

# Development and Evaluation of Mental Health Interventions for Common Mental Disorders in Post-conflict Settings



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**Abstract** This chapter explores the development and evaluation of mental health interventions for common mental disorders (CMDs) during the prolonged post-conflict phase. The chapter considers the selection of interventions to deal with the important combination of mental disorders typically common during this time and serious enough to affect functioning. These disorders are depression, anxiety, PTSD and/or substance abuse which are often co-morbid. Adaptation of interventions developed in one culture to another is also discussed as a prolonged and ongoing process during the pretraining, training, and implementation phases. The chapter concludes with discussion of program evaluation. Evaluation of effectiveness of mental health interventions refers primarily to impact on symptoms and functioning but also includes effects on stigma and discrimination, costs of receiving the intervention, and mortality. Other areas of program evaluation are also described – fidelity, access, uptake, and compliance.

**Keywords** Design · Adaptation · Intervention · Monitoring · Evaluation · Effectiveness · Fidelity · Access · Uptake · Compliance

## Introduction

The term ‘post-conflict’ is used to refer to a variety of different periods. It can refer to the period immediately after cessation of fighting, when conditions are usually poor and unstable, and/or to the prolonged and relatively stable period that usually follows. Conditions during the latter period may vary: There may be recovery or partial recovery of the situation prior to conflict or a static situation without real improvement as experienced by many refugees living in camps for years at a time. The mental health needs and appropriate services during the immediate unstable phase and the prolonged stable phases are very different. Briefly, the immediate

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N. Morina, A. Nickerson (eds.), *Mental Health of Refugee and Conflict-Affected Populations*, [https://doi.org/10.1007/978-3-319-97046-2\\_18](https://doi.org/10.1007/978-3-319-97046-2_18)

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post-conflict phase will see many people exhibiting mental health symptoms which may be normal reactions to threat and difficult circumstances rather than evidence of mental illness. For example, refugees displaced by conflict and separated from family with little income and uncertainty about their future may experience sadness, loss of interest and ability to experience pleasure, weight loss, nervousness, and many of the other symptoms of depression and anxiety. In such cases the best first 'mental health treatments' would be the normal humanitarian and development aid that aims to correct as many of the situational concerns as possible, with the expectation that many symptoms will then resolve. Once the situation improves or at least stabilizes, mental health treatments can be implemented for those who continue to exhibit symptoms. Therefore, this chapter primarily deals with the development and evaluation of such mental health treatments during the chronic and stable post-conflict phase.

### ***Which Problems to Address***

In the past the conventional wisdom was that the primary mental health problem of populations experiencing conflict is PTSD resulting from traumatic experiences. However, conflicts tend to occur in settings where the population is also poor and under stress. Even in cases where this is not so before the conflict, the conflict itself tends to produce these conditions, which usually outlast the fighting. The result is that populations in post-conflict settings have not only had experiences of violence but are typically also under current financial and social stress and often ongoing danger. These multiple stressors result in various mental health problems. Studies to date suggest that, while PTSD does occur in these populations, the priority mental health issues in these contexts are depression, anxiety, and substance abuse related to the *current* situation and sundry other stresses which may vary by population (e.g., Miller, Omidian, Rasmussen, Yaqubi, & Daudzai, 2008). Multiple problems in the same person (i.e., comorbidity) is very common (e.g., De Jong, Komproe, & Van Ommeren, 2003). Among studies by the author in many post-conflict settings, presentation with a single condition is rare (e.g., Bass et al., 2013; Bolton, Bass et al., 2014; Bolton, Lee et al., 2014). Therefore, mental health programs for post-conflict populations must be prepared to focus on combinations of problems among both the population and individuals.

The choice of problems to address should be informed by their public health importance, which is a function of prevalence and severity. This approach suggests that both common and severe problems should be addressed. Severe cases are important because of their impact not only on the individual but also families. This impact on family is felt mainly as stigma and reduced function. The stigma associated with a severe mental disorder appears to be universal and substantial: Those with the disorders are often avoided, mistrusted, and not seen as priorities for assistance (Gureje, Lasebikan, Ephraim-Oluwanuga, Olley, & Kola, 2005; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Thornicroft, Rose, & Kassam, 2007). In

some populations the stigma of mental disorders extends to the rest of the family; for example, it may even affect marriage prospects of other family members. The reduced function associated with severe illness is equally important. Severe mental illness affects not only mental but also physical functioning (lack of energy) and social functioning (withdrawal and isolation). Its occurrence among people in the prime of life changes them from being a net contributor to family welfare and income to being a drain on the family's resources, while stigma makes it less likely that they will receive assistance to deal with their burden.

