PSYCHOSOCIAL NEEDS ASSESSMENT OF COMMUNITIES AFFECTED BY THE CONFLICT IN THE DISTRICTS OF PIDIE, BIREUEN AND ACEH UTARA

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FOREWORD FROM THE MINISTRY OF HEALTH OF INDONESIA

The Indonesian Province of Nanggroe Aceh Darusalam (NAD) is a region which is facing a unique set of problems, among which is the protracted internal conflict, exacerbated by the tsunami on December 26, 2004.

These events have generated a widespread impact on the lives of the communities. One of the most crucial issues to be addressed aside from legal, security, social and economic problems is the matter of health, including mental health.

We are joyous that we have left the these difficult times, and it is now our obligation to restore aspects of life that would otherwise bring adverse effect on the people, including the lingering effects of such events.

In regards to health issues, comprehensive steps have been formulated into various short-, medium-, and long-term programs.

Specifically on mental health issue, whose impact is quite significant, the Indonesian Ministry of Health has collaborated with the NAD government and national as well international NGOs. With this aim in mind, a comprehensive mental healthcare model has been designed and commenced, targeting not only regions affected by the tsunami, but also other provinces in which this model may serve as reference in developing mental health.

Therefore, we are very happy to see the organizing of this psychosocial need assessment in Pidie, Bireun and Aceh Utara under a cooperation between the International Organization for Migration (IOM), the Department of Social Medicine from Harvard Medical School and the Syiah Kuala University (SKU).

I am convinced that the outcome of this assessment is in line with and significantly contribute to the programs that we are currently developing, such as the capacity building project in the form of trainings for community health center and hospital physicians at the district level, as well as the development of the Community Mental Health Nursing (CMHN) concept. It is hoped that this partnership will be followed by other programs.

To all the parties who have made this undertaking a reality, I express my highest appreciation.

Let us hope that it will bring great benefit to the Acehnese in particular, and the entire Indonesian people in general.

May God the Almighty grant His blessing upon us all.

DR. Dr. Siti Fadilah Supari, Sp.JP (K)
Minister of Health of the Republic of Indonesia

FOREWORD FROM SYIAH KUALA UNIVERSITY

This report represents the first empirical and systematic survey of the experiences of communities that suffered high conflict prior to the August 15, 2005 signing of the Memorandum of Understanding between the Government of Indonesia and the Free Aceh Movement initiated the peace process. It is the first attempt to study the consequences of the conflict, focusing on the Psychosocial Needs of Communities Affected by the Conflict. The survey was carried out by a team of researchers recruited by the *Pusat Pengembangan Studi Kawasan* (Regional Studies Development Center), Universitas Syiah Kuala, in collaboration with Senior Researchers from the Department of Social Medicine, Harvard Medical School, and supported by the International Organization of Migration (IOM), Indonesia, and its Banda Aceh office. Field research was carried out in the districts of Pidie, Bireuen, and Aceh Utara during February 2006.

The survey was specifically designed to assess and evaluate the psychological and mental health conditions or problems of communities who have been very much affected by the armed conflict. However, the underlying goal of this study was to learn and understand as much as we could about such issues in order to provide a basis for policy judgments.

One major finding of the study is that these survivors of the conflict experience trauma, high levels of depression, and mental health problems, in addition to inadequate resources of livelihood. However, the consequences were not equally distributed among the three Districts. On certain quantitative measures, the district of Pidie, the home of the number one leader of GAM, suffered less compared to the other two districts.

Individual experience related to the conflict varies from one person to another. The majority of the communities need some professional help for their trauma and mental health; they need help to cope with their social life, and they need economic resources. In other words, these unfortunate people need healing of the deep scars in their heart inflicted by a conflict not of their making.

Therefore, this manuscript is necessary for the Governor, members of the DPRD, the Ministry of Social Welfare, and the Ministry of Health to read and use as a basis for judgment in their policy and decision-making process. Along the same line, findings of this report should be of concern to local as well as international NGO's, donors, the academic community in Aceh, and any individual who feels concerned about this misfortune.

Professor Bahrein T. Sugihen
Syiah Kuala University

FOREWORD FROM THE EMBASSY OF CANADA

The past year has been a momentous one for Aceh, as the foundation for a lasting peace, for newfound autonomy and for newly democratic institutions has emerged. The beneficiaries of this peace process - which is still in progress - are many and include not only residents of Aceh but all Indonesians as well as the international community.

Alongside substantial humanitarian and development assistance to the people of Aceh following the devastating tsunami, Canada was also quick to accept the challenge of supporting post-conflict reconstruction and peace-building within Aceh. For this reason the Government of Canada, through the Department of Foreign Affairs and International Trade's Global Peace and Security Fund, was pleased to work with other partners to support the Psychosocial Needs Assessment of Communities Affected By the Conflict in the Districts of Pidie, Bireuen, and Aceh Utara project.

The recommendations in this report amply demonstrate the utility of this assessment, and the need it filled, by providing the data necessary to enable decisions about the role of health services in supporting re-integration. The report also demonstrates the importance of partnerships between governments, international agencies, academia, and community-based leaders in peace-building.

It is therefore with great pleasure that I congratulate, on behalf of the Government of Canada, our partners whose efforts produced this invaluable report, adding to the toolkit of all those continuing to rebuild a peaceful and democratic Aceh.

Rosalind Coleman
Chargé d'affaires a. i.
Embassy of Canada

ACKNOWLEDGEMENTS

The psychosocial research team at the International Organization for Migration in Banda Aceh could not have completed this project without the contributions of the following participants:

1. Above all we acknowledge the gracious time and brave candor given by 596 anonymous questionnaire respondents, 75 key informants, and 17 GAM members from throughout Pidie, Bireuen, and Aceh Utara districts who contributed the data presented in this report.

2. The Center for the Development of Regional Studies at Syiah Kuala University (SKU) managed the field research, staff training, and data entry. Professor Bahrein Sugihen was a key consultant on study design. Ibu Rosnani organized the training, coordinated the fieldwork, and assisted the Harvard team in Aceh. The Center also hired a research staff composed of twelve faculty lecturers from SKU. We acknowledge the team leadership of Pak Adnan Abdullah, Pak Nazir Basyir, and Pak Husaini Daud for leading the Pidie, Bireuen, and Aceh Utara research teams respectively, as well as all of the interviewers on the project. We also thank Pak Sofyan from SKU for his data entry work.

3. The Indonesian Ministry of Health supported IOM's psychosocial reesarch in Aceh, especially the Provincial Health Office in Banda Aceh, and the District Health Offices of Pidie, Bireuen, Aceh Utara and Lhokseumawe municipality. The mental hospital in Banda Aceh provided five nurses to join the research staff, and the District Health Offices of Pidie and Bireuen each provided two community mental health nurses to join the research staff as well. The nurse contributions to this research were outstanding.

4. We are grateful to the Community Protection and State Unity Board at the Governor's Office in Banda Aceh for extending their permission and letters of introduction to carry out social scientific and public health research in Acehnese villages.

5. IOM's research partners at Harvard Medical School are responsible for the overall study design, questionnaire development, database management, statistical analyses, and this report. Professor Byron Good and Professor Mary-Jo DelVecchio Good were the Primary Investigators of this project. Matthew Lakoma delivered efficient and creative statistical analyses, and Sharon Abramowitz spent two densely packed weeks in Aceh assisting with questionnaire development, staff training, and research protocols.

6. IOM's Post Conflict Programme in Banda Aceh is a terrific forum for planning and discussing the material contained in this report. Jesse Grayman was overall Project Manager and coordinator of this study. The Medical Team has been a reliable source of programming and material support. We thank Dr. Ibrahim Puteh for his psychiatric expertise and for helping us navigate the health and university systems in Banda Aceh. ICRS doctors Dr. Abdul Razak Kelana Ibrahim, Dr. Teuku Arief Dian, and Dr. Noor Anita Humaira facilitated field research in Pidie, Bireuen, and Aceh Utara respectively. Su Lin Lewis provided crucial insight and background data for designing the sampling methodology. Mental health is a novel feature in DDR programming, and we thank Program Director Mark Knight for recognizing its importance in IOM's Post Conflict Reintegration Program. Finally, Dr. Nenette Motus wrote the original proposal to carry out this work and started the research process with a phone call to Harvard Medical School in October 2005. We thank her for her patience and confidence in our work.

7. The Canadian Department of Foreign Affairs and International Trade supported IOM's Post Conflict medical activities in Aceh. We thank them for funding the field research. Financial support for data analysis and writing of this Report was provided by funds from the Department of Social Medicine, Harvard Medical School, unrestricted research accounts of Profs. Byron and Mary-Jo Good, and funds from an IOM consulting agreement with the Department of Social Medicine, Harvard Medical School.

8. Authors of this Report are Byron Good, Mary-Jo DelVecchio Good, Jesse Grayman, and Matthew Lakoma.

EXECUTIVE SUMMARY

Between December 2005 and February 2006, a team of researchers from the International Organization for Migration (IOM) and the Department of Social Medicine from Harvard Medical School, carried out a Psychosocial Needs Assessment (PNA) in three high conflict districts on the northeast coast of the province of Aceh (N.A.D.), with financial support from the Canadian Department of Foreign Affairs and International Trade and an IOM contract with Harvard Medical School.

The basic goal of the assessment was to evaluate the psychosocial and mental health needs in communities which have been deeply affected by the years of conflict between armed forces of the Republic of Indonesia and the Free Aceh Movement (G.A.M.), given the cessation of violence following the signing of the Memorandum of Understanding of August 15, 2005.

This report focuses on current psychosocial and mental health needs in high conflict areas of Pidie, Bireuen, and Aceh Utara and deliberately refrains from identifying groups or individuals instrumental in the violence visited upon these communities.

PROJECT DESIGN

The project was designed to provide scientifically-derived, empirical data which can serve as a basis for developing mental health and psychosocial services to support these communities' efforts at recovery. Specifically, the PNA sought to determine the level of conflict-related traumatic experiences suffered by members of these communities, to assess levels of psychosocial and mental health problems and identify high risk subgroups in the population, to identify patterns of resilience and resources drawn on by communities and their members in managing mental health problems, and to assess the urgency for particular forms of mental health interventions in areas affected by decades of violence.

The study was designed by senior researchers from Harvard Medical School. It included two components: a qualitative, key-informant study designed to explore how the conflict has affected particular communities and parts of the population and what community leaders feel should be the priorities for responding to the psychosocial effects of the conflict; and second, a formal survey of adult members of selected communities designed to measure levels of experience of trauma events associated with the violence, levels of psychological distress associated resulting from these experiences, and perceived priorities for services. These were supplemented by a focus group discussion with GAM members including former combatants and amnestied prisoners. Field researchers from the Center for Development of Regional Studies at the University of Syiah Kuala conducted interviews in 30 randomly selected villages in conflict-affected subdistricts of Pidie, Bireuen, and Aceh Utara during the first two weeks of February 2006. Data were analyzed jointly by the Harvard and IOM teams.

The sample for the quantitative survey consisted of 596 adult respondents, aged 17 or older, randomly selected in 30 rural communities. Sampling procedures produced a well distributed and representative sample of adult men and women in these communities. In addition, 75 key informants, consisting of leaders in the selected communities, were interviewed. Findings may be generalized to high conflict communities in the districts of Pidie, Bireuen, and Aceh Utara..

KEY FINDINGS

1. The first and most over-whelming finding of the survey is that members of these communities have experienced remarkably high levels of terrible and accumulated traumatic events as a result of the violence. A few examples from the data illustrate

the profound effects the conflict has had on the civilian populations in this area. 78% of the total sample report having lived through combat experiences. 38% experienced having to flee from burning buildings in their community and 47% having to flee from danger. 8% of women have had their husband killed in the conflict, and 5% of the total sample have had children killed. 41% of the sample report having had a family member or friend killed, and 33% reported having a family member or friend having been kidnapped or having disappeared. 45% reported having their property confiscated or destroyed, and 33% experienced extortion or robbery.

2. Both men and women experienced extraordinary levels of violence, but the level and type of traumatic events experienced as part of the conflict varied by gender. Men reported significantly greater physical violence than women. 56% of men report having been beaten (20% of women), 36% report being attacked by a gun or knife (14% of women), 25% of men report being tortured (11% of women), 19% of men reported being been taken captive (5% of women), and 65% of men (and 45% of women) reported being forced to watch physical violence against others. Although rates of reported sexual violence toward women are low, owing in part to stigma, women experienced physical attacks by male combatant as gendered violence. In addition, the very common experience of having their houses ransacked and destroyed was experienced as an especially powerful attack on the domain of women.

3. There is very significant variation by region. Somewhat unexpectedly, respondents in Bireuen and Aceh Utara reported far higher rates of both traumatic events and psychological symptoms than respondents in Pidie. 85% of respondents in Bireuen and 87% in Aceh Utara experienced combat, in comparison with 66% in Pidie. 66% of respondents in Bireuen report having had a family member or friend killed, in comparison with 40% in Aceh Utara and 21% in Pidie. 22% of respondents in Aceh Utara reported being captured and held by one of the parties to the conflict, 14% in Bireuen, and 4% in Pidie.

4. The set of questions on stressful or traumatic events since the signing of the MOU peace agreement highlights another critical finding of this study. An extraordinary number of persons describe difficulties of providing for their families (85%), difficulty finding work (90%), or difficulty in restarting their livelihood activities post-conflict (71%). 72% report concerns about adequate food, whereas 59% report concerns about having proper shelter. These numerical findings support the qualitative interviews, which describe deep concerns about basic livelihood issues. The nearly 30 years of conflict have clearly wreaked havoc on local economies, preventing villagers from working their land, killing their animals, destroying trade networks, wrecking their houses, and preventing young people from entering into the labor economy. Thus,'recovery' will require both that the terrible traumatic events suffered by these communities and the broken economy and destroyed community resources be dealt with in a timely fashion.

   In addition, 47% of respondents report seeing perpetrators of crime and violence (pelaku kejahatan) as a continuing stressor, 30% report experiencing physical or psychological attacks or threats (penyerangan) and 21% robbery (perampokan) since the MOU. Despite the cessation of formal conflict, continued insecurity remains a challenge to recovery of individuals and communities.

5. Psychological symptoms in this population are extraordinarily high, ranking with post-conflict populations in settings such as Bosnia or Afghanistan. The study used widely accepted symptom checklists, translated and adapted for Acehnese symptom expressions, and standard procedures for estimating persons who meet criteria for a clinical diagnosis. Internationally accepted protocols for determining persons who suffer major depression, an anxiety disorder, or Post Traumatic Stress Disorder indicate that 65% of the total sample ranked high on depression symptoms, 69% on anxiety symptoms, and 34% on PTSD symptoms. Using extremely high symptom levels to identify the most severe cases, 18% of the sample met criteria for a diagnosis of depression at a severe level and 10% for a diagnosis of PTSD at a severe level. Clearly, the need for mental health services to respond to the mental health consequences of the conflict is very great in this population.

   It should be noted that many respondents suffer the effects of "complex trauma" – many years of repeated experiences of

violence and insecurity, not a single episode of trauma and a return to a situation of safety and security. "Trauma" refers to experiences of both individuals and communities, and effective mental health responses will require both individual clinical treatment and psychosocial interventions for communities.

6. Odds analysis suggests factors associated with greater likelihood of suffering depression and trauma-related illness, as well as particular groups at high risk. First, there is a direct and highly significant relationship between number of traumatic events suffered and both depression and PTSD. Higher numbers of reported experiences of conflict-related events increase the likelihood that persons will suffer both mild and the most severe symptoms of depression and PTSD. Second, all groups in Bireuen and Aceh Utara have far greater odds of suffering these symptoms than in Pidie. Women have slightly greater odds than men, though far less than in most studies of normal populations. Third, looking closely by gender, age and district identifies some groups with extremely high rates of depression and PTSD. The youngest (17-29) and oldest (54 and above) age cohorts of men and women are at highest risk. For example, in Bireuen, 48% of young men report very high symptoms of major depression; 24% of young men, 25% of the oldest men, and 33% of the oldest women report very high symptoms of PTSD.

7. Rates of head trauma and potential brain injury, suffered through beatings, strangulation, near drownings, and other forms of torture or violence, are extraordinarily high and deserve clinical interventions and further research. Men, particularly young men, in Bireuen and Aceh Utara were at the highest risk. Remarkably, 67% of young men in Aceh Utara and 68% in Bireuen report having suffered head trauma. These findings suggest a critical area for intervention.

8. Forced and voluntary evacuations were frequent events in these conflict areas. 38% of respondents said that they were forced to flee burning buildings and nearly half of the sample (47%) said they were forced to flee danger at some time during the conflict. The qualitative data more than adequately supports these figures. The respondents in this sample largely reported localized and temporary displacement, usually within their own district, and often within the same sub-district. Evacuations were frequently collective events, entire villages leaving their land together, and moving to a government facility in either the sub-district or district seat. Village communities would remain displaced for as short as a few weeks or as long as several years, returning only when given permission or after the peace agreement. Returning groups found their homes and livelihood assets such as livestock, ricefields, gardens, plantations, and tools either burnt down or completely pillaged. "We have had to start from zero," is a simple but accurate expression conveyed repeatedly to each interviewer while conducting this research.

9. Despite the history of trauma and the resulting high symptoms, these communities and most individuals within them remain strong and highly resilient. They report dealing with their traumatic experiences by prayer and consulting religious specialists, by looking for general medical attention, and by talking with friends or family members and by simply trying to forget what happened. Almost no one has consulted a mental health consultant to deal with their problems. Respondents are enormously grateful for the end to violence, and most are working hard to rebuild badly damaged communities and move forward with their lives.

10. There remains significant mistrust of public health facilities, particularly in Bireuen and Aceh Utara, which constitutes a barrier to providing mental health care through the public health system. For example, only 35% of respondents in Bireuen and 36% in Aceh Utara said they would be willing to accept mental health assistance provided through government clinics, compared with 74% in Pidie. In some cases, primary health care centers were occupied by combatant groups during the conflict. There is also limited awareness that some public health clinics are developing new mental health capabilities, and little is known about the new community mental health nurses (trained as part of the Ministry of Health efforts, supported by WHO and the Asian Development Bank). Very specific outreach activities will be required to reach many isolated communities that suffered the most during the conflict and to link these communities with the newly trained mental health workers in the primary care system.

RECOMMENDATIONS

1. Experiences with the IOM mobile medical teams, supported by grants from the Canadian government, indicate high willingness to use mental health services provided by specialized mobile medical teams. There is a great opportunity to develop mental health outreach teams at the district level, building on the mobile medical team approach established by

IOM. Such teams would provide immediate mental health services, family-based education and support for understanding and treating mental illness, as well as basic medical care, and would contribute greatly to bridging the current gap between the population and the newly trained community mental health nurses in the public primary health care system.

2. Nearly half the sample reported being forced to flee danger at some time during the conflict. Return populations have particular needs as they rebuild their conflict-shattered lives during this time of peace building and reintegration work in Aceh and should be considered Internally Displaced Persons and thus the core target of IOM relief services. It should be noted that the sample does not include respondents who are still displaced due to the conflict, so actual percentages of conflict IDPs from former conflict areas are likely to be higher than reported here.

3. The international community should recognize the urgency to provide mental health services to the communities most affected by the conflict. Developing mental health services is not without risk. Talking about past experiences of violence may be seen as politically threatening by some parties to the conflict , and will require support from higher levels in these institutions. However, resolution of the many years of violence will require concerted psychosocial and mental health work, as well as economic aid, to deal with individual and community trauma and to support the broad range of efforts needed to rebuild these communities.

4. Managing mental health and psychosocial problems associated with complex trauma in relatively isolated settings with limited access to mental health care is extremely challenging. It should be explicitly recognized that there is no single therapeutic modality which is certain to be effective and sustainable. Instead, a commitment should be made to developing innovative therapeutic programs in selected settings, to documentation of each program, and to careful evaluation of the efficacy of therapeutic approaches.

