

## PSYCHOLOGICAL PROBLEMS AMONG AID WORKERS OPERATING IN DARFUR

---

SAIF ALI MUSA AND ABDALLA A. R. M. HAMID

*United Arab Emirates University, Al Ain, United Arab Emirates*

Aid workers operating in war zones are susceptible to mental health problems that could develop into stress and acute traumatic stress. This study examined the relationships between burnout, job satisfaction (compassion satisfaction), secondary traumatic stress (compassion fatigue), and distress in 53 Sudanese and international aid workers in Darfur (mean age = 31.6 years). Measures used were the Professional Quality of Life Questionnaire (ProQOL; Stamm, 2005), the Relief Worker Burnout Questionnaire (Ehrenreich, 2001), and the General Health Questionnaire (Goldberg & Williams, 1991). Results showed that burnout was positively related to general distress and secondary traumatic stress, and negatively related to compassion satisfaction. Sudanese aid workers reported higher burnout and secondary traumatic stress than did international workers. Results are discussed in light of previous findings. It was concluded that certain conditions might increase aid workers' psychological suffering and relief organizations need to create positive work climates through equipping aid workers with adequate training, cultural orientation, and psychological support services.

*Keywords:* Darfur, burnout, distress, compassion satisfaction, secondary traumatic stress.

Sudan, the largest country in Africa, is located in northeast Africa. It is considered one of the least developed countries, and ranks 139 in the 2004 United Nations' Development Program's Human Development Index (UNDP, 2004). The Darfur region of western Sudan is composed of three states; north Darfur,

---

Saif Ali Musa, PhD, Assistant Professor, Program of Social Work, United Arab Emirates University, Al Ain, United Arab Emirates; Abdalla A. R. M. Hamid, PhD, Associate Professor, Program of Psychology, United Arab Emirates University, Al Ain, United Arab Emirates.

Appreciation is due to reviewers including: Taha Amir, PhD, and Hamzeh Dodeen, Department of Psychology, United Emirates University, P.O. Box 17851, Al Ain, United Arab Emirates, Email: [T.Amir@uaeu.ac.ae](mailto:T.Amir@uaeu.ac.ae) or [hdodeen@uaeu.ac.ae](mailto:hdodeen@uaeu.ac.ae)

Please address correspondence and reprint requests to: Dr. Saif Ali Musa, Assistant Professor of the Social Work Program, United Arab Emirates University, P.O. Box 17771, Al Ain, United Arab Emirates. Phone: (971) 50 7134072; Fax: (971) 3 7671705; Email [saif.musa@uaeu.ac.ae](mailto:saif.musa@uaeu.ac.ae); Dr. Abdalla Hamid, Associate Professor of the Psychology Program, United Arab Emirates University, P.O. Box 17771, Al Ain, United Arab Emirates. Phone: (971) 50 7131 823; Fax: (971) 3 7670 453; Email: [a.hamid@uaeu.ac.ae](mailto:a.hamid@uaeu.ac.ae)

west Darfur and south Darfur. These three states are 250,000 square kilometers in area with an estimated population of 6 million. The starting point of the armed conflict in Darfur region is typically said to be February 26, 2003 (Wikipedia, 2007). This conflict resulted in a complex humanitarian crisis which necessitated the intervention of both national and international aid agencies.

Research on stress and mental health problems suffered by aid workers in their efforts to help traumatized individuals in prolonged complex emergency situations is scarce and still a new field (Adams, Boscarion, & Figley, 2006). The bulk of research has focused on the wellbeing of peacekeepers and armed personnel and traumatic events facing them (Cardozo et al., 2005). Aid workers operating in war zones encounter situations that are likely to generate more distress than would normal, everyday situations (Salama, 2007). They are susceptible to stress and acute traumatic stress (McFarlane, 2004) as a result of dealing with victims and being trapped in difficult situations.

Health problems suffered by aid workers include physical illnesses, psychological morbidity (such as distress, posttraumatic stress disorder, alcohol abuse, anxiety and depression), and even death (McFarlane, 2004). Other problems include risk-taking behavior, psychosomatic disorders (Salama, 2007), nondirected anger, intrusive thoughts, and fear of the future (Omidian, 2001). International aid workers may also be exposed to culture shock and lack of support provided by family or a partner, close friends, and their own culture (Salama).