Milder cases causing reduced functioning should also be addressed as they tend to be substantially more common than severe cases (e.g., Kohler, Payne, Bandawe, & Kohler, 2015; Molla et al., 2016) and therefore also have public health importance. While still a problem, stigma is less of an issue for milder cases, which makes treatment and treatment seeking both more feasible and more acceptable.

### *Selection of Interventions*

The Introduction described how the symptoms of common mental disorders can be the result of current environmental stressors as well as of mental disorders. For this reason, the mental health interventions that cause the greatest reduction in symptoms may be those that reduce stress by improving the environment or (if it was better before) restoring it as much as possible to what it was before the conflict. The group of activities that primarily deal with improving the environment to enhance mental wellbeing fall under the broader heading of psychosocial programs. This includes diverse activities such as providing security, getting children into school, reconnecting families, counseling people on changes they can make to reduce stress, restoring livelihoods, providing social opportunities, and providing child safe and child play areas. All are included in psychosocial programing as practiced by organizations responding to conflict, particularly nongovernmental organizations (NGOs). While the data to support the impact of these programs is limited, they are relatively inexpensive, can be implemented with minimal expertise, can reach many people, and are desirable for reasons other than reducing CMD symptoms. Providing security, employment, education, and social opportunities, for example, are worthwhile regardless of their psychosocial benefit. For these reasons it is difficult to study their psychological impact since withholding them as part of a controlled study may not be justifiable ethically. However, for the same reasons, these types of programs that have value apart from possible mental health benefits should be implemented where people are facing difficult circumstances.

Regardless of the impact of psychosocial programs, there will be persons with moderate or severe common mental disorders who will also need specific mental health treatments. While drug therapy is known to be effective for depression and useful for other CMDs, their use for these disorders in most post-conflict situations is often not feasible due to lack of resources for prescription and monitoring. For the CMDs the non-drug interventions that have shown the best evidence of effectiveness

across cultures and situations (including post-conflict) are based on cognitive behavioral therapy and exposure therapy. Studies of psychotherapeutic interventions among conflict-affected populations in South America, Africa, South-East Asia, and the Middle East have repeatedly found them to be effective and acceptable for both adults (e.g., Bass et al., 2013; Weiss et al., 2015) and children (e.g., Bolton et al., 2007; Jordans et al., 2010).

The implications of these findings is that evidence-based treatments (EBTs) found to be effective in the West can be effective among post-conflict populations in other parts of the world, and that such interventions need to be appropriate for multiple and co-morbid conditions. Post-conflict interventions are therefore adaptations of one or more existing EBTs chosen on the basis of their effectiveness for depression, anxiety, PTSD and/or substance abuse.

Selection of Interventions is dependent on appropriateness and acceptability of the intervention for the local population and situation. Appropriateness refers to whether the intervention is considered likely to be effective by stakeholders. For example, if the mental health problems being addressed are thought to be medical problems then a non-medical counseling intervention may not make sense to local people. The same may be true if the cause is thought to be witchcraft. Acceptability refers to whether the intervention is something that people feel comfortable receiving. For example, males providing services to females behind closed doors is not acceptable in many cultures. Interventions that cannot be provided anonymously are less likely to be acceptable among populations where stigma surrounding mental disorders is high.

What is considered appropriate and acceptable varies by population and situation. Therefore, selecting and adapting acceptable and appropriate interventions requires an a priori understanding of the local culture and situation. This may be derived from an existing qualitative or ethnographic literature although such a literature rarely has sufficient information on mental health to inform decisions. We have found it useful to conduct brief qualitative research focused on exploring the priority mental health problems of the population, including perceived causes, what people currently do about the problem and what they feel should be done given resources not currently available. The last three topics are specifically chosen to provide information on which interventions are likely to be appropriate and acceptable. The process and rationale are described elsewhere (See 'The DIME Program Research Model: Design, Implementation, Monitoring, and Evaluation', <http://www.hopkins-humanitarianhealth.org/empower/resources/tools-guidelines/the-dime-process>).