INTRODUCTION AND BACKGROUND

The December 26, 2004 9.1 earthquake and tsunami in Aceh province devastated many coastal communities of West and North Sumatra; the human toll alone exceeds 135,000 deaths. Homes, schools, health centers and hospitals, mosques and businesses were washed away, or flooded by the tsunami and damaged by the earthquake; entire communities disappeared. Thousands of military and police forces perished, entire barracks and family housing complexes washed away. Bases, posts, offices, military equipment and vehicles were either swept away or seriously destroyed. Coastal fishing, agriculture, and business economies were decimated, and soon replaced with emergency relief and disaster services of Indonesian and international NGOs, bringing many non-Achenese Indonesian civilians as well as foreigners into a region noted for its restricted access, a military zone of operation, a province afflicted by violence and conflict between the Free Aceh movement (GAM) and the Indonesian military and police forces.

Nature's tragedy and the vastness of the human devastation wrought by the tsunami renewed the political will on the part of the Government of Indonesia and the international community, in particular the European Community, to seek a resolution to the conflict between GAM, the Free Aceh Movement, and the Republic of Indonesia's military and police forces.[1] On August 15, 2005, a Memorandum of Understanding to bring about Demobilization, Demilitarization and Reintegration (DDR) was signed by GAM and the Government of Indonesia.

The International Organization for Migration (IOM) was charged by the Indonesian government (GoI) to assist with the DDR process according to the terms set forth in the peace agreement. IOM's post-conflict expertise covers a wide range of countries including East Timor, Cambodia, Afghanistan, and Kosovo among several others. Activities in DDR programs often facilitated by IOM include registration of ex-combatants and former prisoners, transportation to home communities, quick impact peace dividend projects for return communities, reconstruction of health services in former conflict areas, and emergency health interventions for conflict victims and ex-combatants. Specifically in Aceh, IOM has set up ten Information Counseling and Referral Service (ICRS) offices in district towns throughout Aceh to facilitate the reintegration needs of amnestied prisoners and former GAM combatants. ICRS clients receive transitional financial reinsertion support, health care and facilitation of health referrals, along with vocational training and other livelihood support. ICRS staff also facilitate community-driven peace dividend projects in villages with large numbers of returning amnestied prisoners and combatants and/or a severe history of conflict activity.

As a part of its program of medical and psychosocial support for persons and communities affected by the conflict, IOM proposed to carry out a psychosocial needs assessment in three districts in northeast Aceh heavily affected by the conflict. The basic goal of the proposed needs assessment was to evaluate the psychosocial and mental health needs in conflict-affected communities, providing empirical data which can serve as a basis for developing services to support these communities' efforts at recovery during the period following the cessation of violence. Specifically, IOM proposed to determine the level of conflict-related traumatic experiences suffered by members of these communities, to assess levels of psychosocial and mental health problems and identify high risk subgroups in the population, to determine the priorities for mental health and psychosocial services by members of the communities, to identify patterns of resilience and resources drawn on by communities and their members in managing mental health problems, and to assess the urgency for particular forms of mental health care in areas

[1] The last peace talks held prior to the tsunami were mediated by the Geneva-based Henry Dunant Center for Humanitarian Dialogue. These talks failed in May 2003.

affected by decades of tragic violence. The Canadian Department of Foreign Affairs and International Trade agreed to support the proposed Psychosocial Needs Assessment, and the study was designed and carried out between December 2005 and February 2006.

The three districts on the northeast coast of Aceh province – Pidie, Bireuen, and Aceh Utara – are geographically contiguous from west to east respectively. The effect of the tsunami in these three districts was far less severe than along Aceh's west coast and in the provincial capital of Banda Aceh.[2] However, taken together these three districts make up a region of Aceh with the longest and most intensive history of conflict activity dating back to the late 1970s. Conflict-related insecurity in these districts was frequently extremely high, inhibiting daily activities from schooling to farming to seeking health care to marketing to travel from town to town and village to village. Exposure to violence, personal assault, humiliation, extortion, and killing were common experiences for many residents all over Aceh, but especially in this region. Thus, the August 2005 Memorandum of Understanding between the GoI and the leaders of GAM to resolve the conflict was welcomed with relief and hope by many Acehnese. The MOU and the ensuing period of peace also provide an opportunity for rebuilding communities and providing 'trauma healing' and mental health services for those who continue to suffer the effects of years of complex trauma.

[2] The numbers of tsunami IDPs in Pidie, Bireuen, and Aceh Utara (inclusive of Lhokseumawe municipality) at the time of the field research was 19906 (4.2% of Pidie's population), 10032 (2.9%), and 11171 (1.8%) respectively.

RESEARCH DESIGN AND METHODOLOGY

THE RESEARCH TEAM

The psychosocial needs assessment was conducted as a collaborative project by the IOM psychosocial coordinator and technical staff, a team from the Department of Social Medicine, Harvard Medical School, and faculty, staff, and field researchers from the Center for the Development of Regional Studies, University of Syiah Kuala, Banda Aceh. IOM was the contractor for the PNA project; IOM and its staff coordinated the study and provided a project coordinator. The Department of Social Medicine, Harvard Medical School, has entered a collaborative agreement with IOM to provide technical consultation and collaboration on mental health and community and environmental health projects aimed at supporting recovery from the tsunami and the conflict in Aceh, and at investing in human resource development for health and mental health in N.A.D. A team of senior social scientists with long experience in Indonesia, physicians with international health experience, and social science researchers played an active role in designing the psychosocial needs assessment project and carrying out the quantitative research design. A team from the University of Syiah Kuala (USK) was subcontracted to carry out the community survey and the key informant interviews. The IOM coordinator and the Harvard team are jointly responsible for the overall analysis of the data.

The Harvard team and the IOM field coordinator developed the design of the overall study and the survey in December 2005. Members of the IOM, Harvard, and USK teams developed final forms of the questionnaires, translated and back translated them and pretested them in Banda Aceh in January. Final sample universe, procedures, and field methods were determined in consultation with all three groups. The IOM coordinator, a Harvard trauma specialist consultant, and members of the USK organized a training seminar in January, after final recruitment of field interviewers and team leaders. Interviews were revised and finalized following the training workshop, during which the survey instrument was pretested.

The questionnaire and key informant interviews were conducted by the USK team in 30 villages selected randomly from sub-districts most affected by the conflict, ten villages from each of the three districts, between February 2-12, 2006, with the IOM team providing supervision and field oversight. Selection of conflict-affected kecamatan utilized a conflict stress assessment previously conducted by the World Bank, supplemented with anecdotal reports from sub-district government officials, local NGOs, local GAM leaders, and the ICRS staff working in the area. Senior members of the Harvard team joined for the second week of field research, as did USK faculty, meeting with GAM leaders informally and with a GAM focus group, arranged by IOM staff, as well as holding informal discussions with gatherings of village women and men.

After completion of the research, data from the survey instruments were entered by the USK team, using SPSS, and transferred to Harvard for cleaning, development of variables, initial descriptive analyses, and more complex statistical analyses (using SAS). All quantitative data analysis has been conducted by the Harvard research team, as part of the Harvard-IOM collaboration. Analyses are designed in particular to identify levels of traumatic experiences, psychological distress and psychiatric disorders, risk factors associated with these disorders, and priorities in the community for mental health and psychosocial interventions. Open-ended, qualitative responses on the interview forms were also entered into the database, sorted by district and gender, coded for emergent themes, and used for more culturally sensitive analyses. The team leaders were responsible for the key informant interviews. They wrote extensive notes about each interview, as well as summary analyses. These were transcribed for analysis using both standard ethnographic techniques as well as using qualitative data analysis tools (Atlas-TI).

STUDY DESIGN

The study set forth nine goals:

1. To understand how specific communities in Aceh have been affected by the conflict.
2. To understand the nature of trauma suffered by the general population and by specific social groups.
3. To understand the social and psychological problems that have resulted from the conflict.
4. To observe and document the way community members speak about the conflict and the current demilitarization and reintegration process,
5. To identify the most important psychosocial and mental health problems in the three districts chosen as affected by the conflict and in some cases by the tsunami.

6. To determine the priorities of community members and leaders concerning which psychosocial and mental health problems are regarded as requiring immediate response.
7. To determine what groups are at special risk for mental health and stressor trauma experiences, and to assess the need for the provision of community based mental health services.
8. To identify and compare levels of mental health problems of stressor trauma experiences, depression and PTSD, of particular at risk populations.
9. To identify resources in the community that may be useful for collaboration in developing particular psychosocial interventions.

The study design includes two components: key informant interviews and a formal survey of randomly selected adults aged 17 years and older.

The key informant qualitative interviews were designed to explore the historical context of the conflict, how it affected communities over time, and whether certain segments of the population were more vulnerable than other segments. Community leaders were asked to discuss priorities for psychosocial and mental health services for their communities, and their views of the best ways to respond to the effects of the conflict.

The formal survey interview was designed to measure past experience of traumatic events associated with the conflict, to assess experiences of current stressor events, and to identify levels of current psychological distress associated with these experiences. The survey combined open-ended questions designed for Acehnese populations that had experienced decades of conflict and a tsunami, and widely used validated scales allowing for comparability with previous studies of psychosocial needs of conflict and post conflict populations.

The interview began with basic demographic questions followed by open questions. Respondents were asked if they were affected by the tsunami, whether the conflict affected their life and that of their family, and whether anyone in the family, including the respondent, was a victim of the conflict. These open questions were followed by quantitative measures drawn from the validated Harvard Trauma Events scales, adapted specifically to represent typical forms of trauma experienced in the communities being surveyed. These included a yes/no checklist of traumatic events experienced during the conflict and a yes/no checklist of experiences of current stresses and traumatic events in the post-conflict period. Levels of emotional and psychological distress were assessed with a general self assessment question. These elementary questions were followed by a 25 item version of the Hopkins Symptom Checklist for Depression and Anxiety, a scale used widely in disaster and trauma community assessments of emotional distress. The 42 item Harvard Trauma Questionnaire (HTQ) is a broad measure that includes a 16 item core used to assess Post Traumatic Stress Disorder (PTSD). In addition, items designed to capture popular discourses about disturbing experiences post-tsunami and post-conflict were integrated into the quantitative measures to elicit experiences of nightmares, ghosts, spirits, and hearing voices of people who had died.

A four item measure was included from the Harvard Trauma Questionnaire to assess presence and severity of events that might have produced head trauma or brain injury, including beatings to the head, suffocation or strangulation, near drowning, and other physical injuries.

The survey concluded with closed and open questions regarding the respondent's perceptions of what community mental health services are most needed, their opinions about which groups suffered most trauma due to the conflict or are at the greatest mental health risk, assessments of who provides care and to whom community members can turn to overcome bad experiences that remain from the conflict, attitudes about the public health care services, and comments and suggestions about the post-conflict peace process and community rebuilding.

The survey was designed to facilitate comparability with other studies of conflict-affected populations with the intention of drawing lessons concerning useful mental health interventions from previous cases. A significant part of the survey was also

devoted to open questions allowing for the specificity of Acehnese experiences to determine the interpretation and meaning of comparative analyses and lessons.

Overall, the key informant interviews and the survey were focused on mental and psychosocial health problems related to previous conflict experience. As an instrument for health research, the questions do not ask about groups or individuals who may have been responsible for committing violence against Acehnese communities. Rather, this research connects past traumatic experience with current health needs. As such, the results of this study do not meet the specific criteria usually required in human rights investigations. Rather, the results of this study are useful for informing the development of mental and psychosocial health services in conflict affected communities in Pidie, Bireuen, and Aceh Utara.

FIELD RESEARCH TEAMS AND INVITATIONS TO PARTICIPATE

Permission to carry out social scientific and public health research in Acehnese villages for this project was secured from the Community Protection and State Unity Board at the Governor's Office in Banda Aceh. Members of the University of Syiah Kuala social science and education faculty were the field team leaders for interviewers for Pidie, Bireuen, and Aceh Utara. A total of 18 survey interviewers included mental health nurses and education faculty members. All were Acehnese, all but four were men. The four women, three nurses and one education faculty lecturer, were survey interviewers. Team leaders held initial meetings with subdistrict leaders and village heads, compiled a list of households, randomly chose the households, and assigned each interviewer three to four households per village. Each interviewer greeted the person who they first met with the statement :

"Hello, my name is….I am working with Syiah Kuala University to learn about issues of trauma and mental health related to the conflict. We are gathering information on Acehnese adults' feelings and experiences since the MOU was signed. We are conducting a survey among adults residing in this community who are aged 17 and over. I would like to invite someone in this house to participate in the survey. May I continue?"

The interviewer proceeded to compile a list of the household members aged 17 and over, listed the names, and using a randomized numbering system, invited the designated person to participate with the comment:

"We picked you because we assigned each member of your household a number and you a number and then we randomly selected your number. Once we make the selection of an adult in the household, no other adult in the household can be selected. That way we make sure we are selecting respondents according to reliable research methods."

Once the person agreed to the invitation, a description of the project was read together with the person, covering procedures, risks and benefits, questions or concerns, confidentiality, and voluntary participation using Acehnese when preferred. The form was then signed and dated by the interviewer only and a copy was provided to the interviewee including a list of organizations helpful in dealing with psychosocial problems. Each questionnaire was assigned a numerical code leaving no personal identifiers in order to ensure the anonymity of all respondents. Researchers followed standard consent protocols that were approved by the Harvard University Faculty of Arts and Sciences' Internal Review Board.

Team leaders' interviews with key informants were less formal. Consent was obtained, and team leaders held conversations, usually in the meunasah – the community center used primarily by the men of the community but also by women when receiving outside research teams. Team leaders conducted 75 key informant interviews, 67 with men and eight with women. Among these 75 informants were village heads, religious leaders, GAM members, women and youth leaders, retired Indonesian military officers, and village elders. Field notes on each interview were prepared daily by the team leaders. Topics covered local conflict history, local understandings of mental illness, stories of mental illness in their community related to the conflict, local resources and priorities for managing mental illness, and opinions about the peace process.

In addition to those conducted by the team leaders, additional key informant interviews were conducted by the Harvard and USK teams, the IOM coordinator and IOM technical assistants. The IOM coordinator interviewed doctors, nurses, and/or midwives from the nearest public health clinics where research teams were visiting and also traditional healers. Harvard and USK teams held group discussions in several communities, particularly among women, and together with the IOM coordinator convened a focus group discussion with a heterogeneous group of men from GAM including commanders, ex-combatants, amnestied prisoners, and civilian members.

DEMOGRAPHY OF RESPONDENTS

QUESTIONNAIRE RESPONDENTS

The team interviewed 596 adults aged 17 years or older as part of the PNA survey. Respondents were well distributed by age, sex, marital status and schooling, validating the value of the random choice of household members. Few refused to be interviewed.

Table 1.1 Demographics of Study Participants By Gender, Residence, Age

	% Total Sample (N=596)
Gender	
Male	53
Female	47
District	
Pidie	40
Bireuen	30
Aceh Utara	30
Age	
17-29	25
30-40	31
41-53	24
54-82	20

Table 1.2 Demographics of Study Participants By Marital Status, Schooling, and Housing

	% Male (N=315)	% Female (N=281)	% Total Sample (N=596)
Marriage Status			
Never married	20	12	16
Currently married	77	70	74
Divorced or separated	2	3	2
Widowed	2	16	9
Schooling			
No schooling	6	11	9
Primary school	48	48	48
Middle school	23	21	22
Secondary school	20	13	17
Vocational school	2	5	3
University education	2	2	2
Housing			
Live in own home	84	87	85
Live with friend or relative	8	3	6
Live in abandoned/ destroyed home	4	2	3
Renting housing	2	5	3
Live in barracks or tent	2	3	2

Tables 1.1 and 1.2 illustrate the demographic characteristics of respondents. The majority are married, have at least a primary school education, and own their own homes in which they live. The communities studied were only slightly destroyed by the tsunami, thus only two percent of respondents lived in a barracks created for those who lost homes due to the tsunami. Slightly over half of respondents are male (53%). The distribution by age and gender are indicative of the success of the method of random number household selection, with 25% being in the 17-29 age group, 31% from 30-40, 24% from 41-53, and 20% from 54-82 years. Forty percent of the sample (n=237) is from communities in the Pidie district; thirty percent each from Bireuen (n=179) and Aceh Utara (n=180). The three research teams spent seven to ten days in the field collecting data.

The quantitative analyses in the following sections are presented by two significant independent variables: gender and district. District variation is critical to understanding the regional variability of trauma conflict events. Respondents from Pidie communities consistently report experiencing lower levels of conflict events, personal trauma, and psychological distress; whereas respondents in Bireuen and Aceh Utara report much higher experiences with conflict, trauma and psychological distress, although the types of trauma differ to some degree. This variation by district is consistent across most measures, but differences are lower when current life security issues are assessed. The differences by district are surprising given the prevailing impression by most observers of the conflict that the northeastern districts of Aceh represent one continuous region with a common history and experience during the conflict compared to other regions of Aceh such as the central highlands or the southwest coastal districts. Investigation into other factors such as local level leadership in GAM and TNI during the conflict as well as local economies may help understand these differences. Analyses by gender are presented because the data indicate quite significant differences in experiences of violence and traumatic events on the part of men and women, as well as traditional findings of differences in rates of depression by gender. In some cases, analyses are presented in terms of age as well, not only because age predicts risk for some forms of mental illness but because age and gender together were associated with particular experiences of traumatic events as part of the conflict.

KEY INFORMANTS

Tables 1.3 and 1.4 show the profile of key informants that were interviewed by the research team leaders in each district. Team leaders typically interviewed two or three community leaders in each village they visited. The age distribution is representative, considering that leaders do not typically assume their position until at least their thirties. The gender breakdown of key informants is an unfortunate shortcoming reflecting the challenges of male interviewers finding women for private conversations in rural Islamic societies. Team leaders typically interviewed village heads wherever they went, especially because protocol for outsiders upon arrival in rural communities demands checking in with the village head anyway. After meeting with the village head, team leaders asked to meet with other formal and informal leaders in the village who were best able to recount the experiences of the community during the conflict and talk about issues surrounding mental and psychosocial health. Village elders, religious leaders, and village secretaries were the most commonly interviewed members in these communities after the village head, though women's group leaders and GAM members are fairly represented as well.

Table 1.3 Demographics of Key Informants By Gender, Residence, Age

	% Total Sampel (N=75)
Gender	
Male	89
Female	11
District	
Pidie	43
Bireuen	32
Aceh Utara	25
Age	
17-29	7
30-40	27
41-53	31
54-82	35

Table 1.4 Demographics of Key Informants By Marital Status, Schooling, and Position in Community

	% Male (N=67)	% Female (N=8)	% Total Sample (N=75)
Marriage Status			
Never married	6	12.5	7
Currently married	92.5	62.5	89
Divorced or separated	0	0	0
Widowed	1.5	25	4
Schooling			
No schooling	0	0	0
Primary school	26	12.5	24
Middle school	26	37.5	27
Secondary school	36	12.5	34
One year diploma	9	25	11
University education	3	12.5	4
Position in Community			
Village head			32
Religious leaders			13
Village secretary			12
GAM members			7
Village elders			16
Women leaders			7
Youth leaders			3
Other community leaders			9
Indonesian army officer (retired)			1

TRAUMATIC EVENTS

TRAUMATIC EVENTS DURING THE CONFLICT

The first and most overwhelming finding of the survey is that members of the three districts experienced remarkably high levels of traumatic events. A few examples illustrate the profound effects the conflict has had on the civilian populations in this area. 78% of the total sample report having lived through combat experiences. 38% experienced having to flee from burning buildings in their community, and 47% having to flee from danger. Eight percent of women have had their husband killed in the conflict, and five percent of all respondents have had children killed in the conflict. 41% of the sample have had a family member or friend killed, and 33% reported having a family member or friend having been kidnapped or having disappeared. 45% reported having their property confiscated or destroyed, and 33% experienced extortion or robbery. Many respondents were humiliated, their humanity stripped. 17% of respondents were publicly humiliated, eight percent were forced to humiliate another person, seven percent were forced to betray family or friends, six percent to harm and injure family members. People were forced to fight (22%) or to feed (27%) combatants, and forced to search for members of their community in the forest (35%). These experiences of humiliation were more commonly experienced by men than women, except for being forced to give food or shelter. Pidie district stood out as the region least likely to have experienced these practices.

