mistrust associated with psychiatric services further deter people from seeking pharmacological help;

c. Long term community social work projects are required to bridge the service gap.

Overall speaking our professional volunteers endorse the ACT framework. The Model provides a clear and step by step framework for Disaster Social Work interventions. However the COVID-19 outbreak is a community crisis. Community crisis interventions which are innovative and pragmatic, are called upon. In this background the ACT Model is modified and supplemented by the Assessment - triage - Crisis intervention - Education - Recovery (AtCER) Approach. The latter has expanded the tools available by ACT to cover the stages of recovery and resilience post disasters. In AtCER we have included the topic of resilience building which involves personal growth as well as social capacity building. It leads to a even more macro interventions in areas of policies and laws.

Ann Wolbert Burgess in her foreword for the Crisis Intervention Handbook edited by Albert Roberts, 3rd edition, wrote “But all mental health practitioners and graduate students have an overriding concern over community wide disasters especially massive terrorist attacks and how to assess and provide crisis intervention services”. (Roberts, 2005) AtCER Model has linked our concerns from personal and group crisis interventions to community crisis interventions. It can also be applied to Societal Crisis Intervention, which is outside the scope of this paper. Early in 2005, also in the Crisis Interventions Handbook, Sophia Dziegielewski has highlight the importance of evaluating crisis interventions and explain how to design respective research. (Dziegielewski & Powers, 2005) Again we can only address the issue of effectiveness after collection of relevant data.
References