Aid workers who come to know the stories of fear, pain, and suffering of victims may experience similar feelings because they care. This makes them vulnerable to secondary traumatic stress (compassion fatigue) as the emotional residue of exposure to working with victims suffering from the consequences of a traumatic event (ACE-Network, 2007). According to Figley (1995), secondary traumatic stress is “natural consequent behaviors resulting from knowledge about a traumatizing event experienced by a significant other” (Perry, 2003). The symptoms may include avoiding things that are reminders of the event, having difficulty sleeping, or being afraid (Stamm, 2005). Researchers and practitioners have recently acknowledged that professionals who work with or help traumatized people are indirectly or secondarily at risk of developing the same symptoms as the individuals who are exposed directly to the trauma (Perry).

Perry (2003) advances several reasons that aid workers or professionals working with traumatized victims are at increased risk of developing secondary trauma: (a) empathizing with victims leads aid workers to become vulnerable to internalizing some of the victim’s trauma-related pain; (b) aid workers would have to listen to the same or similar stories over and over again without sufficient recovery time; (c) many aid workers have had some traumatic experiences in their own life and the pain of such experiences can be reactivated when they work with an individual who has suffered a similar trauma; and (d) the current

practices in the fields of relief and mental health are based on individual service delivery rather than on team-oriented practice and such practices within a fragmented system (i.e., camps for refugees or internally displaced persons where the turnover is high) are considered to set aid workers up for increased stress.

There are some findings suggesting burnout is prevalent among aid workers in complex emergency situations (Cardozo et al., 2005). Burnout is a state of physical, mental and emotional exhaustion resulting from prolonged demanding and stressful situations (Pines, Aronson, & Kafry, 1981). According to Stamm (2005, p. 12), burnout is “associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that your efforts make no difference, or they can be associated with a very high work load or a non-supportive work environment”. Burnout symptoms can be categorized into five groups, namely, emotional, interpersonal, physical, behavioral, and work-related components (Salama, 2007). The emotional component includes feelings such as depression, anxiety, irritability, and helplessness. The interpersonal category comprises self-distancing, social withdrawal, and inefficient communication. The physical element involves sleep difficulties, fatigue, exhaustion, headaches, and stomachaches. The behavioral aspect includes alcohol abuse, aggression, pessimism, and cruelty. The work-related element includes poor performance, tardiness, and absenteeism.

In their study of stress and burnout amongst prehospital emergency teams, Louville, Jehel, Goujon, and Bisserbe (1997) found that women and hospital-based personnel scored significantly higher on depression and distress measured by the General Health Questionnaire (GHQ; Goldberg & Williams, 1991), and trait and state anxiety than did men and personnel who intervene in the emergency field.

Compassion satisfaction, according to Stamm (2005, p. 12), is about “the pleasure you derive from being able to do your work well. For example, you may feel like it is a pleasure to help others through your work”. Conrad and Kellar-Guenther (2006) studied compassion satisfaction, compassion fatigue, and burnout among Colorado child protection workers using the Compassion Satisfaction/Fatigue Self Test. They found that about 50% of the protection staff experienced high or very high levels of compassion fatigue and low levels of burnout. High compassion satisfaction was associated with reduced fatigue and lower levels of burnout. Most of participants (70%) had high scores for compassion satisfaction. The authors concluded that compassion satisfaction might alleviate the effects of burnout.

Cardozo et al. (2005) conducted a study with 285 expatriate aid workers and 325 Kosovar Albanian aid workers from 22 humanitarian organizations carrying out health projects in Kosovo. The study was concerned with mental

health problems related to exposure to traumatic events. Their results showed that younger expatriates reported significantly more depressive symptoms and more nonspecific psychiatric morbidity as measured by the GHQ. Kosovar and expatriate aid workers with a history of psychiatric illnesses also demonstrated higher levels of depressive symptoms and nonspecific psychiatric morbidity.

The present study attempted to identify psychological health problems suffered by aid workers assisting victims in Darfur, and aimed to explore the relationship between these problems and burnout and job satisfaction rates among aid workers. Because of the hostile and difficult work environment, as witnessed by the authors inside internally displaced persons camps, it was expected that high rates of burnout and psychological disturbances would be found.