Table 2 in the four pages below illustrates the differences in degree of magnitude of past traumatic experiences related to the conflict by gender and by region:

Table 2 Past Trauma Events Experienced, by Gender and District

	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=237)	% Aceh Utara (N=237)	% Total Sample (N=596)
Experienced combat (bombing, fire fights)	83	73	66	85	87	78
Forced to flee burning buildings	43	33	30	59	28	38
Forced to flee danger	52	42	42	61	40	47
Forved to hide	20	12	4	25	24	16
Beating to the body	56	20	20	49	53	39
Attacked by knife or gun	36	14	14	32	35	26
Tortured	25	11	7	25	25	18
Serious physical injury from combat	19	6	6	17	17	13
Witnessed physical punishment	61	45	37	68	62	54
Humiliated or shamed in public	22	11	4	26	25	17
Rape	1	1	0	1	2	1
Forced to rape a family member	1	0	0	0	1	0.2
Other sexual assault	3	4	0	5	6	3
Spouse killed	2	8	3	3	8	5
Spouse disappeared, kidnapped	2	3	1	5	3	3
Child killed	5	5	4	4	9	5
Child disappeared, kidnapped	2	4	1	1	7	3
Family member or friend killed	49	31	21	66	40	41
Family member or friend disappeared	36	30	12	52	42	33
Kidnapped	8	2	1	5	12	5
Captured, held by TNI/ POLRI or GAM	19	5	4	14	22	12

Sent to prison	4	2	1	3	5	3
Forced separation from family	11	7	1	14	15	9
Forced isolation	10	4	1	12	11	7
Confiscation, destruction of property	49	40	25	57	59	45
Extortion, robbery	36	28	16	44	44	33
Forced labour	44	11	21	40	29	29
Forced to give food, shelter to TNI or GAM	29	25	13	41	33	27
Forced to fight against TNI or GAM	28	16	11	28	33	22
Punished for not fighting against TNI or GAM	17	5	1	14	23	11
Forced to search for corpses	15	8	5	16	17	12
Not allowed to provide Muslim burial	7	4	1	13	4	5
Forced to injure family member	10	2	2	14	3	6
Forced to injure non-family member	11	2	1	15	6	7
Forced to destroy someone's property	6	1	1	7	2	3
Forced to betray/ endanger family member	10	3	1	17	4	7
Forced to betray/ endanger non-family member	10	4	1	17	4	7
Someone forced to betray/ endanger you	11	3	2	16	5	7
Forced to humiliate another person	11	5	2	16	8	8
Forced to search for family member in forest	46	24	18	55	39	35
Lack of shelter because of conflict	22	25	14	34	26	24
Lack of food, water because of conflict	86	77	71	96	83	82
Sick, lack of access to health care	64	55	33	82	73	60

These statistics provide clear evidence of the magnitude of suffering and terror experienced in these communities, but the narratives found in both the open response questions on the survey and the key informant interviews have emotional and testimonial qualities that numbers can not measure. The qualitative data of the study are first and foremost filled with stories about men and women being brutally interrogated, intimidated, and threatened for information they could not provide and then severely beaten (or worse) for not having answers. Some vivid additional examples include suffocation with plastic bags, public displays of sexual humiliation, drownings in septic tanks and sewage canals, and being forced to injure or humiliate friends and loved ones just to name a few. Women described being forced to watch with their children as their husbands and sons were mutilated and killed. Stories of being forced to provide labor or of being forced to serve as human shields are common. In addition, many communities reported having schools and public buildings burned or destroyed, of having been extorted for money by both the guerilla and the government security forces, leaving them bereft of community resources. And all community officials were invariably required to provide information about and take responsibility for the actions of their village populations to both sides during the conflict, creating a hopeless sense of entrapment and a reluctance to lead. (See "Experiences of Community Leaders" below)

GENDERED TRAUMA

PHYSICAL ABUSE AGAINST MEN, INCLUDING HEAD INJURIES

"Ada orang yang dipukul sampai hilang ingatan" – orang dituakan di Bireuen
"People were beaten until they lost their memory" – village elder in Bireuen

Some forms of trauma are clearly gender related. Although physical violence has been widely experienced by both men and women of all ages, men report greater physical violence to their bodies than do women. 56% of men report having been beaten (20% of women), 36% report being attacked by a gun or knife (14% of women), 25% of men report being tortured (11% of women), 19% reported being been taken captive by soldiers (5% of women), and 65% of men (and 45% of women) reported being forced to watch physical violence against others. Variation by region is consistent across these measures.

One specific set of questions, drawn from the Harvard Trauma Questionnaire and presented in Table 3.1 below indicates just how commonly men have suffered the kind of head trauma that produces brain injury or anoxia (injury from lack of oxygen). 36% of men reported being beaten on the head, 19% having suffered strangulation or suffocation, 7% near drowning, 8% other forms of head trauma. When broken down by gender and age, our data show, for example, that 48% of young men between ages 17 and 29 were beaten on the head.

Table 3.1 Head Trauma/ Potential Brain Injury By Sex and Region

	% Male (N=315)	% Female (N=281)	% Pidie (N=228)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Beaten on the head	36	7	8	29	35	22
Suffocation or strangulation	19	7	7	18	17	13
Near drowning	7	0.4	2	6	5	4
Other head trauma	9	2	0.5	9	10	6

124 questionnaire respondents (103 men and 21 women) provided qualitative descriptions of the types of head injuries they sustained, the context of the physical trauma event, and the noticeable changes in behavior and physical health that followed these injuries. Although some head injuries occurred while respondents were being detained and questioned, most occurred in ordinary places in the community—at home, in farm fields and gardens, at the village café, and most especially when going to and from the market. Reasons given for getting beaten were most often because villagers were accused of lying or "giving the wrong answer" when under interrogation. Most respondents report getting beaten on the head with the back-end of firearms or heavy pieces of wood, but head injuries also included getting stepped on, electrocuted, held underwater in wells or septic tanks, dragged through the streets, covered in plastic, and hit in the eyes or ears. Many respondents showed interviewers their physical scars (*berbekas*), including neck and bone injuries, and also reported memory loss (*hilang ingatan*), confusion, difficulty in thinking, shortness of breath, and lasting pains and headaches. A significant minority of the respondents told their interviewers that these symptoms lasted only a few weeks and then resolved on their own. These data suggest that clinical neuropsychiatric screenings may be needed to determine levels of neurocognitive effects of the specific forms of organic trauma suffered by this population.

One clinical case from the IOM DDR work suggests the importance of these findings. In early December 2005 IOM medical staff investigated the case of an amnestied prisoner, an ICRS client who was recently thrown back in jail because—his family claimed—he was crazy. Others claimed he was a criminal, caught red-handed thieving from the neighbors in his village where he had recently returned. After several visits to the local jail and the client's home community, the story developed into an altogether more complex narrative. At the jail, the young man was not psychotic, but his expression was dazed and his body was unkempt with noticeable *panu* fungus on his skin; he had difficulty making eye contact with the examining psychiatrist. He admitted he stole a motorbike and was arrested for it. In the village, his family and neighbors said that ever since his amnesty from prison, he has exhibited odd behavior that disrupted the community. He would take things and put them somewhere else; small things like coconuts and chickens, and big things like cows and motorbikes. He never made much secret about it, and he was usually caught every time. When someone came to deliver the news that his mother had passed

away in another district of Aceh, he climbed a coconut tree. When scolded for climbing instead of making immediate plans to travel, he asked the messenger if he was also going to pay for his bus ticket. At night, he would take off his shirt, sling it over his shoulder, wear the backpack that was given to him upon his amnesty from prison, and go walking through the village, back and forth, usually behind people's houses, without any destination. The community acknowledged that he had changed significantly while he was in prison. Before his arrest he was a quiet but functioning member of his village community. Now, his neighbors said, he was suffering from stress sustained in prison where he was beaten severely on at least one occasion that resulted in major swelling of his head. The villagers tried to understand and tolerate his strange and exasperating behavior, but when one villager discovered his "stolen" motorbike parked behind another neighbor's house, community patience was spent and the village head had him arrested.

In a later section in this report (Tables 9.4 – 9.7), we describe in more detail who was at particular risk for head injuries of the kind that may lead to longer term mental health consequences, and how head trauma is related to both depression and PTSD.

SEXUAL VIOLENCE

Sexual assaults and rape are mentioned rarely by women and men in the survey as noted in Table 3.2. This may well be due to shame and stigma and to the fact that most women respondents were interviewed by males. On the other hand, village women in conversations with the women team members from Harvard and USK told about how they were interrogated by having snakes thrust into their faces, and about how aggressive tactics of close body contact and looming threat were used to as part of interrogation by combatant groups. Although men report the most severe physical aggression, women did not escape. One fifth of female respondents reported being beaten to the body, 14% of being attacked with a knife or gun, eleven percent of being tortured, and six percent of suffering serious injury from combat, seven percent suffered beatings to head and seven percent strangulation. Only one percent reported rape and four percent other sexual assault. The post conflict period appears aggressive and violent as well. 24% of women reported experiencing "attack" (*penyerangan*, men 36%); four percent of women and men reported violence toward women; seven percent of women and men reported violence toward children.

Table 3.2 Past Rape & Sexual Assault, Current Gender Violence, & Home Destruction, by Sex and Region

	% Male (N=315)	% Female (N=281)	% Pidie (N=228)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Conflict era related rape	1	1	0	1	2	1
Conflict era sexual assault and forced family rape	4	0	0	5	7	3.2
Current experiences of attack	36	24	24	28	42	30
Curent violence toward women	4	4	2	8	5	4
Current violence toward children	7	7	4	9	9	7
Current era returned fo find home destroyed	24	17	9	22	36	21
Conflict era destruction/ confiscation of property* (not just homes)	49	40	25	57	59	45

In a high conflict village where the chaos of combat had wrecked havoc, the women vociferously complained of the assaults not on their bodies but on their houses. Young and old recounted how one day two years earlier they were forced to leave their homes and sent to a district office. Upon their return, they found their homes destroyed, the tin roofs shot full of holes, their household items and personal belongings decimated and destroyed or stolen – "they left not one plate unbroken, not even one plate," exploded one woman in her early 40s as she recounted with irritation the event which had traumatized many women in the village. Another woman of 65, who had at one time sufficient funds to go on the Hajj to Mecca, exclaimed "we were forced to leave with only the clothes on our back; when we returned that was all we had left, just the clothes on our back. Everything in our houses was gone or destroyed." Another recounted how a group of soldiers moved into her house to take shelter and punished the women. "For three nights they feared they heard ghosts" – "they shot up my house with their rifles destroying it, they shot holes in the roof, it now leaks and is in pieces, falling down; they shot out the walls, the ceiling crashed

in." "They destroyed all my things, my dishes and things. Nothing was left untouched." These young men were shooting up the midnight ghosts, certain they heard the stealth of combatants in the surrounding forest.

In a focus group discussion with male GAM leaders and rank and file members, the men noted that their families, wives and children, were traumatized by the conflict. Women were interrogated and aggressed, their things stolen, or money taken. Women are by and large the owners of the family houses in these regions of Aceh, and they manage much of the agricultural work and market. It may well be that the destruction of houses was much like a sullying rape, the "rape" of the women's houses, as noted above, which brought intense rage that was not silenced nor stigmatized, but a rage and irritation about injustice.

VARIATION BY DISTRICT

Each of the above tables illustrates an unexpected but consistent variation by district. Although rates of civilian trauma are high in all three districts studied, it is distributed unequally. Clearly Bireuen and Aceh Utara communities have significantly higher levels of physical violence against civilians, burned buildings, and broad forms of terror against village populations. As noted in Table 2, fewer respondents in Pidie villages reported having a family member or friend killed in the conflict, compared with 65% in Bireuen and 42% in Aceh Utara. 22% reported being physically beaten in Pidie, 47% in Bireuen, and 55% in Aceh Utara. It is clearly possible with these data to identify districts with the very highest levels of experiences of trauma associated with the conflict as well as variations in associated intensity of psychiatric symptoms and "caseness" and to ask : "What is necessary for these specific regions to bring about repair?"

The consistent variation by district was an unexpected and surprising result of this data. As noted in the Background section above, these three geographically contiguous districts are perceived as a corridor of common conflict history, especially when compared against other high conflict areas of Aceh with remarkably different historical and population dynamics such as the central highlands or the southwest. GAM's original leadership and membership come from this densely populated and fertile region of the province, dating back to the late 1970s when the first GAM rebel activities began. There is little reason to suspect that Pidie would have such lower rates of traumatic experience and psychological distress especially when considering the many sub-districts of Pidie that were well-known theaters of conflict (including Tiro sub-district, where Hasan Di Tiro, leader of the GAM movement, was born). Pidie also has the infamous *bukit janda* (widow's hill) and *rumoh geudong*, a house that was converted into a detention facility. All of these places figure heavily in the collective Acehnese memory of conflict events, contributing to the overall curiosity of this systematic regional variation in the data.

Subsequent consultations with knowledgeable researchers and scholars of the conflict in Aceh may yield a more in depth understanding of the sources of variation between districts. But rather than speculate upon the source of these variations, a fundamental conclusion from this research is that systematic needs assessments such as this one are critical for identifying appropriate development and prioritization of mental health services in Aceh.

FORCED EVACUATIONS AND OTHER POPULATION DISPLACEMENTS

38% of respondents said that they were forced to flee burning buildings and nearly half of the sample (47%) said they were forced to flee danger at some time during the conflict. The qualitative data more than adequately supports these figures. The conflict in Aceh caused a variety of population displacements, and this is an area of particular relevance to IOM's core mandate to meet the needs of populations before, during, and after their displacement. Transmigrant populations from other parts of Indonesia living in Aceh prior to the most recent years of conflict evacuated back to their home island; many other transmigrants took refuge in the neighboring district of North Sumatra. Many Acehnese fled to other parts of Indonesia to save their own lives, and large numbers of Acehnese also crossed international borders to go to Malaysia, Europe and the United States.

The respondents in this sample largely reported localized and temporary displacement, usually within their own district, and often within the same sub-district. A typical narrative of internal displacement during the conflict in these three districts of Aceh begins with the arrival of security forces (from either side) in a village and either warning communities of impending war operations with implicit instruction to leave or a more forceful order to leave. Villagers were told that security forces would not be held responsible for the safety of anyone in the village who chooses to stay. Evacuations were frequently collective events, entire villages leaving their land together and moving to a government facility in either the sub-district or district seat. Village

communities would remain displaced for as short as a few weeks, returning only when given permission, but only to find that homes and livelihood assets such as livestock, ricefields, gardens, plantations, and tools were either burnt down or completely pillaged. "We have had to start from zero," is a simple but accurate expression conveyed repeatedly to each interviewer while conducting this research.

Many IDP communities chose to stay away from their home villages after their evacuation until the end of the conflict, sometimes living in barracks for 18 months or longer. Many IDP communities have decided to return home since the signing of the peace agreement, but "starting from zero" still conveys a sense of vulnerability. Return populations have particular needs as they rebuild their conflict-shattered lives during this transitional time of peace building and reintegration work in Aceh.

EXPERIENCED EVENTS DURING THE TSUNAMI

Generally speaking, the tsunami had decreasing impact as one travels eastward along the coast from Banda Aceh toward Medan. Therefore it is not surprising that in moving eastward from Pidie, to Bireuen, and then finally to Aceh Utara, respondents describe less of an effect of the tsunami in their own lives. 101 respondents from Pidie gave answers to the open-ended question that asks them to describe what happened to them during the tsunami, 59 respondents from Bireuen, and 43 respondents from Aceh Utara. Most of these respondents lamented the loss of loved ones, especially those who lived in Banda Aceh; others described their physical injuries and material loss including households and source of livelihood (such as shrimp fisheries). Others described common symptoms of trauma intruding upon their lives after surviving the disaster:

- "Sad, and frequently lost in thought ever since."
- "I feel restless and lose my appetite whenever I think about what happened."
- "I thought it was Judgement Day (*kiamat*)"
- "Dizzy with fear, unsettled thoughts."
- "Don't ask me anymore about it, I will faint."
- "Still can not sleep at night."
- "I feel panic and fear thinking it will happen again."

INSECURITY OF DAILY LIVING POST-CONFLICT

Responses to current stressful or traumatic events highlight the insecurity of daily living that many experience. Table 4 analyzes these responses by gender and district. An extraordinary number of persons describe difficulties of providing for their families (85%), difficulty finding work (90%), or difficulty in restarting their livelihood activities post-conflict (71%). 72% report concerns about adequate food, whereas 59% report concerns about having proper shelter. Different patterns are evident for the three regions with fewer respondents from Pidie district identifying difficulties. However, even in this region of wealth and substance, two thirds of respondents experienced being hungry and lacking food, and 82 percent complained of having difficulty finding work. These numerical findings support the qualitative interviews, which describe deep concerns about basic livelihood issues across all three districts, even in the so-called lower conflict areas.

Table 4 Post Conflict Stressors and Insecurities of Daily Living

	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Lack of proper place to live	63	54	40	80	62	59
Lack of water, sanitation facilities	79	71	61	92	78	75
Hungry or lack of food	75	69	66	86	67	72
Difficulty providing for your family	86	85	78	96	84	85
Difficulty finding work	92	86	82	97	92	90
Difficulty starting a livelihood	72	70	56	95	67	71
Returned to find home destroyed	24	17	9	22	36	21
Learned of death of family member, friend	48	43	42	50	45	45
Not knowing what happened to family/ friend	16	13	10	20	15	14

Table 4 Post Conflict Stressors and Insecurities of Daily Living (continue)

	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Seeing perpetrators	49	46	38	54	54	47
Rejection by family, community	4	1	3	3	2	3
Fear of living with family, community	21	13	20	23	9	18
Experienced attack	36	24	24	28	42	30
Experienced robbery	22	20	11	23	32	21
Change in religious values	12	11	3	13	21	11
Change in community values	20	21	7	33	25	20
Violence toward women	4	4	2	8	5	4
Violence toward children	7	7	4	9	9	7

ECONOMIC INSECURITY

The near two decades of conflict have clearly wreaked havoc on local economies, preventing villagers from going to the fields and working their land, killing their animals, destroying trade networks, and preventing young people from entering the labor economy. Women in Pidie district speaking about a peace bringing a more hopeful future, explicitly stated that what they truly needed were small cash grants of US$40 to US$100 dollars to restart their home businesses that had crumbled under the conflict and under extortion. They needed money to purchase new implements for producing *emping*, a nut cracker snack food, for the cash snack urban market, or sewing machines for stitching and embroidering the white cotton headscarves (*jilbab*) used by almost all primary and middle school girls, thereby giving them the opportunity to secure a market share of a vast and growing consumer item used by all girl students. Sitting in the company of a male intruder, "an extorter," telling us these needs, they uncomfortably eyed their young kinsman, wishing he too would be granted a cash sum to leave for *rantau* – a period of life when young adults leave their villages of origin to seek better opportunities elsewhere in the archipelago – to fulfill his desire to search for his fortune in Medan as a fruit seller, far from his grandmother, aunts, nieces, sisters, and even his wife, from whom he has taken whatever he could extract. The women eyed him uneasily as they spoke with us, but they did not desist from pressing their own case, as they eased away from the young man's side, dismissing his bluster and self important behavior.