An additional consideration is the selection of interventions that can be provided by local workers and not by outsiders with little or no knowledge of the local language, culture, or situation. This is partly because the demand for services will exceed the supply of outside workers who are usually expensive and only available short term, but also because implementation by local workers is critical to the adaptation and provision of the intervention in an acceptable way. While prior qualitative studies and consultations are important for identifying red flags for achieving appropriateness and acceptability, they cannot guarantee them. As local workers learn the

intervention they provide key input on undetected issues, so that training workers becomes less of a one-way knowledge transfer and more of a negotiation between the external trainers and the trainees on how the intervention should be implemented. This usually results in the intervention changing over the course of the training, so much so that the author and colleagues usually provide training materials as ‘drafts’ at the beginning of the training, with a revised version being provided after training completion. The same process occurs when workers begin to implement the intervention under supervision of the trainers. Real life problems are identified which require adjustments based on input from the clients, the local workers and the trainers. The result is further revisions in the intervention and of the resource materials.

The reliance on local workers requires that they have the capacity to learn the intervention and that effective training can be provided. As with learning any set of skills this requires not only didactic workshops but ongoing ‘on the job’ training and supervision until competence is achieved. This supervisory phase also facilitates the real-life learning and adaptation described above. Previous research has demonstrated that local persons without a mental health background but with aptitude can learn to provide specific non-drug mental health treatments (e.g., Bass et al., 2013; Bolton et al., 2007; Bolton, Bass et al., 2014; van Ginneken et al., 2013). With support they can continue to provide these services after expatriate workers have gone home. Therefore, much of the intervention development described in this chapter refers to refining the treatment during local training.

### *Adaptation of Interventions*

Appropriateness and Acceptability are issues not only in the selection of interventions but also in their adaptation for local use. Even when evidence based interventions have been selected on the basis of Appropriateness and Acceptability they still require local adjustments. This is because initial selection seeks a broad match between the local culture and the underlying concepts of the intervention including addressing the perceived causes of the problem in ways that make sense to local people. Selection using this approach should therefore result in a broadly appropriate and acceptable intervention. However, acceptability will also require more detailed changes to address problems of implementation that may not be apparent from the qualitative study or discussions with local people. Examples from programs implemented by the author and colleagues of issues that did not become apparent until implementation include: whether people are able to travel for repeated treatment sessions in terms of cost, time, and absence from other responsibilities; family opposition to treatment based on stigma; difficulty explaining the treatment using western terminology and examples; and the selection of acceptable providers in terms of social status and ethnicity. These and similar issues will need to be identified, explored, and addressed by changes in how the intervention is provided.

Adaptation also refers to training materials and manuals. Most existing materials and manuals were written for Western mental health professionals. The more that the providers of the intervention differ from this audience the more adaptation is required. There are various types of issues to consider. The first type relates to content: Most interventions have manuals and training materials that include an extensive focus on how the intervention builds on existing theories and knowledge which would be known to Western-trained mental health professionals. For those without this training these explanations may be irrelevant because they do not have this knowledge or may not even care about this aspect of the training. For them this content should be removed. Content may also have to be changed where concepts do not translate well into the local context. When adapting Cognitive Behavioral Therapy for use in Kurdistan, two of the five themes of CPT treatment – intimacy and esteem – had no local equivalent, necessitating the identification of alternative themes (Kaysen et al., 2013). In Uganda, one of the four problem areas to be addressed by Interpersonal Psychotherapy – isolation/loneliness – was not considered a relevant issue locally and so was not included in the training (Verdeli et al., 2003).

The second issue relates to translation. Mental health manuals and training materials are normally written using jargon making them difficult to translate. Much of this jargon is not necessary and its replacement by standard English (or whatever the language of the original) improves translation, particularly where translation is being done by non-technical people for non-professional trainees. For example, ‘cognition’ can be replaced by ‘thought’, ‘cognitive restructuring’ by ‘thinking differently’, ‘verbal communication’ by ‘talking’ and ‘interpersonal deficits’ by ‘loneliness’ and ‘shyness’ (Verdeli et al., 2003). Replacing as much jargon as possible is therefore important before sending the materials for translation.