## METHOD

### PARTICIPANTS

Participants were 53 humanitarian aid workers representing 11 relief organizations operating in camps in Darfur, around the towns of Nyala (40%) and Fasher (60%). The sample was randomly selected from aid workers who had firsthand experience with victims inside the camps. The ages of participants ranged between 20 and 55 years (mean age = 31.6 years). Forty-six percent of them were married, 51% single, and 3% were divorced or separated. Sixty percent of the participants were Sudanese nationals while 39.6% were international aid workers. The percentages of male and female participants were 49.0% and 43.4% respectively.

### MATERIALS AND PROCEDURES

Participants were requested to complete three questionnaires. The goal of the research and its importance were explained to them. The first questionnaire was the 30-item Professional Quality of Life Questionnaire (ProQOL; Stamm, 2005). It measures compassion satisfaction, compassion fatigue (secondary traumatic stress), and burnout. This questionnaire was subjected to factor analysis using equal variances (weights) as prior communality estimates. The factor axis method was used to extract the factors, and this was followed by a varimax (orthogonal) rotation. In our study only the first two factors displayed eigenvalues greater than 1, and the results of a scree test also suggested that only the first two factors were retained for rotation. Combined, factors 1 and 2 accounted for 32.60% of the total variance.

In interpreting the rotated factor pattern, an item was said to load on a given factor if the factor loading was 0.45 or greater for that factor, and was less than 0.45 for the other. Using these criteria, 17 items were found to load on the first factor, which was subsequently labeled *secondary traumatic stress* (STS) or

compassion fatigue. The average score on the STS scale was 45 ( $SD = 16.0$ , alpha reliability = 0.87). Instead of having cutoff scores to indicate relative risks or protective factors, conservative quartile method was used with high (top 25%), middle 50%, and low (bottom 25%). This method has been found to be useful for screening (Stamm, 2005).

Six items loaded on the second factor, which was labeled *compassion satisfaction* (CS). The average score on CS was 23.8 ( $SD = 5.0$ , alpha reliability = 0.72). Higher scores on this scale indicate greater satisfaction with one's ability to be an effective aid worker.

The second questionnaire was the 13-item Relief Worker Burnout Questionnaire (Ehrenreich, 2001) which is designed to help detecting burnout among aid workers. A score of 0-15 suggests the aid worker is probably coping adequately with the stress of work. A score of 16-25 suggests suffering from work stress and preventive action is recommended. A score of 26-35 suggests possible burnout. A score above 35 indicates probable burnout (Ehrenreich). In our study the average score was 15.0 ( $SD = 7.5$ , alpha reliability = .73).

The third questionnaire was the General Health Questionnaire (GHQ-28 items; Goldberg & Williams, 1991). This questionnaire comprises four subscales gauging anxiety, depression, somatic symptoms, and social dysfunction. The GHQ is a well validated instrument for measuring nonpsychotic psychiatric disorders in both clinical and community settings. There are two methods of scoring the GHQ; the first is the GHQ scaling method (0,0,1,1) and the second is the Likert scaling method (0,1,2,3). The former is appropriate for recognizing psychiatric cases and the latter for survey research (Swallow, Lindow, Masson, & Hay, 2003). For differentiating psychiatric from nonpsychiatric cases the GHQ scoring system with a cutoff point of 4 or more is usually used. This system was used in the present study. When using the Likert system, GHQ total score measures general distress. In our study the mean score on this scale was 5.2 ( $SD = 5.2$ , alpha reliability = 0.85).

## RESULTS

Factor analysis was performed on the ProQOL to find out whether or not the factors yielded were consistent with those of Stamm (2005). Unlike Stamm's study which produced three factors, secondary traumatic stress, burnout, and compassion satisfaction, the present study produced two factors; secondary traumatic stress (STS) and compassion satisfaction (CS). This difference may be attributed to the overlap between secondary traumatic stress and burnout. Stamm (p. 5) stated that "we do not see high scores on burnout with high satisfaction, but there is a particularly distressing combination of burnout with trauma". About 25% of aid workers in our study scored below 35 on secondary traumatic stress,

and about 25% of them scored above 60.