Even in low conflict villages, where children were frequently kept home from school on days when gunshots were heard, women not only lost motorbikes and cows and sewing machines to the extortion from men of both sides, but they were pressed into accompanying soldiers back to camp, to protect soldiers fearful of walking in the dark, becoming shields, even as they provided succor and secret spaces for their rebel kin, their husbands, their sons, and their not so close kin. They told these stories of being caught in a predominantly male game with a certain amusement and amazement too that it was for the moment over, now that the peace process was underway. They did not hesitate to explain directly, albeit with a certain pleasant earnestness, that the most important route to recovery includes some fashion of monetary support to them which will indeed have a mental health benefit. 'Recovery' in conditions such as these and worse will clearly require both that the traumatic events suffered by these communities and the broken economy and destroyed community resources be dealt with in a direct and timely fashion. This may be helped by "the money pill" – which often supplies the greatest of assistance to resilient albeit abused and aggressed individuals.

SAFETY

Nearly half the sample (47%) reported "seeing perpetrators," which is understood to mean that respondents continue to see those who committed acts of crime or violence in their communities during the conflict, even after the signing of the peace agreement. 54% of respondents in both Aceh Utara and Bireuen still see these people compared with 38% of respondents in Pidie. Who these persons might be was not asked, so these figures have ambiguous interpretations. These numbers may refer to the return GAM combatants or they may also refer to the routine monitoring activities of so-called "organic" government security forces, which denotes native Acehnese policemen and soldiers as opposed to the imported forces from other parts

of Indonesia, most of whom have left Aceh since the signing of the peace agreement. 30% of the sample (36% of all men) report experiencing attacks (*penyerangan*) and 21% report robbery. These figures are both higher for Aceh Utara alone. Both continuing violence in the community and seeing former perpetrators contributes to a continuing sense of insecurity and unease in these villages, even in this time of peace.

CHANGES IN RELIGIOUS AND COMMUNITY VALUES

It is fair to say that the questions that asked about changes in religious and community values were ambiguous and the results raise more questions than answers about their interpretation. One is struck by the increasing belief that there is a change in religious values moving eastward from Pidie (3%), to Bireuen (13%), and then Aceh Utara (21%), but what does that mean? The peace agreement affords respondents the opportunity to visit the village *meunasah* or mosque for their daily prayers, even before sunrise and after sundown, a most welcome and positive change in religious values. On the other hand, the passage of Islamic sharia law in Aceh before the tsunami and then its highly visible implementation and enforcement starting in July 2005 may be seen as a restrictive or negative change in religious values that inhibits women's mobility and comfort in carrying out typical daily chores around the village. These questions require further investigation before making any conclusions. The same can be said about the question about changes in community values. 20% of respondents feel that there has been a change, but it remains unclear what kind of change. Some of the qualitative data provides some insight (see Community Mental and Psychosocial Health), but largely yields more questions for follow-up investigation.

DEPRESSION, ANXIETY AND TRAUMATIC STRESS DISORDERS

One of the key purposes of this psychosocial needs assessment was to assess levels of psychological disturbances, emotional distress, and diagnosable mental health and neuropsychiatric problems in highly affected rural communities following the cessation of armed conflict. As the previous sections have shown, members of these communities have suffered extraordinary violence and extremely high rates of traumatizing events. In this section, we report on findings of this study concerning levels of psychological distress.

Our research used two general methods to assess levels of psychological distress and needs for mental health and psychosocial services: qualitative, open-ended questions, asking people to report on the most important emotional, behavioral and psychological problems facing themselves and members of their communities; and standard psychological measures designed to measure levels of psychological symptoms among a randomly selected group of members of the communities studied.

MEASURES OF PSYCHOLOGICAL DISTRESS AND NEUROPSYCHIATRIC DISORDERS

Measurement of psychological distress began with a very general self-assessment: "In the past year, have you ever had difficulties with your mood or the way you feel (for example, felt depressed or often sad, anxious, fearful, or not being able to control your anger)?" "If yes, how serious was this?" (measured by a 1-4 scale, from 'not serious' to 'extremely serious'). "If yes, in your opinion were these caused by stress or trauma connected to the conflict?"

This general question was followed by asking respondents to report on psychological symptoms or problems they experienced in the past week, using a 25 item version of the Hopkins Symptom Checklist (HSCL) for Depression and Anxiety. 15 symptoms associated with depression and 10 symptoms associated with anxiety were asked, and respondents were asked to describe whether they have experienced these during the past week 'not at all,' 'a little,' 'sometimes,' and 'often.' This scale is incorporated into the Harvard Trauma Questionnaire and has been used widely in disaster and trauma community assessments of emotional distress (refs).

In addition, we asked respondents to tell us (using the same format) whether they had experienced symptoms or problems which are listed as part of the 42 item Harvard Trauma Questionnaire (HTQ), developed by Mollica and his team for use in conflict areas. The HTQ is a broad measure of symptoms associated with trauma, which includes a 16 item core used to assess Post Traumatic Stress Disorder (PTSD).

Care was taken to incorporate common ways of expressing psychological distress in Indonesia, and specifically in Aceh, into these questions. Items on the HSCL and HTQ were translated using common Indonesian terms – such as *bingung* (feeling confused), *melamun* (day-dreaming or 'spacing out') and *pusing* (a combination of feeling dizzy and having a headache). In addition, items designed to capture popular discourses about disturbing experiences post-tsunami and post-conflict were integrated into the quantitative measures to elicit experiences of nightmares, ghosts, spirits, and hearing voices of people who had died.

A four item measure was included from the Harvard Trauma Questionnaire to assess presence and severity of events that might have produced head trauma or brain injury, including beatings to the head, suffocation or strangulation, near drowning, and other physical injuries.

ANALYSES OF PSYCHOLOGICAL SYMPTOMS AND PSYCHIATRIC DIAGNOSES

Psychological distress can be conceptualized in two ways: as a 'continuous variable,' i.e., as a level of distress or symptoms, such as depression or anxiety, ranging continuously from very low levels to very high levels; and as a 'dichotomous variable,' i.e., as being either high or low, as being a 'case' or not (for example, of depression or anxiety, or a case requiring treatment), or as someone meeting criteria for a clinical diagnosis (for example, of major depressive disorder, panic disorder, or PTSD) or not meeting criteria for diagnosis.

Psychological symptom checklists are designed primarily to be used as continuous variables in clinical work or research – to answer such questions as 'is this patient feeling better than he or she did one month ago?', or 'are psychological symptoms especially high in some risk groups,' or 'are levels of psychological distress highly correlated with levels of stress or numbers of traumatic events experienced?' On the other hand, questions such as 'what percentage of persons in this village suffer depression or require mental health services?' require making dichotomous ratings, determining whether someone is or is not a 'case' of depression or does or does not meet diagnostic criteria for PTSD.

In mental health surveys, there are two methods used for transforming a 'continuous variable' into a 'dichotomous variable'. First, one can make a determination that any respondent who reports symptoms above a particular level will be judged to be a 'case' – for example, someone who is adequately depressed as to need mental health treatment. The level the analyst sets for the 'cut-off point,' along with the level of symptoms in the community, will determine what number of persons are considered to be a 'case'.

Second, one can use a diagnostic algorithm, based on current psychiatric diagnostic practices. If a respondent indicates that he or she has experienced a particular combination of symptoms that serve as criteria for a particular diagnosis ("major depressive disorder" or "post-traumatic stress disorder," for example), that person may be rated as 'meeting criteria' for that disorder.

In what follows, we report our findings in four ways. First, we follow the standard procedure recommended by Mollica et al (2004) to use as cut-offs a mean of 1.75 on depression items on the HSCL 15 item depression scale, and 2.50 on the 42 trauma symptoms on the HTQ, to identify a person as suffering depression or a post-traumatic disorder.[3] Using this method allows us to compare findings for the Aceh sample with similar samples from high conflict areas such as Bosnia or Cambodia. Second, for some analyses, we used more conservative or stringent cut-offs, 3.0 on depression items on the HSCL and 3.0 on the trauma symptoms on the HTQ. Raising the cut-off levels identifies a smaller group of individuals who are currently suffering more severe symptoms, and allows us to ask what groups of persons or what forms of traumatic experience place an individual a particularly high risk for suffering major psychiatric distress.

Third, we followed the algorithm devised by Mollica et al (2004) to determine whether individuals suffer particular constellations of symptoms associated with depressive illness or PTSD, according to the American Psychiatric Association's Diagnostic and Statistical Manual 4th edition (DSM-IV). Because this algorithm is based on symptoms from a symptom checklist rather than a psychological interview designed explicitly to determine a clinical diagnosis, these ratings can be considered approximations only. They do, however, indicate levels of depression and trauma-related suffering in these communities.

A total of 14 depression items from the HSCL were included within the depression algorithm (see Table 5.1). Individuals were considered to be suffering a particular symptom if they rated themselves 3 or 4 on a particular item. In order to be classified

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[3] Mollica, Richard F., Laura S. MadDonald, Michael Massagli, and Derrick M. Silove. 2004. Measuring Trauma, Measuring Torture. Instructions and Guidance on the Utilization of the Harvard Program in Refugee Traumas Versions of The Hopkins Symptom Checklist-25 (HSCL-25) & The Harvard Trauma Questionnaire (HTQ). Cambridge, MA: Harvard Program in Refugee Trauma.

as symptomatic for depression, a subject initially needed a positive response on any of the depressed mood or decreased interest/pleasure items. Additionally, a positive score on 4 out of the 6 DSM-IV Criterion A symptoms were required for positive classification. A total of 3 out of the 6 DSM-IV Criterion A symptoms were required when positive responses for both depressed mood and decreased interest/pleasure were present. [4 5 6]

A more conservative algorithm was also examined. In this case, questions were checklist positive if ratings were 4 only. All other steps in the primary depression algorithm remained the same.

Table 5.1 HSCL-Depression Categories

Depressed mood
• Crying easily
• Feeling hopeless about the future
• Feeling blue
• Feeling lonely
Diminished interest/ pleasure
• Feeling no interest in things
• Loss of sexual interest or pleasure
DSM-IV criterion a symptoms
• Poor appetite
• Difficulty falling asleep or staying asleep
• Feeling low in energy and/ or feeling everything is an effort
• Blaming yourself for things
• Worrying too much about things and/ or feeling or worthlessness
• Thoughts of ending your life

Each question was rated as "Not at all", "A little", "Quite a bit", or "Extremely often", 1-4 respectively.

A total of 16 Harvard Trauma Questionnaire (HTQ) items were included within the PTSD algorithm. Individuals were considered to be suffering a particular symptom if they rated themselves 3 or 4 on a particular item. In order to be classified as symptomatic for PTSD (or 'meeting diagnostic criteria for PTSD'), a subject needed a positive response on 1 or more re-experiencing symptoms, 3 or more avoidance and numbing symptoms, and 2 or more arousal symptoms. (See table5.2) Subject exposure to a traumatic event (criterion A) has been assumed for all respondents.

Once again, a more conservative algorithm was also examined. In this case, questions were checklist positive if ratings were 4 only. All other steps in the primary PTSD algorithm remained the same.

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4 Mollica et al. "Disability Associated with Psychiatric Comorbidity and Health Status in Bosnian Refugees Living in Croatia" in Journal of the American Medical Association (JAMA). Volume 282(5), 04 August 1999, pp 433-439.

5 Mollica et al. "Dose-effect Relationships of Trauma to Symptoms of Depression and Post-Traumatic Stress Disorder Among Cambodian Survivors of Mass Violence" in The British Journal of Psychiatry. Volume 173(12), December 1998, pp 482-488.

6 Sabin et al. "Factors Associated with Poor Mental Health Among Guatemalan Refugees Living in Mexico 20 Years After Civil Conflict" in Journal of the American Medical Association (JAMA). Volume 290(5), 06 August 2003, pp 635-642.

Table 5.2 Harvard Trauma Questionnaire Core Categories

Re-experiencing Symptoms (DSM-IV criterion B)
- Recurrent thoughts or memories of the most hurtful or terrifying events
- Feeling as though the event is happening again
- Recurrent nightmares
- Sudden emotional or physical reaction when reminded of the msot hurtful or traumatic events

Avoidance and Numbing Symptoms (DSM-IV criterion C)
- Feeling detached or withdrawn from people
- Unable to feel emotions
- Avoiding doing things or going places that remind you of the traumatic or hurtful events
- Inability to remember parts of the most traumatic or hurtful events
- Less interest in daily activities
- Feeling as if you don't have a future
- Avoiding thoughts or feelings associated with the traumatic or hurtful events

Arousal Symptoms (DSM-IV criterion D)
- Feeling jumpy, easily startled
- Difficulty concentrating
- Trouble sleeping
- Feeling on guard
- Feeling irritable or having outbursts of anger

Each question was rated as "Not at all","A little","Quite a bit", or "Extremely often", 1-4 respectively.

SYMPTOM FINDINGS

Tables 6.0, 6.1, and 6.2 provide findings concerning self-perceived levels of general emotional distress, symptoms and diagnoses of depression, and symptoms and diagnoses of PTSD, both by gender and by district. Overall, the findings suggest extremely high levels of psychological distress in this population.

Table 6.0 reports findings from three general questions designed to assess respondents' global sense of emotional distress. In answering these questions, 76% of men and 85% of women indicated that they suffer difficulties with their mood or their feelings, such as feeling depressed, sad, anxious, fearful, or unable to control their anger, and rated the level of seriousness as 3.0 and 2.9 respectively on average. 95% of both men and women indicated that their emotional difficulties are caused by the conflict.

Table 6.0 General Emotional Distress and Conflict

	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Experience general emotional distress?	76	85	62	91	94	80
Caused by the conflict?	95	95	90	98	98	95
Seriousness (1-4 scalemean (SD))	3.0 (0.9)	2.9 (0.9)	2.6 (0.8)	3.1 (0.9)	3.0 (0.8)	2.9 (0.9)

Note: 8 no responses

Table 6.1 Depression by Gender and District

Psychological symptoms or psychiatric diagnoses for informants	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Mean depression Sx score ≥1.75 = "symptomatic"	64	67	44	81	78	65
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	54	57	38	72	62	55
Mean depression Sx score ≥3 = "symptomatic"	16	18	6	26	23	17
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	18	19	6	31	22	18

Table 6.2 Trauma Symptoms and PTSD by Gender and District

Psychological symptoms or DSM-IV Psychiatric diagnoses	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Mean PTSD Sx score ≥2.5 = "symptomatic"	33	35	12	51	45	34
PTSD Diagnosis Initial DSM Algorithm Sx=3 or 4	37	35	14	52	51	36
Mean PTSD Sx score ≥3 = "symptomatic"	17	16	3	26	25	16
PTSD Diagnosis Revised DSM Algorithm, Sx=4	11	10	1	16	17	10

Table 6.3 Anxiety Symptoms, by Gender and District

Anxiety symptoms experienced by informants	% Male (N=315)	% Female (N=281)	% Pidie (N=237)	% Bireuen (N=180)	% Aceh Utara (N=179)	% Total Sample (N=596)
Mean anxiety score (≥1.75)	64	75	54	79	79	69
Mean anxiety score (≥3)	30	36	23	39	39	33

Note: Significant difference in gender:"Mean anxiety score (≥1.75)"
Significant difference in district:"Mean anxiety score (≥1.75)" and "Mean anxiety score (≥3)"

Table 6.1 is more complex. First, using the cutoff score of 1.75 as the mean score on HSCL depression items, as recommended by Mollica and his colleagues, 65% of the total population – 64% of men and 67% of women –may be considered depressed. Using a diagnostic algorithm as recommended by Mollica and colleagues, 55% of the total population – 54% of men and 57% of women – merits a diagnosis of major depression. Levels of depression vary by district, closely matching findings of level of traumatic events in the three districts studied. 38% of respondents in Pidie meet criteria for a diagnosis of major depression, using the recommended algorithm, 62% of respondents in Aceh Utara, and 72% of respondents in Bireuen meet criteria for major depression.

Table 6.1 also provides findings for the percentage of persons with high levels of depressive symptoms (a mean of 3.0 or higher) and those who meet more conservative criteria for a diagnosis of major depressive disorder (counting a symptom as meeting criteria only if the respondent answered 4, indicating that they have often experienced that symptom during the past week). 17% and 18% of the total population respectively suffer these higher levels of symptoms or more severe forms of depression. Again, men and women are nearly equal, and rates are highest in Bireuen, lowest in Pidie.

Table 6.2 provides comparable findings for symptoms of trauma and for diagnoses of PTSD. Using the cutoff mean scores and the algorithms recommended by Mollica and his colleagues, and used in studies in many other conflict settings, rates of persons suffering trauma symptoms or a diagnosis of PTSD are estimated at 34% and 36% of the total population. Using the initial algorithm criteria, 16% of the total population meet PTSD; utilizing the more stringent criteria of the revised algorithm, 10% of the total population suffers PTSD.

Table 6.3 provides findings for symptoms of anxiety and anxiety disorders. These include symptoms such as feelings of acute anxiety or panic as well as chronic feelings of worry, insecurity, and fear. These symptoms are particularly high in these communities. 69% of all respondents report symptoms at a standard cutoff level, and 33% report anxiety symptoms at a very high level (mean 3.0 or greater). Women are only slight more likely to suffer anxiety than men, but levels in Bireuen and Aceh Utara are remarkably high, reflecting patterns of violence and trauma in these communities.

The complexity of these tables should not obscure the findings: this population has extraordinarily high levels of depression and trauma-related symptoms, ranking with traumatized populations in high conflict areas such as Bosnia or Cambodia or Afghanistan. Members of these communities are highly resilient, but they have experienced years of violence that has produced high levels of depression and complex trauma. Community-based services aimed both at 'clinical' disorders and at helping members of these communities rebuild their lives should be an urgent priority.

THE DISTRIBUTION OF RISK: WHAT GROUPS ARE AT HIGHEST RISK?

Variation in symptom levels and severity for both depression and PTSD is clearly associated with district, whereas associations with gender and age are much less powerful and far less clear predictors of who is at risk for psychological disorders. These relationships are analyzed utilizing adjusted odds ratios for depression and PTSD as measured by the initial criteria and stringent criteria algorithms previously discussed. This is a statistical model that allows one to determine how much the risk for an illness like depression is increased for women rather than men, for persons in particular age groups, or for those who have suffered particular patterns of traumatic violence.

Table 7.1 Adjusted Odds Ratios for Depression and PTSD by District

Psychological symptoms or DSM-IV psychiatric diagnoses	*District		
	Pidie	Bireuen	Aceh Utara
	or (95% CI)		
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	1.00	4.96 (3.19-7.72)†	2.63 (1.74-3.96)†
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	1.00	9.63 (4.93-18.82)†	5.59 (2.84-11.03)†
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	1.00	7.10 (4.36-11.57)†	6.65 (4.11-10.78)†
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	1.00	26.87 (6.23-115.88)†	28.18 (6.56-120.98)†

* District: 0=Pidie (reference) and adjusted for gender and age † Statistically significantly different at p<0.0001

Table 7.2 Adjusted Odds Ratios for Depression and PTSD by Gender

Psychological symptoms or DSM-IV psychiatric diagnoses	*Gender
	or (95% CI)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	0.68 (0.47-0.97)†
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	0.69 (0.43-1.09)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	0.90 (0.62-1.32)
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	0.76 (0.43-1.34)

*Gender: 0=female (reference) and adjusted for district and age † Statistically significantly different at p<0.05

Table 7.3 Adjusted Odds Ratios for Depression and PTSD by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	*Age			
	17-29	30-40	41-53	54-82
	or (95% CI)			
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	1.00	0.93 (0.59-1.48)	1.78 (1.07-2.96)†	1.19 (0.71-2.02)
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	1.00	0.42 (0.23-0.78)†	0.81 (0.44-1.49)	1.36 (0.71-2.57)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	1.00	0.78 (0.48-1.26)	0.83 (0.49-1.41)	0.91 (0.51-1.60)
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	1.00	0.43 (0.20-0.91)†	0.56 (0.26-1.23)	1.29 (0.59-2.79)

* Age: 0=17-29 (reference) and adjusted for gender and district † Statistically significantly different at p<0.05

Tables 7.1-7.3 indicate the explanatory power of district, gender and age in the scores of respondents on depression and PTSD symptoms; each odds ratio analysis adjusts for variation introduced by district, age or gender. In Table 7.1, respondents from Bireuen and Aceh Utara are far more likely to score positive on all depression and PTSD algorithms as compared to respondents in Pidie district. These differences are highly significant across the algorithms, with respondents from Bireuen 5 to 10 times more likely to meet depression criteria and 7 to 27 times more likely to meet PTSD criteria than Pidie respondents. Respondents from Aceh Utara are 3-6 times more likely to meet depression criteria and 6 to 28 times more likely to meet PTSD criteria as compared to respondents from Pidie.