The third consideration refers to how concepts are explained to the trainees and how the trainees will explain them to clients. This particularly refers to the use of examples which are usually rooted in the types of persons and experiences the intervention will be used for. For example, manuals of trauma interventions may exist as military (using examples of soldier’s experience of war) and civilian versions (referring to criminal acts or natural disasters). The same type of adaptation is required when using these interventions in other cultures: replacing examples rooted in Western culture and experience with those more locally relevant such as that of refugees, guerilla fighters, or civilians living in war zones.

While adaptation begins with the removal of jargon and changes in content and examples based on existing knowledge and consultation with local workers, adaptation continues during the training process. As trainers explain the intervention, going through training materials and manuals, trainees are invited to raise concerns and make suggestions for changes to enhance appropriateness and acceptability. Training is designed to include this process in terms of significant additional time (2 or more days of a 10 day training) for discussion and within-training editing of the training materials and manuals. Therefore, both trainees and trainers will leave the training with revised versions of these materials.

The final stage of adaptation begins when trainees start to treat local people. Since even local trainees cannot anticipate all the issues that they and their clients

will face, this is an important phase in adaptation. Examples of problems encountered by providers include opposition to working with the mentally ill by providers' families and by co-workers, low status of mental health care within the health care system, and a lack of resources for professional development due to low prioritization of mental health. Previously unanticipated client problems have included opposition to treatment as an invasion of privacy and perceived threat to family standing if the client's treatment becomes known. It is critical that the link between the trainees and trainers is maintained at this time, to make necessary changes to the intervention that address these concerns while not reducing effectiveness. This can be incorporated in the training and supervision process since training of local providers already requires prolonged detailed supervision in the form of an 'apprenticeship' (Murray et al., 2011).

In summary, intervention development is a prolonged and multi-phase process beginning with the selection of priority problems and interventions likely to address them, followed by several phases during implementation of increasing refinement to acceptability. These latter phases consist of a cascade of local inputs beginning with local partners, trainee providers, and finally ongoing and iterative inputs from actual providers and their clients. The format and provision of the intervention is therefore often quite different from the original version.

## Evaluation of Interventions

There are five main elements of interventions that should can be evaluated whenever possible. While there are others that can also be explored, these five refer most directly to the capacity of interventions to have a meaningful impact on the communities in which they are provided. They are briefly described in Table 1.

**Table 1** Program evaluation objectives

Construct	Working description	Indicators
Effectiveness	Impact on client symptoms and function	Change in client level indicators for symptoms and function
Fidelity	How accurately the intervention is provided, based on the training and manual	Checklist of critical provider activities
Access	Ability of those in need to make use of the intervention	Proportion of those in need of the intervention who are able to use it.
Uptake	Extent to which those with access use the intervention	Proportion of those offered treatment (or who have access to it) who begin treatment.
Compliance	Extent to which those beginning services complete them as directed by providers	Proportion of those beginning treatment who complete it as directed

It is rare for post-conflict mental health programs to measure all these elements, however measurement of multiple indicators is becoming more common. This section describes elements separately.

## *Effectiveness*

### **Content**

Since addressing mental disorders is the main reason for the intervention, determining how well this is achieved should be the major focus of evaluation. Mental disorders (or mental health problems generally) have five possible types of impacts, including on symptoms, functioning, stigma and discrimination, cost and mortality.