Concerning compassion satisfaction, the quartile method revealed that 25% of aid workers scored higher than 26 and about 25% of them scored below 21. As for burnout, 63% of participants scored 15 or less, 21% scored 16-25, and 16% scored higher than 25. The GHQ results showed that 50% of the aid workers in our study scored less than 4, while 50% scored higher than 4.

Correlation analysis showed that burnout was positively related to general distress and secondary traumatic stress and negatively related to compassion satisfaction (see Table 1). Burnout was further positively related to depression, anxiety, somatic symptoms, and social dysfunction (see Table 1). Compassion satisfaction was negatively associated with general distress, anxiety, and social dysfunction (see Table 1). Age was negatively related to burnout and secondary traumatic stress (see Table 1). The older participants experienced less burnout and secondary traumatic stress than did the younger workers.

**TABLE 1**  
THE COEFFICIENTS OF CORRELATION BETWEEN DIFFERENT VARIABLES

Variable	Burnout	Compassion satisfaction	Secondary traumatic stress	Depression
Somatic symptoms	.57**	-	-	-
Distress	.71**	-.33*	-	-
Anxiety	.61**	-.28*	-	-
Social dysfunction	.52**	-.28*	-	-
Age	-.37**	-	-.46**	-
Burnout	-	.35**	.48**	.30*

Note: \*  $p < .05$ ; \*\*  $p < .01$

The  $t$  test results indicated significant difference between the two sexes in burnout, ( $t = 2.901$ ,  $df = 47$ ,  $p < 0.01$ ). Female participants scored higher than males. No significant sex differences were found in secondary traumatic stress, compassion satisfaction, general distress, and GHQ subscales. There were significant differences between Sudanese and international aid workers in burnout and secondary traumatic stress ( $t = 2.608$ ,  $df = 49$ ,  $p < 0.05$ ;  $t = 4.389$ ,  $df = 49$ ,  $p < 0.001$ , respectively). Sudanese aid workers suffered more burnout and secondary traumatic stress.

Responses on burnout were divided into two groups: scores less than average (15) represents group A, and scores more than 15 represent group B. There were significant differences between the two groups in  $t$  test results for anxiety, social dysfunction, somatic symptoms, secondary traumatic stress, and general distress ( $t = 3.657$ ,  $df = 50$ ,  $p < 0.01$ ;  $t = 2.862$ ,  $df = 50$ ,  $p < 0.01$ ;  $t = 2.654$ ,  $df = 50$ ,  $p < 0.05$ ;  $t = 4.422$ ,  $df = 51$ ,  $p < 0.001$ ,  $t = 3.801$ ,  $df = 50$ ,  $p < 0.001$ , respectively). Those participants with higher than average scores for burnout reported more

symptoms of the above mentioned disturbances. Those who were classified as nonpsychotic psychiatric cases, according to the GHQ scoring system, scored higher on burnout than those who were not ( $t = 4.827$ ,  $df = 50$ ,  $p < 0.001$ ). No significant differences were found between the two groups in secondary traumatic stress or compassion satisfaction.

## DISCUSSION

In the present study, 25% of aid workers scored higher than 60 (the top quartile) on secondary traumatic stress. According to Stamm (2005), if the individual's score on the secondary traumatic stress scale is in the top quartile, s/he may want to take some time to think about what may be causing distress to him/her at work, or if there is some other reason for the elevated score. While higher scores do not mean that s/he has a problem, they are an indication that s/he may want to examine how s/he feels about his/her work and work environment. The person may wish to discuss this with his/her supervisor, a colleague, or a health care professional (Stamm). In our study the quartile method suggested by Stamm yielded the result that 25% of the participants had high levels of secondary traumatic stress. However, we believe that this percentage could be far lower than the actual incidence of secondary traumatic stress among aid workers. The GHQ results support this claim by showing that 50% of aid workers in Darfur could be classified as nonpsychotic psychiatric cases. This may be due either to the stressfulness of the working environment and the seriousness of the adjustment problems encountered by aid workers or to the tendency of maladjusted individuals to choose to become aid workers. This percentage of potential clinical cases (50%) is far higher than the percentages found by Cardozo et al. (2005) in Kosovar Albanian (11.5%) and expatriate aid workers (16.9%). However, it should be noted that the cutoff points used with the GHQ total score were 8 and 9 for the Kosovar Albanian and expatriate aid worker, respectively. These cutoff points are higher than the usual one (4) which was used in the present study. The psychiatric morbidity rate in aid workers in the present study was comparable to Chung, Chung, and Easthope's (2000) findings in people in a community exposed to traumatic stress related to an aircraft crash (56%), and higher than Chung, Farmer, Werrett, Easthope, and Chung's (2001) findings that 35% of people exposed to a train disaster scored higher than 4 on the GHQ total score.