Table 7.2 indicates that gender is a far less important contributor than district to variation in meeting criteria. For example, when controlling for district and age, men are significantly less likely to meet criteria than are women for depression on the initial depression algorithm by .68. Significance at the .05 level is not met by the other scores on the depression and PTSD algorithms, although the odds ratios indicate men as being slightly less likely than women to suffer symptoms of depression and PTSD. This finding in and of itself is important. Women typically suffer higher rates of depression and depressive symptoms than men in population studies. Here, men and women both suffer high levels of depression, with men only slightly less at risk than women, reflecting the levels of violence men have experienced in these Acehnese communities.

Table 7.3 presents the relationship between age and depression and PTSD algorithm scores, adjusted for the effects of gender and district. It is a complex picture. Comparing depression scores of older age groups to the young, respondents in the 41-53 age group are significantly more likely to suffer symptoms of depression than are younger people by 1.78 times). However , individuals in the 30 to 40 age group, are significantly more likely to score lower on both depression (.42) and PTSD scores (.43) utilizing the most stringent criteria algorithm.

The descriptive data underlying the odds ratios analyses are noted in Table 8.1 - 8.6, examining the distribution by district, gender and age of individuals who scores meet criteria on the initial and more stringent depression algorithms and on the initial and more stringent PTSD algorithms. Again the importance of where one lives as an explanation for scoring high for depression and anxiety is exceedingly important. Gender explains little of the variation, and the scores of men and women across the total sample are highly similar. Variations by age are more complex and may reflect both life cycle experiences as well as conflict-related and post-conflict stress experiences, with many younger men and women aged 17-29 from Bireuen and Aceh Utara scoring high on algorithms for depression and PTSD, with the middle aged appearing more resilient, and the old scoring higher again on these measures. These figures tell a most complex story. However, Pidie district where respondents reported less trauma also had very few respondents regardless of age meeting the more stringent criteria for the depression and PTSD algorithms. The difference is most striking in these descriptive tables.

Table 8.1 Pidie: Depression by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	PIDIE SAMPLE % (N=236)			
	Male (N=106)			
	Age 17-29 (n=15)	Age 30-40 (n=26)	Age 41-53 (n=26)	Age 54-82 (n=39)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	47	15	35	26
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	0	0	4	3
	Female (N=130)			
	Age 17-29 (n=38)	Age 30-40 (n=40)	Age 41-53 (n=27)	Age 54-82 (n=25)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	42	43	52	52
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	5	10	7	12

* Age: 0=17-29 (reference) and adjusted for gender and district † Statistically significantly different at p<0.05

Table 8.2 Pidie: PTSD by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	PIDIE SAMPLE % (N=236)			
	Male (N=106)			
	Age 17-29 (n=15)	Age 30-40 (n=26)	Age 41-53 (n=26)	Age 54-82 (n=39)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	13	4	12	5
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	0	0	0	3
	Female (N=130)			
	Age 17-29 (n=38)	Age 30-40 (n=40)	Age 41-53 (n=27)	Age 54-82 (n=25)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	21	23	15	12
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	3	0	0	0

Table 8.3 Bireuen: Depression by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	BIREUEN SAMPLE % (N=177)			
	Male (N=114)			
	Age 17-29 (n=25)	Age 30-40 (n=44)	Age 41-53 (n=21)	Age 54-82 (n=24)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	68	75	67	79
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	48	16	33	42
	Female (N=63)			
	Age 17-29 (n=25)	Age 30-40 (n=22)	Age 41-53 (n=10)	Age 54-82 (n=6)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	72	68	80	67
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	36	14	30	67

Table 8.4 Bireuen: PTSD by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	BIREUEN SAMPLE % (N=177)			
	Male (N=114)			
	Age 17-29 (n=25)	Age 30-40 (n=44)	Age 41-53 (n=21)	Age 54-82 (n=24)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	56	48	48	67
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	24	5	10	25
	Female (N=63)			
	Age 17-29 (n=25)	Age 30-40 (n=22)	Age 41-53 (n=10)	Age 54-82 (n=6)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	56	50	30	50
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	20	18	20	33

Table 8.5 Aceh Utara: Depression by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	ACEH UTARA SAMPLE % (N=176)			
	Male (N=90)			
	Age 17-29 (n=19)	Age 30-40 (n=25)	Age 41-53 (n=28)	Age 54-82 (n=18)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	58	56	75	44
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	21	16	14	28
	Female (N=86)			
	Age 17-29 (n=23)	Age 30-40 (n=28)	Age 41-53 (n=27)	Age 54-82 (n=8)
DSM Depression Diagnosis *Initial DSM Algorithm Sx= 3 or 4	44	50	85	88
DSM Depression Diagnosis **Revised DSM Algorithm, Sx = 4	30	14	30	38

Table 8.6 Aceh Utara: PTSD by Gender by Age

Psychological symptoms or DSM-IV psychiatric diagnoses	ACEH UTARA SAMPLE % (N=176)			
	Male (N=90)			
	Age 17-29 (n=19)	Age 30-40 (n=25)	Age 41-53 (n=28)	Age 54-82 (n=18)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	58	48	54	50
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	21	12	14	22
	Female (N=86)			
	Age 17-29 (n=23)	Age 30-40 (n=28)	Age 41-53 (n=27)	Age 54-82 (n=8)
PTSD Diagnosis *Initial DSM Algorithm Sx=3 or 4	44	43	56	63
PTSD Diagnosis **Revised DSM Algorithm, Sx=4	22	14	15	25

THE EFFECTS OF TRAUMATIC EXPERIENCES ON PSYCHOLOGICAL DISTRESS

Although it is reasonable to assume that experiencing high levels of violence or particular traumatic events places community members at higher risk for psychological problems, it is important to examine this question empirically. Odds ratios by number of traumatic events are vivid representations of the relationship between past traumatic experiences and current symptom scores on depression and PTSD algorithms; similarly, higher levels of current stressful events are significantly increase the odds of meeting the symptomatic criteria on all the four algorithms. These relationships are pictured in Tables 9.1 and 9.2 and the accompanying graphs.

Table 9.1 Mental Health Measures (Odds Ratios) for Respondents Experiencing Past Traumatic Events-Unadjusted

	Emotional Distress Experienced by Informants			
No. of traumatic events	Depression Symptoms-Initial Algorithm OR (95% CI)	Depression Symptoms-Revised Algorithm OR (95% CI)	PTSD Symptoms-Initial Algorithm OR (95% CI)	PTSD Symptoms-Revised Algorithm OR (95% CI)
0-3	1.00	1.00	1.00	1.00
4-7	3.04 (1.84-5.02)*	1.83 (0.66-5.10)	6.91 (3.12-15.32)*	2.94 (0.30-28.54)
8-10	6.25 (3.64-10.75)*	5.83 (2.30-14.81)*	11.57 (5.19-25.80)*	22.26 (2.91-170.39)*
≥11	11.42 (6.80-19.16)*	12.75 (5.34-30.44)*	28.19 (13.03-61.02)*	41.10 (5.59-302.41)*

* Statistically significantly different at p≤ 0.0001 to p≤ 0.05 Note:"0-3 Events"= reference group

Odds Ratios-Mental Health Algorithms by Number of Past Traumatic Events

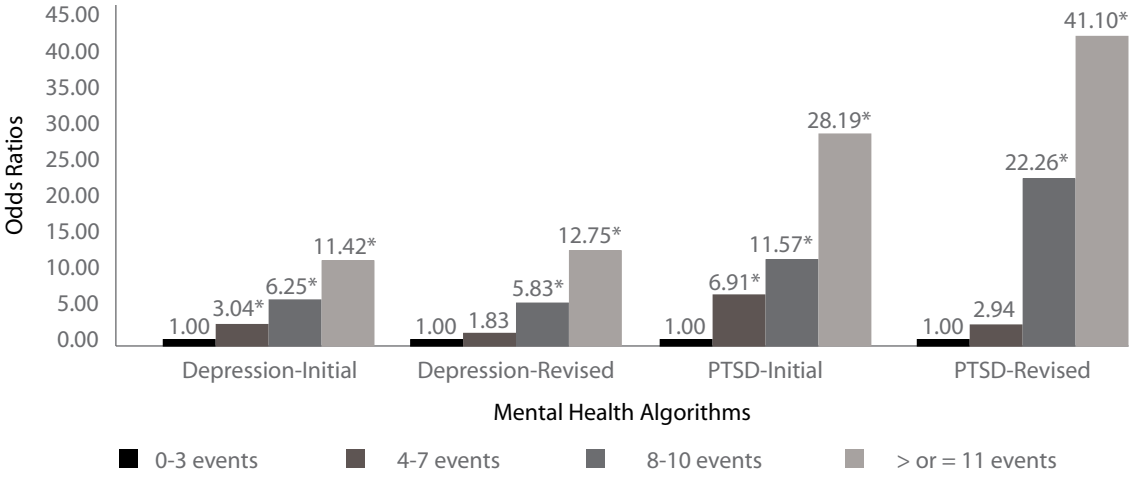
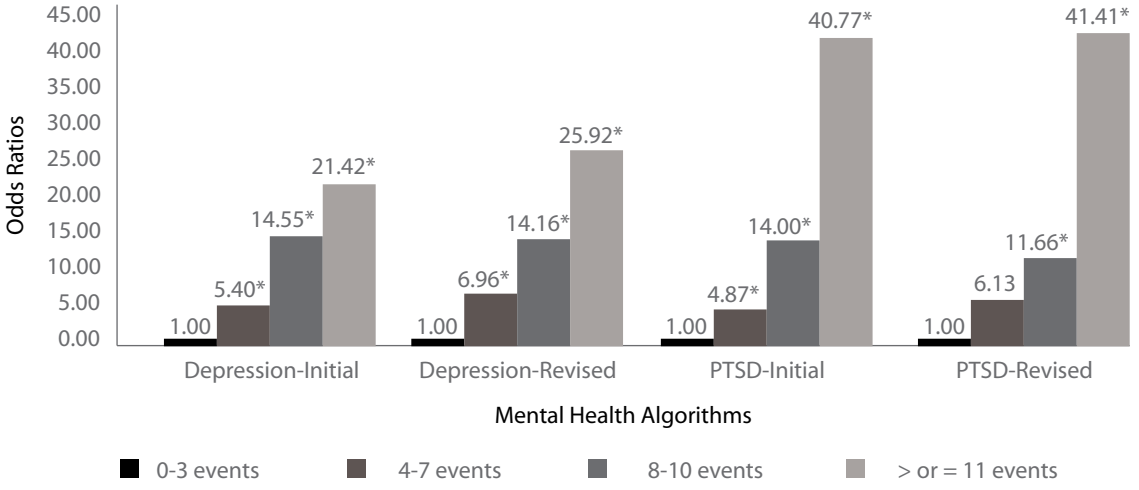


Table 9.2 Mental Health Measures (Odds Ratios) for Respondents Experiencing Present Stressful Events-Unadjusted

	Emotional Distress Experienced by Informants			
No. of traumatic events	Depression Symptoms-Initial Algorithm OR (95% CI)	Depression Symptoms-Revised Algorithm OR (95% CI)	PTSD Symptoms-Initial Algorithm OR (95% CI)	PTSD Symptoms-Revised Algorithm OR (95% CI)
0-3	1.00	1.00	1.00	1.00
4-7	5.40 (2.90-10.03)*	6.96 (1.64-29.53)*	4.87 (2.04-11.67)*	6.13 (0.80-46.75)
8-10	14.55 (7.50-28.25)*	14.16 (3.34-60.04)*	14.00 (5.80-33.78)*	11.66 (1.54-88.34)*
≥11	21.42 (9.59-47.85)*	25.92 (5.91-113.59)*	40.77 (15.33-108.45)*	41.41 (5.44-315.26)*

* Statistically significantly different at $p \leq 0.0001$ to $p \leq 0.05$ Note:"0-3 Events"= reference group

Odds Ratios-Mental Health Algorithms by Number of Current Stressful Events



There is a powerful relationship between the number of traumatic events a respondent reported and their level of psychological distress – both depression and trauma-related symptoms. Tables 9.1 and 9.2 demonstrate this quite dramatically. Table 9.1 reports odds ratios for respondents who experienced various levels of past traumatic events. Individuals who experienced 4 to 7 events are three times more likely to meet criteria for depression on the initial algorithm, and almost twice as likely to meet criteria on the more stringent algorithm, in comparison to those who experienced 0 to 3 traumatic events. They are almost seven times more likely to meet criteria for PTSD on the initial algorithm and almost 3 times on the more stringent algorithm. Individuals who had experienced 8 to 10 past traumatic events are 6 more times likely to meet criteria for depression and 11 to 22 times more likely to meet criteria for both PTSD algorithms. When individuals experience 11 or more past traumatic events their likelihood of scoring high on all four criteria algorithms for depression and PTSD become exceedingly high – over 11 for depression and between 28 and 41 for PTSD, as noted in the table and chart. Significant differences are particularly powerful when people have experienced 8 or more traumatic events.

Table 9.2 reports odds ratios for levels of psychological distress for respondents experiencing present stressful events. Again, individuals who experience 4-7 current stressful events are 5 to 7 times more likely to meet criteria for depression and 5 to 6 times more likely to meet criteria for PTSD than those who experience 0 to 3 events. Individuals who experienced 8 to 10 current stressful events are over 14 times more likely to meet criteria for depression on both algorithms, and 11 to 14 times more likely to meet PTSD criteria. Individuals who experience 11 or more current stressful events are 20 to 26 times more likely to meet criteria for depression on both algorithms, and over 40 times more likely to meet criteria for PTSD on both algorithms. These odds ratios in all but one instance are significant when comparing individuals in the three event categories (4-7, 8-10, $\geq$ 11, respectively) to individuals who experience 0-3 stressful events.

HEAD TRAUMA

As described above, a startlingly high number of persons have suffered head trauma and strangulation or near drowning, both of which may produce lasting brain injuries that can affect cognitive functioning, emotional lability, and behavior. (See Table 3.1, referred to above.) Although a significant number of women suffered head trauma, men suffered extremely high rates. 36% of all men in the survey reported being beaten on the head, 19% being suffocated or strangled, and another 7% experienced near drowning and 9% other forms of head trauma. Breaking these findings down by gender and age clarifies who was at special risk (see Table 9.4).

Table 9.4 Head Trauma/Potential Brain Injury: Percent of Respondents by Gender and Age

Types of Head Trauma/ Potential Brain Injury	Male (N=280-304)			
	AGE 17-29 % (N=53-58)	AGE 30-40 % (N=84-92)	AGE 41-53 % (N=70-75)	AGE 54-82 % (N=72-79)
*Any Type of Head Trauma	52	40	40	33
Specific Type				
Beaten on the head	48	39	35	23
Suffocation or strangulation	18	20	24	14
Near drowning	13	5	4	10
Other head trauma	17	6	9	7
	Female (N=258-272)			
	AGE 17-29 % (N=81-84)	AGE 30-40 % (N=82-88)	AGE 41-53 % (N=62-70)	AGE 54-82 % (N=33-37)
*Any Type of Head Trauma	17	15	5	5
Specific Type				
Beaten on the head	10	10	2	0
Suffocation or strangulation	7	9	3	5
Near drowning	1	0	0	0
Other head trauma	3	2	0	3

These findings are particularly startling when examining percentages of persons involved by district, as well as age and gender. Tables 9.5 and 9.6 show just how many young men in Bireuen and Aceh Utara suffered various types of head trauma as part of the conflict situation. All men were at high risk, but young men were at particularly high risk for various forms of head trauma in these two districts.

Table 9.5 Head Trauma/Potential Brain Injury: Percent of Respondents By Gender and Age for Bireuen

Head Trauma/ Potential Brain Injury	BIREUEN			
	Male (N=100-112)			
	AGE 17-29 % (N=23-25)	AGE 30-40 % (N=41-43)	AGE 41-53 % (N=19-21)	AGE 54-82 % (N=17-23)
*Any Type of Head Trauma	68	40	43	44
Specific Type				
Beaten on the head	60	37	29	32
Suffocation or strangulation	29	16	26	14
Near drowning	17	7	5	12
Other head trauma	17	5	10	21
	Female (N=59-61)			
	AGE 17-29 % (N=23-25)	AGE 30-40 % (N=20-22)	AGE 41-53 % (N=9)	AGE 54-82 % (N=5)
*Any Type of Head Trauma	28	23	0	0
Specific Type				
Beaten on the head	12	14	0	0
Suffocation or strangulation	17	18	0	0
Near drowning	0	0	0	0
Other head trauma	4	5	0	0

Table 9.6 Head Trauma/Potential Brain Injury: Percent of Respondents by Gender and Age for Aceh Utara

Head Trauma/ Potential Brain Injury	ACEH UTARA			
	Male (N=80-87)			
	AGE 17-29 % (N=17-18)	AGE 30-40 % (N=19-23)	AGE 41-53 % (N=26-28)	AGE 54-82 % (N=17-18)
*Any Type of Head Trauma	67	61	61	33
Specific Type				
Beaten on the head	67	57	61	28
Suffocation or strangulation	11	35	33	17
Near drowning	12	5	4	18
Other head trauma	29	16	15	6
	Female (N=75-81)			
	AGE 17-29 % (N=19-21)	AGE 30-40 % (N=22-26)	AGE 41-53 % (N=26-27)	AGE 54-82 % (N=7)
*Any Type of Head Trauma	29	27	7	0
Specific Type				
Beaten on the head	19	24	4	0
Suffocation or strangulation	11	13	4	0
Near drowning	5	0	0	0
Other head trauma	5	4	0	0

* From the four different types of head injury, if a respondent answers yes to one or more of those four questions, then the answer is yes for the new variable ("Any type of head trauma"), which will then tell us how many respondents experienced physical head trauma of any kind at all"

Note: Chi square analysis:
Significant difference ($p<0.001$) for gender and district
Non-significant difference in age

Note: Severity (loss of consciousness and duration) were examined, 88% did not become unconscious. Only two percent told interviewers about duration of unconscious state.

Head trauma may cause specific and direct effects on emotions, cognitive abilities (memory, learning ability), and behavior, as the clinical case described above illustrates. This form of trauma also places persons at increased risk for depression and PTSD. Table 9.7 illustrates this. It should be read to indicate that suffering beating to the head, suffocation or near drowning, or other types of head injuries makes it 2.2 to 2.6 times as likely that the respondent will suffer a clinical depression or PTSD.