Symptoms refer to how the person experiences the problem, particularly negative effects. At this time symptoms are the only outcomes routinely measured in program evaluations. A variety of standard instruments for assessment of the symptoms of the CMDs have been adapted for use and found to be valid in multiple cultures and languages. Commonly used examples for children, adolescents, and their caretakers include the short Strengths and Difficulties Questionnaire (Goodman, Meltzer, & Bailey, 1998) and the much longer Achenbach group of instruments for children and adolescents and their caretakers ([Achenbach System of Empirically Based Assessment](#)). Examples of adult instruments found valid across cultures are the Patient Health Questionnaire or PHQ-9, a 9 item depression instrument, (Spitzer, Kroenke, Williams, & Patient Health Questionnaire Primary Care Study Group, 1999), the 20 item Center for Epidemiological Studies Depression Scale for depression (Radloff, 1977) and 20 item PTSD Checklist (Blevins, Weathers, Davis, Witte, & Domino, 2015; Bovin et al., 2015; Wortmann et al., 2016). The author and colleagues have favored the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) for depression and anxiety and the Harvard Trauma Questionnaire (Mollica et al., 1992) for trauma symptoms and function, including PTSD. We have found both to reliably perform well across cultures (e.g., Bass et al., 2013; Bolton, Bass et al., 2014; Bolton, Lee et al., 2014). Their greater length than other instruments reflects a broader representation of relevant symptoms.

Reduced function is largely a subcategory of symptoms although some reduced function may be more obvious to family and observers than to the affected person (e.g., the impact of alcohol or drug use). Of particular importance is the reduced ability to do tasks and activities for others (e.g., earning income) or self-care tasks that must then be done by others (e.g., hygiene). However, reduced quality of relationships with family and friends are typically also important to the individual and family. As with symptoms there exist standard measures found to be valid and reliable across cultures. The most commonly used are the WHO Disability Assessment Schedule (Üstün, Kostanjsek, Chatterji, & Rehm, 2010) and the Short Form Survey (Ware & Sherbourne, 1992). The author usually combines these universal instru-



ments with assessment of locally generated items referring to activities that are most important to care of self, family and community. The intent is to combine universal measurement with measurement of activities important to local people. The adaptation of symptom instruments and generation of local function items is described in the DIME manual (<http://www.hopkinshumanitarianhealth.org/empower/resources/tools-guidelines/the-dime-process>).

Stigma and discrimination refer to real or perceived exclusion by the community. These constructs are often included in program assessments where stigma is known to be a particular problem. Because there are many instruments available (Yang & Link, 2015) none have been widely validated across cultures. Like symptoms and function, stigma and discrimination are considered to be concepts that are readily understood across cultures and able to be accurately assessed by those experiencing them.

Costs refer to the financial costs of caring for the person and the loss of any financial contribution to family income arising from engaging with treatment. Cost measurement is rare, partly due to difficulties in defining relevant costs and measuring them accurately. At this time it is mainly undertaken as part of research, including large scale research projects by WHO and others to evaluate interventions for country-wide and global use.

Mortality refers to both directly caused death (of self or others) as well as indirect, such as by neglect. It is the least often measured outcome. This is partly because it is relatively rare and the difficulties in defining indirectly-caused mortality, and partly a reluctance by mental health program implementers to include assessment of suicidal and homicidal actions and risk. In the case of risk the author and colleagues frequently encounter reluctance because of concerns that the program may have to expend additional resources and training to address an outcome considered to be relatively rare.

## Approach

The most common method of assessing effectiveness of interventions is to measure the baseline levels of CMDs, provide the intervention, and then repeat the measure. The change between pre and post intervention assessments is assumed to be the effect of the intervention.

Comparing pre and post intervention measures in this way remains the most feasible method for quantitatively assessing effectiveness. This approach has been used extensively in assessments of physical health programs as well as non-health programs. It is justified for interventions which have already shown a demonstrated impact in multiple scientific studies either in contexts like the program site or have been studied in multiple sites and found to be resistant to environmental factors. For example, most vaccines have been scientifically proven to be effective across populations and situations as long as the vaccine itself is maintained correctly prior to administration. Also, the impact of most vaccines is much greater than other factors that affect disease transmission. Under these circumstances (compelling scientific

evidence and lack of other factors that affect the measured outcome) the use of the pre/post comparison method is sufficient to demonstrate effectiveness.