Concerning compassion satisfaction, 25% of the aid workers scored higher than 26. This suggests that these workers derive a good deal of professional satisfaction from their work. Those (25%) who scored below 21 can be described as very dissatisfied and may either have problems with their job, or there may be other reasons for deriving satisfaction from activities other than their job (Stamm, 2005).

With regard to burnout, it seemed that the majority of the participants (63%) were able to cope, in one way or another, with their work stress and therefore there were low levels of burnout. The remaining 37%, who scored 16 or above on total burnout, could be described as suffering work stress and possible burnout. The latter group might need professional psychological help to assist them with their sufferings.

The positive relationship between burnout and secondary traumatic stress is consistent with the findings of Conrad and Kellar-Guenter (2006) who found high levels of compassion satisfaction in individuals with low levels of burnout. This is also consistent with the work of McFarlane (2004) who found that aid workers experienced chronic hassles that could develop into stress and acute traumatic stress. Hence, secondary traumatic stress might be one of the factors through which burnout manifests itself.

The positive associations between burnout and general distress and three of the subscales measured by the GHQ (anxiety, somatic symptoms, and social dysfunction) are consistent with the findings of Louville et al. (1997) who reported that in women and a hospital-based emergency team burnout was strongly related to depression and distress measured by the GHQ. These results suggest that the burnout process might involve experiencing a variety of psychological disturbances and distress that exceed the aid worker's ability to cope and thus lead the person to total collapse. Conrad and Kellar-Guenter (2006) found that burnout could result from exposure to prolonged and extreme job stress that consequently leads the aid worker to stop doing the job. If this is the case, controlling for psychological stress can help mitigating burnout. Providing psychological support can help eliminating the feelings of burnout and aid work staff turnover. The higher levels of burnout reported by female participants compared to male participants could be explained by women's need to prove themselves in more than one capacity: to be wife, mother, woman and employee (see for example, Brunt, 2007). In addition, women, by nature, tend to be more involved in relationships with others, such as pleasing and serving others (Brunt).

The negative association between compassion satisfaction (job satisfaction) and burnout supports previous research (i.e., Conrad & Kellar-Guenter, 2006). The negative associations of compassion satisfaction with general distress, anxiety, and social dysfunction, support the literature relating job satisfaction to reduced levels of psychological distress. It could be that lack of job satisfaction leads to these feelings or vice versa.

The negative associations of age with burnout and secondary traumatic stress suggest that age may moderate the influence of these problems on aid workers. Older aid workers may be more mature and rational in their responses to the demands and associated stress of their job.

The high rates of burnout and secondary traumatic stress in Sudanese aid workers compared to the international aid workers might be attributed to the fact that the vast majority of Sudanese aid workers are from Darfur and they themselves are displaced victims of the war. So, their symptoms may be triggered by the combined effect of primary and secondary traumatic stress. Sudanese aid workers are more likely to understand and relate to the tragic stories told by victims who were traumatized because they are familiar with the local dialects.

## CONCLUSIONS AND IMPLICATIONS

This study provides vital information for humanitarian organizations, for aid workers operating in war zones and researchers interested in this field. Aid workers in Darfur encounter several serious adjustment problems. The high incidence of secondary traumatic stress, psychiatric illnesses, and burnout among aid workers can be attributed to experiencing difficult situations such as being in direct contact with highly traumatized victims and a hostile environment. Aid workers tend to be blamed by victims for shortages in services (food, water, shelter, security etc.). This condition may explain the high percentage of aid workers who took little satisfaction from their work. An alternative explanation is that there is a high incidence of people with psychological problems choosing to become aid workers. The implication of this study is that managers and directors of aid organizations should create a positive work climate for their coworkers through equipping aid workers with adequate training, cultural orientation, and psychological support services.