Table 9.7 Increased Risk for Depression or PTSD for Persons Suffering Head Trauma (Adjusted Odds Ratios)

	Emotional Distress Experienced by Informants					
Head trauma	Depression Symptoms-Initial Algorithm OR (95% CI)	Depression Symptoms-Revised Algorithm OR (95% CI)	PTSD Symptoms-Initial Algorithm OR (95% CI)	PTSD Symptoms-Revised Algorithm OR (95% CI)	Anxiety Symptoms-Mean (≥1.75) OR (95% CI)	Anxiety Symptoms-Mean (≥3.00) OR (95% CI)
Any Type of Head Trauma	2.21 (1.40-3.47)‡	2.59 (1.54-4.36)‡	2.33 (1.49-3.62)‡	2.43 (1.29-4.59)**	2.75 (1.63-4.65)‡	2.95 (1.89-4.58)†
Beaten on the head	3.23 (1.92-5.42)†	3.07 (1.74-5.42)†	3.14 (1.92-5.15)†	2.75 (1.40-5.40)**	3.15 (1.74-5.70)‡	3.52 (2.17-5.72)†
Suffocation or strangulation	2.55 (1.40-4.62)**	1.70 (0.92-3.14)	2.69 (1.54-4.68)‡	2.34 (1.15-4.75)*	2.40 (1.21-4.75)*	2.08 (1.24-3.50)**
Near drowning	2.13 (0.78-5.82)	2.94 (1.12-7.71)*	2.13 (0.82-5.50)	1.88 (0.60-5.84)	1.56 (0.54-4.53)	1.92 (0.78-4.69)
Other head trauma	2.36 (0.92-6.07)	1.49 (0.64-3.46)	2.30 (1.00-5.30)*	2.04 (0.82-5.09)	2.06 (0.69-6.17)	1.97 (0.92-4.26)

Adjusted for gender, age, and district

† Statistically significantly different at $p<0.0001$

‡ Statistically significantly different at $p<0.001$

** Statistically significantly different at $p\leq0.01$

* Statistically significantly different at $p\leq0.05$

To date, very little mental health work has focused on head injury. Because head trauma may affect long-term behavior which can be mistaken for criminal behavior, and can also affect attention, learning, and other cognitive functions, specific attention needs to be directed at this problem. In particular, research needs to address what percentage of persons have lasting effects of head trauma – for the population in general, as well as for former combatants and former prisoners. These findings also have direct clinical relevance. Community mental health nurses, general practitioners, and psychiatrists need advanced training to assess and respond to problems associated with head injury as part of routine clinical work and as part of advanced referral services. This needs assessment provides evidence that a specialized program focused on head trauma should be undertaken with support of the international community.

LOCAL IDIOMS OF DISTRESS

The symptom checklists used above are useful for comparative purposes with populations around the world in post-conflict and other disaster settings. Nevertheless these are symptom categories defined largely by psychiatrists trained in a distinctly biomedical tradition. It is possible that some commonly understood symptoms in psychiatric practice have little meaning for populations not schooled with these categories of mental illness. Some symptoms considered pathological in one setting might actually be an adaptive survival strategy in settings of high danger and conflict. In any setting of psychosocial research it is important to understand local categories of illness before pathologies in a community can be described.

Before the depression, anxiety, and trauma symptoms checklists were read to the questionnaire respondents, they were asked the following question: "The conflict has brought unique pressures upon the Acehnese people during the past number of years. Have these pressures had an effect on your feelings, energy, or your health in your daily life? Can you explain what this effect has been?" The responses to this question are interesting because respondents describe for interviewers how they think of mental illness in their own words before they hear the symptoms that are in the standardized checklists. Their answers yield a list of local idioms of distress, an essential first step in any cross-cultural mental health research or intervention.

The first thing one learns when talking to Acehnese about mental health is that the English words "stress" and "trauma" have been thoroughly absorbed into local idioms for mental illness, not least because of the thirty years of conflict and more recently the earthquake and tsunami natural disasters. One key informant told his interviewer: "before the conflict, no one around here knew the word trauma." Like in English, these two words have gained such a broad currency in the local language that it is hard to know exactly what someone means when they say stres or trauma. Nevertheless, deeper investigation yields some broad generalizations. Many people use stres and trauma interchangeably, both denoting deep psychological distress brought on by external events such as war, a death in the family, or a natural disaster. Their meanings overlap, but judging from the use of these words during key informant interviews, trauma can be a temporary condition from which one can recover. In contrast, the word stress—unlike in English where stress might suggest something as light as the effects of a bad day at the office—denotes a more serious, long-term condition that may require psychiatric care at a hospital. One might be suffering from trauma but still be present and at least appearing functional in the community, whereas when someone has stres, he or she is noticably debilitated from performing normal social roles. Hence the word trauma tends to appear more often in interview transcripts (e.g. "everyone in this village is still trauma from the conflict").

Beyond these two broad local categories of mental distress, the answers to the question quoted above yield a distinct list of common symptoms that describe local understandings of trauma and also correspond to a subset of the symptom checklists, but with some local specificity tied to them. Additionally, many Acehnese refer directly to somatization of mental distress, which is to say not just that the psychological distress brought on by the conflict frequently manifests as physical illness, but also that Acehnese understand some of their physical ailments are caused by psychological distress. Most people mentioned "fear" (*takut*) as a common symptom of trauma, but rarely was fear mentioned as a general condition. Usually, respondents tied their fear to something specific like "I am afraid of crowds," "I get scared whenever I see military uniforms/ hear a motor vehicle/ hear a noise that sounds like gunfire." "Pressure" (*tekanan*, or *tertekan*) is mentioned repeatedly but this might be the respondent quoting and affirming the language of the original question back to the interviewer. The following is a list of symptoms, physical and psychological, that were frequently mentioned to describe Acehnese understandings of psychological distress:

- Loss of spirit (*kehilangan semangat*)
- Uneasy, restless
- Unable to sleep at night

- Frequent headaches
- Daydreaming
- Remembering what happened
- Shaking uncontrollably
- Heart problems (many varieties)
  - Heart ache
  - Racing heartbeat
  - "It feels as if my heart has fallen"
  - Weak heart
  - Heart attack (upon hearing bad news)
- Exhausted for no reason
- Frequent sadness / frequent tears
- Hard to think, slow to think, forgetfulness or thinking too much
- Helplessness
- Suspiciousness of others / hard to socialize / self-isolation
- Unable to work
- Other physical ailments
  - Body hurts
  - Weakness

DREAMS AND SPIRITS

Tales of the supernatural and dream worlds supplement some of the more formal indicators of psychosocial and mental health in Acehnese communities discussed above. Local attitudes toward these experiences can also challenge conventional psychiatric understandings of visual and aural hallucinations as pathological and requiring treatment. Based on several anecdotal stories heard about Acehnese people being visited by the spirits of loved ones who died or disappeared in the tsunami disaster, the investigators included three closed and two open questions about dreams and spirits and examined the open responses to explore possible connections with conflict experiences. The first open ended question asked "Can you tell me about your experience with ghosts, spirits or seeing someone who has died?" and the second open ended question was about nightmares: "Can you tell me about any nightmares that you frequently have since the conflict?" Most responses referred directly to conflict experiences, but a few related to the tsunami as well. In general, the responses to these two questions are remarkably similar to one another suggesting that the wakeful world of spirits in Aceh is not clearly distinguished from the world of dreams. More than 150 respondents gave answers to each question. In Pidie and Aceh Utara women answered this question more frequently than men, with the reverse being true in Bireuen. Compiling the answers given to these two questions yields a reliable set of preoccupying themes summarized below with brief illustrative examples:

SEEING THE DECEASED

By far the most common response was seeing or dreaming about the spirits of the deceased, most usually relatives. Most respondents took the time to explain whether the spirit speaks; many are frustratingly silent:

- "The ghost said nothing. He just looked at me." Or "He just smiled at me."
- "I see the ghost for a fleeting glimpse only."
- "The ghost just walks around the village."
- "The ghost sits around the house where the person used to spend his/her time."
- "In my dream the visitor said nothing."
- "I saw my husband in my dream but he didn't tell me where he was."
- "I dreamed that a dead conflict victim was standing in front of my house."

Many returning spirits convey specific messages:

- Thanking their surviving relatives for moving the corpse and ensuring a proper Islamic burial
- Asking (or thanking) their surviving relatives to take care of the dead person's dependents
- Giving advice to pray often, be nice to relatives, do not sin
- "I dreamed about a dead conflict victim who told me everything that happened to him."

DREAMS ABOUT VIOLENT EVENTS

Living through the conflict and losing loved ones are haunting experiences that reappear as terrifying ghostly encounters and nightmares. Some responses that reflect these experiences include:

- Seeing ghosts/corpses with physical injuries, deformities, and wounds
- Dreams that repeat conflict events that happened in real life
- "I dreamed that I brought the bones of dead people home from the forest."
- "I dreamed that I saw the dumping of dead bodies in the river."
- "In my dream, I saw someone get shot."

DREAMS AND VISITS AFTER RECENT VIOLENT EVENTS

Several respondents correlated their visits with spirits and dreams about the conflict with the timing of actual conflict events, noting that these vivid experiences were only temporary. Some villagers even recalled memorable dreams that predicted conflict events which came to pass shortly thereafter:

- "Yes, I had nightmares about the conflict, but not since the MOU"
- "I always had nightmares right after a conflict event in my village."
- "I have nightmares whenever the security situation is bad."
- "I had a dream about the conflict that actually came true the next day."
- "I saw the spirits of people right after they were killed."

DREAMS ABOUT VIOLENCE AFFLICTING ONESELF

A range of responses to the question about nightmares recount dreams that echo many of the actual traumatic events reported in Table 2:

- "I have dreams of being raped."
- "In my dream I was beaten." or "I was attacked."
- "I had a dream that I was choked by a jin (mischievous spirit)"
- "In my dream I was chased / dragged around / stripped naked / tortured."
- "I worry / imagine that what happened in my dream will really happen to me or someone in my family."
- "I dreamed that I was shot, but did not die."
- "I dreamed that I was being chased by a crazy person."
- "In my dream I was skinned and burned."
- "I dreamed that I was trapped in gunfire."

TSUNAMI DREAMS

A few villages in the sample were coastal communities that lived through the tsunami disaster. But regardless of geography, nearly everyone in Aceh lost someone close to them on December 26th, 2004. Even though the second question mentioned the conflict in particular as a source of nightmares, still some respondents thought it was important to share their dreams about their losses in the natural disaster instead:

- "My nightmares are about the tsunami, not the conflict."
- "In my dream I was visited by my child who died in the tsunami in Banda Aceh."
- "I dreamed that a big wind destroyed my house."
- "I heard crying noises in the night-time, when the wind blows or when it rains."
- "I often dream about a big flood and I don't know where to find shelter or how to save my child."

PLEASANT VISITS WITH THE DECEASED

The question about dreams specifically uses the word "nightmare" (*mimpi buruk*), but when talking about dreams or spirit visitations from loved ones, a large number of respondents corrected the interviewer and emphasized that it was not a nightmare, but rather quite the opposite: "I dream about my husband and it is pleasing and beautiful, not a nightmare." Their comments suggest pleasure, comfort, wonder, and yearning for more visits with the spouses, children and friends they miss. When respondents told interviewers that their deceased brother or sister visited them to say thank you for a proper burial and to ask them to take care of surviving orphaned children, one might think through these visits therapeutically rather than pathologically, a process that perhaps helps bring closure to traumatic loss:

- "I saw the ghost and it was as if the person never died… it was so real… looked just like he did before he died."
- "I dream about my friend, he comes to visit me. He was shot in the 1990s."
- "I often dream about my husband who always asks me first about our children… it feels so real."
- "I met him in my dream and felt inspired because he was doing well."
- "It felt like my son came home, and we were talking with each other."

MANIFESTATIONS OF PERSONAL GUILT

Other dreams and visitations leave respondents with uncertainty or discomfort, not because of terror but perhaps because of unresolved feelings of guilt about debts unsettled, sins unforgiven, or deeds that may have directly or indirectly affected the loss of life during the conflict:

- "The ghost blamed me for not helping in his time of need."
- "The ghost had a message that death is painful, so do not sin."
- "The ghost asked me to pay my debts to him."
- "In my dream I heard the voice of someone crying for help."
- "In my dream the ghost blamed me for what happened."
- "I dreamed that I could not help my friend."

RELIGIOUS THEMES

Islamic imagery and instruction are significantly featured in the supernatural and dream worlds of Acehnese communities living in former conflict areas. It has already been described above how one spirit thanked his friend for providing his body with a proper Islamic burial. Another respondent recounted a spirit asking him to properly wrap his body in a *kafan* shroud, one of the procedures in a proper Islamic burial. Others recount being visited by deceased religious leaders of their community who remind them to pray regularly. Another told of a spirit reciting the *syahadat*, the Muslim confession of faith. Tsunami and earthquake dreams, filled with floods and the earth ripping open, remind Acehnese of *kiamat*, the Islamic concept of Judgement Day at the end of the world.

COMMUNITY MENTAL AND PSYCHOSOCIAL HEALTH

After answering a number of questions about trauma and mental health, respondents were asked a broad series of questions about mental health problems in their own communities and local resources available to address them. This section of the questionnaire began by asking whether respondents felt that there are mental health problems in their community related to the tsunami and / or the conflict, and if those problems are affecting the respondents or the respondents' families. The results are presented in Table 10.1 below:

Table 10.1 Respondent Perceptions of Mental Illness in the Community and at Home

	Male (n=315)	Female (n=281)	Pidie (n=237)	Bireuen (n=180)	Aceh Utara (n=179)	Total (n=596)
Do you think there are any mental health problems in your community related to the tsunami and and / or the conflict? (%Yes)	69	62	59	80	61	66
Those responding yes:	Male (n=218)	Female (n=175)	Pidie (n=140)	Bireuen (n=144)	Aceh Utara (n=109)	Total (n=393)
Do you feel that these problems have affected you and your family? (% Yes)	54	55	29	67	70	55
Number of people who gave descriptive responses about mental health problems within the family:	n=123	n=93	n=43	n=96	n=77	n=216

66% of all respondents think there are mental health problems in their communities related to the tsunami, the conflict, or both. The difference between men and women is not statistically significant, however the differences between all three districts are significantly different from each other. 55% of those who answered yes to the first question then reported that these problems affect either the respondent or the resopndent's family, with significant variation between districts: 29% in Pidie, 67% in Bireuen, and 70% in Aceh Utara.

Just over one third of the total sample gave descriptions of the psychosocial problems affecting themselves and their families. What is interesting about the responses to this question is the overwhelming number of answers that describe respondents feelings projected outward toward others who have been affected by the conflict or the tsunami. The plight of other victims is mentioned again and again as something that affects the respondent and the respondent's family. Respondents are moved to sadness, pity, fear, helplessness, and charity upon facing the conflict experiences of others, and they cite this—quite correctly—as psychosocial problems of their own. Starting with concerned feelings for others, the description of problems listed by respondents can be grouped into the following additional themes: psychological distress, daily hardships, changes in social relationships, and memories of what happened:

Concerned Feelings for Others

- Sadness for conflict victims
- Pity for conflict victims
- Feeling responsible for others' suffering
- Hard to think about or see other conflict victims
- Giving advice to others
- Afraid or bothered by others with mental illness
- Afraid to be a conflict victims: "when I see others, I can't think about what if that happened to me"
- Helplessness or inability to help others

Psychological Distress

- Still fearful or cautious (*was-was*)
- Shock
- Forgetfulness
- Physical weakness
- Fear of leaving the house, fear of going to work
- Frequently surprised
- Difficult thoughts
- Feeling sick with headaches
- Loss of spirit
- Constantly remembering what happened
- Passing out/ fainting (*pingsan*)
- Afraid to talk with other people
- Afraid of men nearby
- Not trusting anyone
- Hateful feelings
- Difficulty sleeping
- Can not look at the ocean (tsunami specific)
- Can not look at military or other security force uniforms
- Fear of crowds

Daily Hardships

- Caring for conflict victims in the family
- Difficulty earning a living/ worse employment
- Not enough money
- Physical health problems/ need medical assistance
- Stopped schooling
- Extortion
- Responsibility for supporting family alone
- Living with physical handicap
- Land destroyed/ land unfit for construction or farming
- Unfit housing/ Housing burned down
- No justice

Changes in Social Relationships

- Family member joined GAM
- Leadership roles more difficult
- Single parent homes

- Loss of trusted friends or family members
- Supporting / providing housing for conflict or tsunami victims
- Rumors of child kidnapping
- Fear of becoming a "meaningless person"
- Mistrust within the community
- Unhappy marriage
- More beggars coming to the door

Memories of What Happened
- Kidnapping in the family
- Torture
- Beatings
- Gunfire / shot in gunfire
- Hunted down by security forces

Respondents were then asked to tell us which groups in their community suffered the most from "stress or trauma related to the conflict." Respondents were free to choose as many groups they wanted, without rank, from the following groups: women, men, children, youth, former political prisoners, former GAM-TNA combatants, the elderly, conflict widows and widowers, and "other." The results are presented in Table 10.2 below:

Table 10.2 Respondent Selection of Groups in their Community Suffering Most from Conflict-Related Stress or Trauma

Which of the following groups in your community suffer the most because of stress or trauma related to the conflict? (%Yes)	Male (n=315)	Female (n=281)	Pidie (n=237)	Bireuen (n=180)	Aceh Utara (n=179)	Total (n=596)
Women	70	59	44	87	69	65
Men	84	77	70	94	81	81
Children	37	26	3	56	45	32
Youth	76	66	57	95	65	71
Former political prisoners	24	13	0	43	20	19
Former GAM-TNA combatants	32	18	2	61	22	26
Elderly	43	33	10	66	48	38
Conflict widows / widowers	37	26	4	66	35	32
Other	4	9	12	1	3	6

Since respondents were free to choose as many groups from the list as they wanted, each row in the table represents the percent of people who said "yes" to that category, but not at the expense of others. The percentages in each column therefore do not sum to 100%.

EXPERIENCES OF COMMUNITY LEADERS

The key informant interviews tell us a lot about the unique pressures faced by village heads, teachers, religious figures, and other community leaders in conflict-affected areas of Pidie, Bireuen, and Aceh Utara districts. From a psychosocial perspective the two most overwhelming themes to emerge about the experience of community leaders during the conflict are feelings of entrapment, and as a consequence of that, a reluctance to lead.

ENTRAPMENT (*TERJEPIT*)

The Indonesian word *terjepit* is perhaps more accurately translated as "squeezed" or "pressed," as if by tweezers or clamps. This kind of language occurs repeatedly when key informants discuss their role and experience during the conflict. Security forces on both sides of the conflict held village leaders responsible for the actions and sympathies of their community. In the Acehnese language, one religious leader in Bireuen described it as "*keuchik lageu boh sunti,*" village leaders are pressed like tamarind fruit under a stone. Others said village heads were "pressured from right and left," or "from up and down." Leaders felt they could never please everyone and always found themselves in trouble ("*serba salah*"). Another religious figure in Pidie explained that he was able to keep both sides at a distance by simply giving monetary contributions when GAM came asking for it and then again when Indonesian forces came to check in. But not all leaders avoided a more violent squeeze; village heads were frequently tortured for information about members of their community, others were killed in front of their families, who in one narrative from Pidie were then said to isolate themselves and suffered great psychological stress.

RELUCTANCE TO LEAD

Key informants again and again used the expression "*nafsi-nafsi*" (which generally means "personal" or "individualistic") to describe the effect of the conflict on people in their communities, which is to say that people were so busy ensuring the safety of their own lives and the lives of their families that they were unable to look out for the needs of the community. At worst, *nafsi-nafsi* implies selfish individualism without regard for others, but in reading the key informant interview transcripts one gets the impression that *nafsi-nafsi* was an unfortunate but understandably necessary consequence if ordinary people in these villages wanted to save their own lives during the conflict. *Nafsi-nafsi* had its most public expression with a reluctance of villagers to assume positions of leadership. In a setting of dangerous pressures from right and left, up and down, it is not surprising that many villages found it difficult to nominate leaders during the conflict. One 26 year old village head explained that all his predecessors lasted only a few months, unable to handle the difficult pressures of leadership, until the responsibility eventually fell upon him. Village heads in Aceh are almost invariably men, and conflict areas had a distinct shortage of them either because the men were fighting, had run away to save their lives, or had died. One region in Pidie is still known as *bukit janda* (widow's hill). Younger men suddenly found themselves in positions of leadership usually reserved for village elders, but such positions are even more dangerous for the younger men, as the questionnaire data above shows that young men in particular were the most likely group in the community to have violence committed against them. A 34 year old village head told his interviewer: "As a youth in the community [during the conflict], I was suspected of giving protection to GAM members." Since the peace agreement, younger men have been returning home and their experiences beyond Aceh convince the community to nominate them into positions of leadership. One 32 year old key informant was nominated for village head shortly after he returned from Malaysia following the tsunami.

ONE VILLAGE LEADER, TWO NATIONS (*"SIDROE GEUCHIK, DUA NANGGROE"*)

The story of a visit by the psychosocial research team to a village in Pidie neatly illustrates the aforementioned challenges faced by community leaders in Aceh during the conflict and their relevance to mental health. After spending a half hour in the village head's home choosing a random sample of houses for the questionnaire interviewers, the team leader went on to conduct three key informant interviews and the IOM coordinator went to the village café for informal discussions with village residents. The team leader first interviewed the village secretary, who explained that "the other villagers here are reluctant to become village leaders because they must face enormous outside pressures that deeply oppress and affect their mental health." Although his official role in the community was village secretary, he explained that he handles much of the work of the village head such as infrastructure development and youth activities because the village head "has a few health problems." The team leader's next interview was with a 33 year old former GAM combatant who told him that "the person who suffered most here during the conflict was the village head because he was sidroe guechik, dua naggroe," a single village leader managing the affairs of two nations, two governments, each of which made claims upon him. Meanwhile, the IOM coordinator, after explaining to villagers at the café that his research team was collecting information about mental health related to the conflict, listened to local residents' stories about their "crazy" village head. "Every now and then he disappears for a couple of days at a time," and "everyone knows that whenever he leaves like that he is having private episodes of prayer out in the wilderness, but no one understands what he is saying." "His family is used to it," and so was everyone else in the community, it seemed, as they told the story about him without fanfare, malice, or fear. Throughout the day, the research staff all saw the village head walking around the village, back and forth, as they conducted their interviews in different households, and he passed by the café several times as well.

The Pidie team leader's third key informant interview that day was with the village head himself, who was frank about his experience with mental illness. As they sat together in the village meunasah for 80 minutes, the team leader noted that the village head was presenting with many of the symptoms he described, such as restlessness and an inability to sit still. He always feels compelled to move, perhaps explaining his erratic walkabout through the village while the research team was there. He was quite aware that he behaved as a person with mental disturbance, and described his periodic episodes of hermitage when he behaves most strangely. Despite his illness, the community nominated him to be the village head, he said, because nobody else was willing to face up to both sides during the conflict. He was not afraid to assume the position, he explained, because he has deep religious knowledge. The community says he is "*pugo na'hu*," crazy because he would memorize and recite esoteric speech configurations in Arabic. Additionally, he knew some phrases in Javanese language and this was useful in his neogtiations with Indonesian security forces who considered him a friend for his effort. A few times he was accused of assisting GAM, and his village was under constant surveillance during the conflict, but he was always able to escape a violent fate when he spoke in Javanese. A visit to his community for only one day makes it difficult to assess causes and effects, but while the conflict may certainly have exacerbated the village head's mental health condition (as reported by others), perhaps this is a singular example in all of Aceh when mental illness may have had a protective effect on the village head's life and social status during the conflict years. This example shows how a community and an individual were able to strategically position mental illness into an unusually protective capacity.

EFFECT OF THE TSUNAMI

When asked whether they thought there were any mental health problems related to the tsunami, respondents reported in numbers consistent with the decreasing tsunami effect in districts from west to east (56 from Pidie, 46 from Bireuen, and 20 from Aceh Utara). Having just been administered several symptoms checklists, respondents answered this question with lists of those symptoms that they felt most closely resembled what they observed in their own communities, along with some descriptions of how those symptoms present. The following were the most frequently mentioned symptoms related to the tsunami:

- Loss of hope, spirit, and / or energy to live
- Laziness
- Reluctance to socialize, lonely
- Fear of the ocean and beaches
- Fear, trembling, panic and / or flight after every earthquake
- Crying alone
- Too many thoughts / thinking too much
- Can not bear to think about it
- Difficulty providing for family
- Facing problems at work

Some respondents noted that most people with these symptoms resolved on their own several weeks or months after the tsunami, and one tsunami survivor even said "No, because people came to visit and comfort me," suggesting not only that the worst trauma sustained during the tsunami has passed and communities are moving on, but that social support mechanisms are in place to address it. Several key informant interviews from tsunami villages in our sample mentioned that tsunami aid has ameliorated conflict-related stress and trauma: "With the tsunami assistance, the community began to relax several months later, as if the burden of conflict could be forgotten… the post-tsunami assistance put our community at ease." More politically-minded observers of the situation recognized the key role the tsunami played in bringing an end to the conflict and also bringing their relatives home: "After the tsunami and the improved security situation, along with many foreigners coming to work in Aceh, my son decided to come home again." Meanwhile, several questionnaire respondents from villages far from the tsunami-affected coastlines are cognizant of massive aid being delivered elsewhere, apart from their own conflict-affected communities, in spite of claims of assistance for conflict victims in the peace agreement.

RESILIENCE AND RESPONSE

Interviewers asked all respondents "In the past 6 months, have you done any of the following things to overcome bad experiences related to the conflict?" The list of possible responses is shown in the left column of Table 10.3. Respondents were

free to choose as many of these items as they wanted; each row in the table represents the percent of people who said "yes" to that category, but not at the expense of others. The percentages in each column therefore do not sum to 100%.

Table 10.3 Help Seeking Behavior During the Past Six Months

In the past six months, have you done any of the following things to overcome bad experiences related to the conflict? (%Yes)	Male (n=315)	Female (n=281)	Pidie (n=237)	Bireuen (n=180)	Aceh Utara (n=179)	Total (n=596)
• Talk about it with friend or family	36	34	18	56	37	35
• Visit a traditional healer / take traditional medicines	2	3	0	7	2	3
• Look for medical help	19	11	3	34	12	15
• Consult a mental health specialist	1	2	0	3	1	1
• Consult a religious specialist	23	11	8	34	11	17
• Prayer	71	70	47	92	81	71
• Sports/ Exercise	4	1	0	3	4	2
• Try to forget about the experience	17	15	5	17	29	16
• Move somewhere else	1	5	4	2	2	3
• Do nothing	6	6	0	5	15	6
• Other	2	2	1	1	4	2
• No "bad experience" (Not applicable)	23	26	53	6	4	24

Men are more likely to look for medical help (19% versus 11%) and consult a religious specialist (23% versus 11%). Women and men both seek succor in prayer (71%) and more individuals from Bireuen (92%) and Aceh Utara (81%) than Pidie (47%) feel the need to do so. 35% of people, women and men equally, and more from Bireuen (56%) and Aceh Utara (37%) than Pidie (18%), talked about mental health issues with friends or family. Only 1% of respondents sought help from a mental health specialist, reflecting a lack of both the availability of community based mental health services in Aceh and also the ability to pay for specialized medical care.

Respondents were also asked an open question about who helps take care of conflict victims that suffer from mental illness in their community. Almost half of the sample (280 respondents, 47%) took the time to give answers. The vast majority of responses say "families do it themselves" and often emphasize that "there is no other help for conflict victims with mental illness except for families themselves." A significant minority of respondents mentioned well known components of the Indonesian public health care system such as village midwives, *puskesmas* (sub-district level primary health clinics) doctors and nurses, district hospitals, and also the mental hospital in Banda Aceh, but this question was also an unanticipated opportunity for respondents to express their dissatisfaction with disparities in health care in Aceh. Common responses along these lines included versions of the following:

- "Only for those who can pay"
- "Not around here" or "there is no help here because of the conflict"
- "There is no NGO assistance here"
- "There is no government assistance here"

- "No one"
- "I have to take care of my sick relative all by myself"
- Expressions of hopelessness, giving up, or giving in to fate ("*pasrah*")
- Expressions of anger toward Acehnese elites

It is worth noting that in one village that was affected by the tsunami an NGO had opened up a trauma clinic for tsunami survivors in the community. Several respondents from this one village mentioned this clinic specifically as a resource in their community, again suggesting that more than 18 months after the disaster there is now disproportionate service coverage in tsunami areas when compared with the rest of Aceh.

When asked about resources in the community for addressing conflict-related mental illness, key informants gave answers that were entirely consistent with what questionnaire respondents said, but with more detail that suggests religious support is the next resort following family-based care. Also apparent from key informants is the *nafsi-nafsi* element described above, i.e. the conflict forced individuals and families to prioritize their own needs over the needs of their community.

- "There are no institutions nor even one person who cares about mental illness in the community, it all depends on families themselves"
- "No attention gets paid toward those with stres or trauma because no one is able nor does anyone have the opportunity because people are hardly able to take care of their own selves."
- "The community is unable and does not care about the fate of those with mental illness; if they get healthy again, they get healthy on their own."
- "His friends advised him to participate in prayer activities (*pengajian*) and in this way his condition stabilized over time and lately he has looked healthy again."
- "Community assistance comes only from the families of the sick and from *zakat* (religious charity)."
- "Those who have mental illness are only treated by their families and by attending prayer groups (*pengajian*)"

TRADITIONAL MEDICINE IN ACEH

An important bias to consider when reading Table 10.3 is that many of the psychosocial research staff were mental health nurses, which may have an effect on how respondents answered this question. The remainder of the research staff were lecturers from Syiah Kuala University in Banda Aceh, which is to say that they were highly educated urban elites. Qualitative ethnographic research suggests that the use of traditional healers in Aceh is far more widespread than the table above suggests, but questionnaire respondents were likely reluctant to mention it in front of medical professionals and urban elites because both groups are perceived by rural communities as modern rational citizens who look down on "backward" village ways. Only two key informant interviews made specific mention of traditional medicine as an option for treating mental illness. A key informant in Aceh Utara mentioned that families usually treat the mentally ill on their own but that they can drink water boiled with the nest of red ants as a medicinal treatment. Another informant from Pidie told his interviewer that patients with mental illness are usually brought to the traditional healer in a neighboring village.

Healers in Aceh are usually referred to as either *tabib* or *dukun*, and there is regional variation as to which term is preferable. There is no formal organization, training or codification of practice for healers in Aceh. Each one works independently of others, but knows about the others and their specialties in order to make referrals. Healers are neither competitive with one another nor with the *puskesmas* system, for they acknowledge that every healer has their specialty and that many medical conditions are more appropriately addressed at the *puskesmas* (such as open wounds, vomiting, and diarrhea). They learn their skills either as an apprentice to a predecessor, or their skill is passed down through a family lineage. Most practice involves detailed knowledge for the collection, preparation, and application of local plants and food products into a compress or drink. All the healers interviewed by the IOM coordinator had a special ability to bring an Islamic element to bear on the treatments they prepare and give to their patients. The Acehnese language verb *ngerajah* comes closest to the meanings associated with English words such as "mantra," "offering," or "blessing." *Ngerajah* usually involves the recitation of a koranic verse upon either the preparation or administering of a healer's medicine. No healer in Aceh would dare claim to have a healing hand, rather they have the ability to call forth and channel the healing hand of God. Healers address both physical and spiritual illnesses, ranging from bone-setting and persistent gastritis to spirit possession and the casting out of black magic spells that cause illness. The

healer interviewed by the IOM coordinator in Bireuen had anywhere from three to twenty patients a day. Some patients come from distant parts of Aceh and beyond based on word of mouth. Patients stay in the home of a healer for an average of five days, but sometimes as long as three months, receiving constant attention while they are there. Patients rarely pay with money, but with goods in kind, and it rarely matches the value of the fees paid to doctors in medical clinics.

Many people in Aceh use clinical and traditional services side-by-side for the treatment of one illness. It is not uncommon to visit the local healer first because it is easier than traveling to the clinic. Patients might also visit their local healer either on their way to the clinic or on the way home, because his or her treatment could not possibly hurt and has the added benefit of addressing the spiritual side of illness lacking in the pills they get from the pharmacist. Villagers in Aceh have very clear ideas about which illnesses require going only to the clinic, which illnesses can use both, and which ones require going only to the healer. A young woman who recently graduated from high school mentioned that from her lessons at school she knows how medicine works biologically, how the scientific method demonstrates the efficacy of modern medicine, but she nevertheless felt that the healer offered a comfort and familiarity that goes a long way toward a more positive outcome than a visit to the clinic. She went on to say that a visit to the clinic only reinforced her sense of illness, reminding her that she is sick, and for the short term makes her feel worse. When pills do not work, her frustration increases because she worries about side effects. She cannot explain why, and it surprises her every time given what she has learned in school, but the healer has greater success with her health needs than the *puskesmas*.

There are at least three features of traditional healing practices in Aceh that may contribute to perceptions of its efficacy. First is the time spent by healers with patients, lasting anywhere from one evening to several months. *Puskesmas* patients frequently complain that the attending doctor or nurse spends only five or ten minutes with them, and sometimes do not even perform a physical examination. Second is the proximity to home. Most patients can find a healer in their own community and the familiarity between healer and patient ensures more careful attention and comfort. Third is the religious and spiritual element. Clinical settings are distinctly divorced from Islamic practice, whereas the healing hand of God, administered through home remedies prepared under the recitation of koranic verse, removes the kind of uncertainty that usually accompanies the generic and frequently misunderstood pills handed out at clinics.

Three members of the IOM psychosocial research team interviewed a well-known traditional healer for mental illness in Bireuen. He distinguished conflict victims from the black magic cases he treats, and told us that most of the patients he sees could rightfully be categorized as conflict victims, suspecting that their symptoms came from excessive beatings to the body. He himself sustained beatings to his head from the back end of a firearm during a sweeping operation in his village. At that time he was told to close his house to patients, an order he obeyed for 20 days before re-opening. Conflict victim patients can be distinguished from other kinds of patients he sees because they are usually able to still recite Islamic prayers without disturbance while his black magic patients tend to resist prayer. He claimed to have treated both GAM and KOSTRAD (Indonesian special forces) soldiers during the conflict. The number of his patients has increased since the signing of the peace agreement because ordinary civilians have more liberty to travel. He has two apprentices to help him and a new building next to his house was currently under construction to house additional patients, particularly psychotic patients who might be violent to others.

COMMUNITY OPINIONS: WHAT SHOULD BE DONE?

After questionnaire respondents and key informants were asked to describe some of the common mental health and psychosocial problems in their communities related to the conflict, they were asked about what they think should be done to help the people who have these problems. Key informants were asked the same question. Just as with the question which asked respondents about who usually cares for people with mental health problems in the community, respondents took an unanticipated opportunity to vent their frustrations and anger against the government and against the two opposing forces during the conflict. A second major thematic response to this question, especially from the key informants, was an unambiguous demand for post-conflict material assistance. Most people in these communities, not unlike tsunami survivors along the Aceh coast, recognize the therapeutic value of rebuilding their destroyed infrastructure and livelihoods, getting back to work, and moving on. Other themes that emerged from this question were particular suggestions for medical assistance, religious support, and improved social engagement in the community for the mentally ill. Finally, some respondents expressed hopelessness or surrender to fate, while others expressed ungeneralizable personal requests (e.g. "Find my husband!")

Expressions of Frustration / Anger, Demands for Justice

- "More attention should be paid to conflict victims and their communities."
- "I could not go to the puskesmas / government."
- "I have no idea because we have never had any help for anything before."
- "No more murders in this community!"
- "Execute the perpetrators of these crimes"
- "The government must address the crimes and violations committed during the conflict."
- "Both sides of the conflict need more self control / need to return to their senses."
- "End the conflict for good." Or "Maintain the peace."
- "I am praying for NGO assistance here."
- "We need more information about what's going on with the peace process."

Material Assistance

- Socioeconomic assistance
- Housing assistance
- Micro-credit programs
- Vocational assistance
- "Fix the roads!" and other infrastructure improvements
- Land rehabilitation and other agriculture reconstruction
- "Tractors" and other capital inputs

Medical Assistance

- "We need easier access to medical services."
- "We need health outreach into our community" or "Doctors should be coming to our village."
- "Build a mental hospital closer than Banda Aceh."
- "Financial aid for medical care."
- "Give patients better treatment in the clinics and hospitals."
- "We need more medicine.""We need regular/ consistent medication.""We need correct medicines." And also "We need free medicine."
- "We need therapy/ counseling."
- "We should be visiting traditional healers"
- "Mental health patients should receive treatment immediately before their conditions worsen."
- "Go to the trauma center" (specific to one tsunami-affected village only that had a trauma center)
- "We need more helper clinics" (i.e. satellite *puskesmas*, aka "*puskesmas pembantu*" or "*pustu*")
- Transportation assistance for medical services
- "Treatment for the mentally ill requires the role of an NGO that will more actively socialize and take action. Don't just wait for patients to come for medication."

Religious Support

- Prayer groups for the mentally ill (*pengajian*)
- Individual prayer
- Put one's fate in God's hands ("*tawakkal kepada Allah*")
- "Treatment for the mentally ill should be accompanied by the support of religious leaders in the community."

Improved Social Engagement

- "Do not leave the sick alone." Accompaniment for the mentally ill.
- "Give the mentally ill spirit/ hope to live."
- Frequent gatherings with friends and neighbors
- Joining in with daily activities
- Sharing experiences with one another. Talking with close relatives and friends.
- Create a special institute (*lembaga*) for the people's aspirations
- Spend more time at the village café
- "They need support and direction."

Helplessness

- "We are just helpless villagers."
- "They can not help themselves."
- "Assisting the mentally ill should be the task of experts. We can not fool around with the souls of others."

COMMUNITY PERCEPTIONS OF NGOS AND PUBLIC HEALTH SERVICES

Several of the comments above mention outreach and an interest in having non-governmental organization (NGO) support for developing community-based mental health services. The questionnaire included two questions about interest in NGO services, designed also to measure preference in local implementing partners, i.e. the Indonesian government or GAM, which now operates in Aceh as a civil society organization. The results are presented in Table 10.4 below:

Table 10.4 Opinions about NGO Mental Health Services and Implementing Partners

	Male (n=315)	Female (n=281)	Pidie (n=237)	Bireuen (n=180)	Aceh Utara (n=179)	Total (n=596)
If an outside NGO offered you or a member of your family mental health assistance, administered through GAM, would you accept it? (%Yes)	68	51	64	65	50	60
If an outside NGO offered you or a member of your family mental health assistance, administered by the Indonesian government, would you accept it? (%Yes)	51	52	74	35	36	51

Overall, conflict-affected communities slightly prefer NGO services administered in collaboration with GAM over the Indonesian government, but this difference appears largely driven by the responses given by men. Women equally accept NGO services administered by the Indonesian government or GAM with 52% and 51% approval rate respectively, but what stands out is the difference between male (68%) and female (51%) support for GAM services, perhaps reflecting men's perceptions of how they were treated by Indonesian security forces during the conflict. In either scenario, a majority of respondents support the delivery of mental health services in their communities. This opinion is more unanimously expressed in the key informant interviews; community leaders almost invariably and very enthusiastically supported "any kind" of NGO assistance in their villages.

Table 10.4 above is a starting point for discussions about community perceptions about existing public health services. Only 35% and 36% of respondents from Bireuen and Aceh Utara respectively would avail themselves of NGO services if they were administered by the government. Most people, when asking for NGO assistance, ask for direct assistance, not through the government, which is perceived as "project minded," where the word "project" (*proyek*) has come to mean an opportunity for bureaucrats to play with budgets for personal gain. Key informant interviews conducted by the IOM Coordinator, and Harvard and Syiah Kuala research teams revealed a strong mistrust of *puskesmas* clinics and other government health services. *Puskesmas* clinics during the conflict were at times sites for security forces on either side to collect information about local populations, placing doctors and nurses in the same difficult positions described by community leaders. Some sub-district level military posts were built right next to clinics, ensuring that people would not use them even if they lived nearby. In most former conflict communities, health services simply were not available because these areas were cut off and isolated from

them. Recall that the most common answer to who treats mental health problems in respondents' communities were the families of the sick themselves. One of the key informant quotes from above bears repeating here: "There are no institutions nor even one person who cares about mental illness in the community, it all depends on families themselves."