It is recommended that an academic discipline specializing in the humanitarian field should be established. This discipline needs to focus on education, training, and research and would help make use of the great source of data that could be scientifically analyzed to reach conclusions which contribute to improving the practice of humanitarian assistance in all relevant fields.

## REFERENCES

- ACE-Network. (2007). What is compassion satisfaction? *Child trauma web by child trauma academy*. Retrieved March 27, 2007, from <http://www.ace-network.com/cfspotlight.htm>
- Adams, R. E., Boscarion, J. A., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry*, *76*, 103-108.
- Brunt, G. (2007). *An informed view as a means of minimizing the cost to both the individual and the organization as a whole*. Retrieved April 9, 2007, from <http://www.corporatetraining.co.za/news3.htm>
- Cardozo, B. L., Holtz, T. H., Kaiser, R., Gotway, C. A., Ghitis, F., Toomey, E., & Salama, P. (2005). The mental health of expatriates and Kosovar Albanian humanitarian aid workers. *Disasters*, *29*, 152-170.
- Chung, M. C., Chung, C., & Easthope, Y. (2000). Traumatic stress and death anxiety among community residents exposed to an aircraft crash. *Death Studies*, *24*, 689-704.

- Chung, M. C., Farmer, S., Werrett, J., Easthope, Y., & Chung, C. (2001). Traumatic stress and ways of coping of community residents exposed to a train disaster. *Australian and New Zealand Journal of Psychiatry*, **35**, 528-534.
- Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect*, **30**, 1071-1080.
- Ehrenreich, J. H. (2001). *Coping with disasters: A guidebook to psychosocial intervention*. (Revised ed.). Toolkit web by NGOs, sports club, and governments. Retrieved March 18, 2005, from <http://www.toolkitsportdevelopment.org/stml/topic>
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue* (pp. 1-20). New York: Brunner Mazel.
- Goldberg, D., & Williams, P. (1991). *A user's guide to the General Health Questionnaire (GHQ)*. Hampshire: The Basingstoke Press Ltd.
- Louville, P., Jehel, L., Goujon, E., & Bisserte, J. C. (1997). *European Psychiatry*, **12**, suppl. 2, 186s.
- McFarlane, C. A. (2004). Risks associated with the psychological adjustment of humanitarian aid workers. *The Australian Journal of Disaster*, **1**. Retrieved April 20, 2007, from <http://www.massey.ac.nz/~trauma/>
- Omidian, P. (2001). Aid workers in Afghanistan: Health consequences. *The Lancet*, **358**, 1545.
- Perry, B. D. (2003). *The cost of caring: Secondary traumatic stress and the impact of working with high-risk children and families*. Child trauma web by child trauma academy. Retrieved March 13, 2007, from <http://www.childtraumaacademy.org>
- Pines, A., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to personal growth*. New York: Free Press.
- Salama, P. (2007). *The psychological health of relief workers: Some practical suggestions*. Relief web by the United Nations Office for the Coordination of Humanitarian Affairs. Retrieved March 7, 2007, from <http://www.reliefweb.int/library/documents/psycho.htm>
- Stamm, B. H. (2005). *The ProQOL Manual: The Professional Quality of Life Scale: Compassion Satisfaction, Burnout & Compassion Fatigue/Secondary Traumatic Scale*. Baltimore: Sidran Press.
- Swallow, B. L., Lindow, S. W., Masson, E. A., & Hay, D. M. (2003). The use of the General Health Questionnaire (GHQ-28) to estimate prevalence of psychiatric disorders in early pregnancy. *Psychology, Health, & Medicine*, **8**, 213-217.
- UNDP. (2004). Human Development Reports. *Human development reports web by the United Nations Development Programme*. Retrieved October 17, 2005, from <http://hdr.undp.org/reports/global/2004/>
- Wikipedia. (2007). Darfur Conflict. Retrieved February 22, 2007, from [http://en.wikipedia.org/wiki/Darfur\\_conflict](http://en.wikipedia.org/wiki/Darfur_conflict)