Poverty, of course, is another barrier to accessing health services, even from inexpensive government clinics once transportation costs from remote villages are factored in. Indonesians can get free medical service through the national health insurance program but only with proper referral letters that verify poverty status from village heads, sub-district offices, and even district offices if secondary referral is required at the district hospitals. Upon procuring these letters, the insurance needs to be acquired from the insurance office, then patients must return to the primary clinic nearest one's home village for proper movement through the referral network. The entire process, including transportation, probably costs as much if not more than a simple fee-for-service visit to the clinic, and for all that cost and effort, most patients would prefer using their money for private clinics.

PUBLIC HEALTH PROVIDER PERCEPTIONS OF CONFLICT-AFFECTED COMMUNITIES

While research teams conducted their interviews in randomly selected villages, the IOM Coordinator would usually visit the nearest *puskesmas* to meet with local health personnel. Like village leaders, health staff are responsible and held accountable for certain needs of their surrounding communities, and so inevitably found themselves in extremely difficult positions caught between both sides during the conflict. On the one hand, *puskesmas* staff, as government employees, are expected to deliver reports and other information about their communities to any number of government agencies, sometimes under duress. On the other hand, GAM was known for regularly extorting health personnel on salary payday, and occasionally kidnapping doctors and nurses to treat injured men in the forests and other hideouts. Like school teachers, many health staff understandably stopped reporting to work, effectively shutting down health services throughout most "black areas" of Aceh. It is not surprising then that the IOM Coordinator found a pronounced lack of knowledge about conflict issues and conflict areas among *puskesmas* staffs—the less they knew, the less they would be held accountable to either side. Most *puskesmas* have re-opened since the peace agreement, and some destroyed satellite health clinics are slated for reconstruction within the next few years, but health staff still do not conduct outreach into former conflict areas, and like many urban Acehnese remain apprehensive about the security conditions there.

CHILDREN AND YOUTH

The questionnaire designed by the psychosocial research team does not systematically address the experiences of children and youth because a study of children's issues requires particular ethical and methodological considerations. But it is worth noting in Table 2 above that 7% of all respondents (9% in both Bireuen and Aceh Utara) report violence against children as a problem in the post-conflict landscape. Table 10.2 shows that 32% of all respondents (56% and 45% of residents in Bireuen and Aceh Utara respectively) cite children as a group that suffered most during the conflict. 71% of all respondents (95% of residents in Bireuen) cite youth, echoing the individually reported indicators that show young men typically suffered the greatest amount of physical violence. Nearly all key informant interviews affirm this community perception about young men. One community leader told his interviewer that he encouraged young men to leave Aceh until the conflict was over.

A number of key informants mentioned the burdens placed upon children during and after the conflict. A 28 year old youth leader in Pidie, for example, reported that conflict activity in his village dates back to when he was still in elementary school, recalling on several occasions finding dead bodies placed in the village *meunasah*. Most key informants took the time to mention that education for children was entirely disrupted during the conflict years; mothers wisely keeping their children home from school whenever gunfire was heard in the vicinity. Dozens if not hundreds of village schools were burnt down all over Aceh during the conflict, and teachers from the towns stopped traveling to the dangerous areas where they taught. Religious education (*pengajian*), usually held in the evening, was also disrupted due to nightly curfews. Today leaders in Aceh are wondering why the children of Aceh score so low on national standardized tests and fail to pass graduate exams.

Young children in remote villages are still frightened when they hear vehicles enter the community. All three psychosocial field research teams witnessed children fleeing when their vehicles approached. During the conflict, the only vehicles ever to go in and out of these communities were security forces. What remains troubling is that these fears are not just hangover reactions from the conflict. First the Bireuen team, and then the Aceh Utara team were surprised to hear key informants mention rumors

that child kidnappers in dark vehicles were striking their communities. At a café where elementary school students stopped to watch cartoons on their way home from school, the young woman who served coffee and snacks asked to see the researchers' ID cards and letters of permission to conduct psychosocial research in the village. "They seem like nice people just like you," she told the researchers suspiciously, "but then they take our children." Perhaps not unrelated, one questionnaire respondent mentioned twice the recent appearance of village peddlers in his community and other nearby villages who do not speak Acehnese. To be sure, these are all unproven rumors, but their veracity is beside the point. Rumors are good indicators of social uncertainty and reveal enduring concerns about threats to the community from outsiders.

ON THE PEACE PROCESS

Simultaneous opinions of both praise and doubt were shared with all interviewers when asked about the peace process. The first thing worth mentioning is that communities define or feel "peace" as an opportunity to work, travel, and socialize again. For example, beatings to the body during the conflict were most often experienced in ordinary settings of the village, especially on journeys to and from the market for trade. Now Acehnese villagers can bring their goods down to market without fear of extortion along the way, and can bring back household supplies without being accused of providing soldiers from either side with logistical support. Key informants often describe this as "freedom" and even "independence" (*kemerdekaan*), a term loaded with nationalist fervor for Indonesians and a crucial demand that was dropped from GAM's platform upon signing of the peace agreement in Helsinki. Other daily activities that define a sense of peace for respondents are the ability to travel in the evening, to socialize in groups in public settings (especially village cafés), and to return to farm lands and forest gardens for agricultural livelihoods.

Table 10.5 below summarizes respondent answers to questions related to the peace process in Aceh. No one gave "disagree" or "strongly disagree" answers to a question which asked respondents' opinions about the peace process since the signing of the treaty in Helsinki on August 15th 2005, and a vast majority (78%) said they "strongly agree" with the process.

Table 10.5 Attitudes Toward the Peace Process

	Male (n=315)	Female (n=281)	Pidie (n=237)	Bireuen (n=180)	Aceh Utara (n=179)	Total (n=596)
What is your opinion about the peace process since the signing of the MOU? (%Yes)						
Strongly agree	85	70	70	94	73	78
Agree	15	30	30	6	27	22
Has there been a peusijeuk or other ceremony held in your village for former political prisoners or former GAM combatants that have returned to the community since the signing of the MOU? (%Yes)	35	21	29	39	17	28
If so, Have you attended or participated in these events? (%Yes)						
Never	42	63	74	28	31	52
Rarely	18	10	6	25	19	14
Often	18	13	13	16	24	16
Always	15	4	6	18	7	10
Don't Know / Refuse	6	11	1	13	19	8

A *peusijeuk* is an Acehnese ceremony usually held after turbulent events; the term (from *sijeuk*, the same as the Indonesian *sejuk*, meaning "cool") literally suggests a "cooling off," a metaphor denoting the calming of emotions. *Peusijeuk* can be either collective village events or private events held in indvidual homes. Since the peace agreement, villages and families all over Aceh have been organizing *peusijeuk* events to welcome home amnestied prisoners and former combatants, and can be used as one measure of post-conflict reintegration. It is hard to interpret the statistics about *peusijeuk* in Table 10.5 because little is known about how this ceremonial practice varies between districts or even between villages, but in general nearly one third of all respondents acknowledged *peusijeuk* in the communities after the peace agreement. Many respondents noted that they did not know about or did not attend *peusijeuk* in their own communities because they suggested it would be a family affair rather than a communal one. A closer look at the participation in *peusijeuk* activities by gender and region suggests that *peusijeuk* are acknowledged by men more than women and perhaps are more prevalent in Bireuen and Aceh Utara over Pidie.

Table 10.5 shows that respondents overwhelmingly support the peace process in general. Nevertheless having lived through the failure of peace agreements in the past, several concerns were expresssed. Both questionnaire respondents and key informants were asked about their opinion of the current peace process, problems and challenges with the implementation, and suggestions for moving forward. Several consistent themes emerged that raise doubts and concerns among the residents of former conflict areas:

- "When AMM leaves, we are worried that the conflict will resume again." Many respondents expressed concerns not just about what will happen when AMM leaves, but the entire community of foreigners who have arrived in Aceh since the tsunami. (e.g. "When the foreigners leave, there will be problems.") The very presence of people from all over the world working in Aceh since January 2005 has played an important role, albeit indirect, in achieving and maintaining peace in Aceh.
- Several respondents and key informants noted an increase in crime in recent months.
- Unequal distribution of assistance for Acehnese. There were two major stand-out examples that villagers cited to mark unfair aid assistance in Aceh. The first example was the disproportionate aid delivered to tsunami areas while heavily damaged conflict areas remain neglected. The second example was the unequal distribution of village fuel subsidies from the government. Village heads were held accountable for giving the government's cash assistance to close friends and family instead of the poorest people who needed it the most. One respondent said forthrightly: "There is a crisis of trust in our village leaders."
- Many respondents were concerned that GAM and the Indonesian government might not stick to the agreed upon terms of the MoU. Examples cited were the delay in the drafting of a regional autonomy law, the absence of assistance for civilian conflict victims, a failure to adequately socialize the peace process throughout Aceh, and the looming question about local elections. Many respondents registered their hope that both sides will remain ethical and faithful to the letter of the peace agreement.
- Finally, for some there still remains non-specific fears that linger because of memories about failed peace efforts in the past, or perhaps also an unshakeable unease sustained during the conflict:
  - "I am worried that there are elements in society that are still interested in maintaining the destruction and conflict."
  - Until now many people in the community are still afraid to work in their fields, gardents, and forests.
  - "After the peace, we are still worried, still unsure."

RECOMMENDATIONS

The following are recommendations based on the data presented above, the experience of conducting field-based psychosocial research, and discussions with colleagues at district health offices, *puskesmas* (primary health care centers), and the mental hospital in Banda Aceh.

THE COMMUNITY MENTAL HEALTH NURSING PROGRAM

Shortly after the tsunami, the World Health Organization, in collaboration with the Provincial Health Office in Banda Aceh and the University of Indonesia's nursing program in Jakarta, developed a novel curriculum to train *puskesmas* nurses in community mental health nursing (CMHN). The program also included refresher courses on basic psychiatry and prescribing protocols for general physicians from the same *puskesmas*. Funding was directed first toward tsunami-affected sub-districts along Aceh's entire coastline. Nurses were taught how to treat some of the major acute psychiatric disorders in a curriculum that also emphasized basic nursing care for the mentally ill and family education. Their job as CMHN includes active outreach into communities for case identification, family education, treatment, and referral for complex cases beyond their skill. Selected nurses were provided initially with the foundational course, the first of three. The intermediate course has so far only been implemented in a few sub-districts of Bireuen; it includes a broad community educational component, training CMHN nurses to conduct more intensive outreach with entire villages, focused on early detection, and basic counseling skills. If the basic, the intermediate, and eventually the advanced CMHN training program is successful, it would serve as a model for community-based mental health services throughout Aceh and all of Indonesia. Continued support for this program currently comes from the Asian Development Bank.

The CMHN program is an ideal infrastructure with which to collaborate with the Indonesian Ministry of Health in Jakarta and the Provincial and District Health Offices in Aceh in creating community-based mental health services for former conflict areas. To date, the CMHN program is still in initial phases and has not been extended to interior districts, and the budget for nurse transportation is rarely enough for travel to the more remote villages that suffered the greatest effects of the conflict. However, the CMHN program's emphases on community outreach and education are precisely the kinds of activities that will be required to reintegrate conflict areas into the health care system and to bridge longstanding gaps in trust and understanding between conflict victims and health personnel. Any future intervention for conflict-affected communities should collaborate with CMHN nurses and their coordinators at the nearest District Health Office.

MENTAL HEALTH OUTREACH TEAMS FOR CONFLICT-AFFECTED COMMUNITIES

The Psychosocial Needs Assessment described here has identified an urgent need for immediate mental health and psychosocial services to communities most affected by the conflict. These communities are often remote and largely beyond the reach of current health services, and both impoverishment (associated with the conflict) and mistrust of formal government-based health services constitute barriers to providing care. Yet members of these communities suffer extremely high rates of both physical injury and mental health problems resulting from violence and forced evacuation of their communities. Specific outreach services are thus urgently needed to provide immediate care and to build bridges between these communities and the newly developing community mental health services.

We recommend that district-level mental health outreach teams, based on the model of IOM's ICRS mobile medical teams, be established to provide immediate medical and psychosocial services to villages in the subdistricts most affected by the conflict, and to help bridge the gap of trust between conflict-affected populations and the newly developing mental health services being established in the primary health care system. These teams should provide clinical and community mental health services, including community-based trauma support activities, as well as general medical care aimed at meeting the most urgent needs in these communities. They should be designed neither as a 'parallel' service system nor as permanent services, but as transitional services to meet immediate needs of conflict-affected communities and to reestablish linkages

between these communities and public health services. From the outset, CMHN's should be included on the outreach teams to facilitate the development of such linkages.

IOM has been assisting the Indonesian government with post conflict reintegration activities since the first prisoners were given amnesty just days after the peace agreement was signed in August 2005. Since the opening of ten ICRS (Information, Counseling and Referral Service) offices throughout Aceh, IOM has been collaborating with local district authorities on a variety of reintegration issues, including medical and psychosocial health. ICRS staff have been conducting extensive outreach into former conflict areas, and as such IOM is ideally positioned to initiate community-based trauma support programs in the most seriously affected conflict areas of Aceh.

An IOM mobile medical team's visit to the mountain interior village of "Cot Pinang" (a pseudonym) demonstrated how community-based psychosocial outreach might work and what it could look like. An Acehnese psychiatrist, the district-based ICRS general physician, and a nurse, along with members from the psychosocial research team from Harvard, IOM, and Syiah Kuala University, traveled to Cot Pinang village to hold a mental health clinic in the *meunasah*. ICRS staff informed village leaders in advance so that those who most needed treatment would be able to plan ahead to attend. Dozens of people gathered in the *meunasah*, and one by one, people sat with the psychiatrist, described their symptoms, and told their stories of conflict-related trauma. Basic evaluations were conducted, some medical treatments initiated, and many referrals were made to *puskesmas* clinics for follow-up care. Approximately 50 patients were seen over the course of a long afternoon. The visit by the Mobile Medical Team became a kind of community ritual, with members of the community testifying to their experiences during the conflict with the medical team as well as the research team. This event provided data concerning the urgent need for mental health services in villages like Cot Pinang. It also suggested that members of affected communities like Cot Pinang recognize the importance of stress, trauma, and mental illness, that they desire and are willing to engage in mental health evaluations and clinical interventions, and that mobile services have the capability to provide access to care for persons most deeply affected by the conflict. Data from the study reported here also suggest that services limited to evaluation and referral will be ineffective, and that such teams need to initiate clinical care and treatment, provide transitional follow-up care, and over time build linkages to the *puskesmas*.

The visit to Cot Pinang suggests that IOM should pursue the mobile outreach model, given the ICRS offices' prior outreach into some of the most damaged communities in Aceh. Outreach teams as part of a transitional program of health services should certainly include CMHN nurses from nearby *puskesmas*. Integration of these two programs from the very beginning could facilitate re-entry of health personnel into long isolated regions of Aceh and initiate caseloads for follow-up by these CMHN nurses at the nearest clinic. IOM is in an excellent position to help bridge the gap of trust between conflict-affected populations and the health services that estranged them for so long and should explore the possibility of initiating such a program.

FAMILY OUTREACH PROGRAMS

The data reported in this survey, as well as nearly all mental health research in Indonesia, show that families constitute the most important local resource for providing care to those with mental illness. Most persons with severe mental illness live with their families. Persons suffering depression and symptoms of traumatic experience depend on their families as a primary source of support and care. Community mental health outreach should thus be family oriented, helping provide families with skills for supporting or caring for those suffering mental health problems in a more effective way. We recommend that programs of family support and education be developed as part of the initiation of mental health outreach teams.

EVALUATION AND COUNSELING ON HEAD TRAUMA

One of the most dramatic findings of this research suggests that the incidence of physical head injury during the conflict years was incredibly high, particularly among young men. We recommend that a program of training, clinical interventions, and research should be initiated, focusing on evaluation of organic head trauma and its neuropsychiatric effects. A starting point for this kind of work might begin with the ICRS doctors who have already established relationships with the direct beneficiaries of IOM's Post Conflict Programme as well as the surrounding communities. These doctors can be trained to incorporate some simple neuropsychiatric evaluation methods into their routine work with amnestied prisoners, former combatants, and ordinary conflict victims. Focus on head trauma should also be built into the work of the mental health outreach teams as well as the CMHN program. Where treatment is possible, physicians or community mental health nurses should be trained

to initiate treatment. Where treatment is unlikely to be effective, families and affected individuals should be counseled on the effects of head injury and ways to accommodate resulting disabilities. A counseling tool should be developed to teach those with head injuries and their families how to understand effects of such injuries and how to live with any long-lasting outcomes. Difficult cases should be referred for more advanced neurological and nueropsychiatric evaluation and treatment. This will require training of specialist psychiatrists and neurologists to evaluate complicated cases and provide advanced care. In addition, neuropsychiatric testing should be made a part of forensic evaluations of former prisoners, combatants, or community members affected by violence who are charged with routine crimes.

INTEGRATION WITH OTHER HEALTH SERVICES

Mental health outreach can and should be integrated with other medical outreach services in Aceh. People living in the villages most damaged by conflict activity are suffering from all kinds of lingering maladies sustained during combat or torture – gunshot or knife wounds, paralysis, lost limbs, eye and ear injuries, as well as head injuries. A total lack of health services during the conflict means that children have not had their immunizations, mothers have not had adequate pre and post natal care, and easily treated infectious diseases such as tuberculosis and malaria have not been attended. While focusing on mental health care, the mobile medical services recommended should also be designed to meet urgent medical needs and begin to reinstitute public health services as well.

INTEGRATION OF PSYCHOSOCIAL AND LIVELIHOOD DEVELOPMENT PROGRAMS

Findings of the Psychosocial Needs Assessment make it clear that mental health problems go hand in hand with economic problems associated with the conflict. This is particularly critical in communities which suffered forced evacuation of their villages or systematic destruction of basic infrastructure. This study provides powerful evidence for the need for mental health services. On the other hand, our research suggests that the mental health programs and economic and infrastructure aid programs should go hand in hand. Mental health programs are unlikely to be successful in the absence of investment in rebuilding local economies. On the other hand, mental health interventions and livelihood programs may interact synergistically, with mental health programs providing a multiplier effect on the benefits of livelihood programs.

THE IMPORTANCE OF INNOVATION AND EVALUATION

Managing mental health and psychosocial problems associated with complex trauma in relatively isolated settings with limited access to mental health care is extremely challenging. It should be explicitly recognized that there is no single therapeutic modality which is certain to be effective and sustainable. Instead, a commitment should be made to developing innovative therapeutic programs in selected settings, to documentation of each program, and to careful evaluation of the efficacy of therapeutic approaches. Evidence from other settings suggests that group therapy approaches to the treatment of depression, Cognitive-Behavioral Therapies incorporating local relaxation approaches (including Islamic meditation practices), dance therapies drawing on local cultural forms, family support groups that include psychoeducational components, school-based programs for children and adolescents, as well as standard pharmaceutical approaches are potentially valuable approaches for the Acehnese setting. But unless programs aimed at providing innovative solutions to trauma-related mental health problems are systematically evaluated, it will be difficult to assess the efficacy of particular approaches. We recommend that the need for innovative service development be explicitly recognized, and that exploratory service approaches be systematically developed and evaluated.

LOCALIZED IMPLEMENTATION

Innovative approaches to developing therapeutic programs in former conflict areas of Aceh require additional research at the local level. A random sample assumes a random distribution of violence, but the regional differences between Pidie on the one hand and Bireuen and Aceh Utara on the other suggest that conflict violence in Aceh was hardly random. The results of this assessment are merely the first step toward developing targeted services for specific communities, recognizing that every region in Aceh experienced the conflict differently due to variable population dynamics, economic resources, and geographies. Different conflict histories across Aceh are likely to produce different psychosocial and mental health needs. Every innovative therapeutic intervention developed for local implementation should attend to these differences.

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