This is not true for mental health interventions in post-conflict populations. Severity of mental health symptoms varies over time and persons who screen into interventions are more likely to be experiencing a period of greater severity which is naturally followed by apparent improvement. This 'regression to the mean', along with a natural tendency for trauma-related mental health problems to improve with time during the post-conflict period, can cause programs to appear to be more effective than they are. Many mental health and wellbeing outcomes are sensitive to contextual factors. Improvements in personal or economic security or other aspects of the living situation can decrease anxiety and improve mood and wellbeing. Similarly, worsening of the situation can enhance symptoms. Either or both are likely since the situation in post-conflict settings is often inconstant. This makes it difficult to measure the impact of a program based on pre/post assessment comparisons alone, or even to decide whether the program was helpful, not helpful, or harmful.

Under these conditions the only accurate means of assessing impact is by comparison to an equivalent control group who did not receive the intervention. This has met with resistance from service organizations who regard withholding treatment from a comparison group for any period as ethically suspect. While ethically sound methods for conducting 'trials as program evaluation' exist (Allden et al., 2009, 'The DIME Program Research Model: Design, Implementation, Monitoring, and Evaluation', <http://www.hopkinshumanitarianhealth.org/empower/resources/tools-guidelines/the-dime-process>) they require some research expertise and additional resources to track and measure the control group, something that service organizations and their funders are usually unwilling to provide. At the time of writing, the group of interventions with the most scientific (i.e., controlled trial) evidence across different post-conflict cultures are the Cognitive Behavioral Therapy (CBT) based interventions (Morina, Malek, Nickerson, & Bryant, 2017; Priebe, Giacco, & El-Nagib, 2016). Therefore, evaluation of these interventions by means of measurement of fidelity combined with pre-post assessments is the most justified, although still insufficient to measure effect size. For interventions that have little widespread evidence of effectiveness, pre-post assessments are still worthwhile but lack of counterfactual evidence (in the form of a control or comparison group), which will render the results suggestive at best.

A large number of instruments exist for measuring the common mental disorders. Like evidence-based interventions, most were developed in the West. Many have been translated and adapted for use in multiple contexts and been found to perform adequately. While the existing literature suggests that depression, anxiety, PTSD, and substance abuse manifest similarly across cultures and situations, there are often variations that can reduce the local accuracy of instruments. Most questions when translated accurately perform well but some will reflect unfamiliar concepts that cannot be answered accurately. For example, with depression we have found that the concepts of 'sadness' and 'loss of interest' translate well in most places while 'hopelessness' and 'self-esteem' are difficult concepts in some languages and cultures. Translations of existing instruments therefore need to be tested

among the target populations to determine how (and how well) questions are understood, through pilot testing with or without cognitive interviewing, and quantitative assessment of instrument validity and reliability (the DIME manual describes one field approach to doing so; [http://www.hopkinshumanitarianhealth.org/assets/documents/VOT\\_DIME\\_MODULE2\\_FINAL](http://www.hopkinshumanitarianhealth.org/assets/documents/VOT_DIME_MODULE2_FINAL)). Programs need to use versions of instruments that they or others have tested and found valid and reliable among the population they are working with or a similar population.

### ***Fidelity***

This refers to the extent to which the intervention is provided as intended. Interventions developed in one culture or situation routinely require adaptation to others if they are to be accepted and understood. The first challenge is to identify those elements that are considered key to the success of the intervention and those that can vary as needed. Experts in the intervention must draw up lists of the critical factors which are then used to create indicators of fidelity. These indicators are compiled into checklists of intervention elements that are completed by providers and/or their supervisors on a sample of sessions with clients (or all sessions with all clients if feasible). The main use of fidelity data is not to judge fidelity at the end of the program but to correct mistakes during treatment in order to build counselor expertise while ensuring that clients receive correct treatment. Poor performance with lack of improvement results in removal of the counselor from the program. The purpose of fidelity monitoring is therefore not a measure of fidelity to the intervention/treatment manual but rather fidelity assurance through correction of mistakes as they occur and removal of providers who cannot provide the intervention correctly.

### ***Access***

While the concept of access is simple – the ability to obtain needed services – the nature of the factors that affect the ability to obtain mental health services vary greatly, such that measuring all those that are significant is rarely possible. These include the same logistic factors that affect physical health and other services, such as distance from the supply point, costs in terms of time and money, and when services are available. Measuring these factors is particularly important with respect to mental health since time, money, and distance considerations are greater for services where the client must attend frequently for repeated sessions (Gulliford et al., 2002). Other factors that are particularly relevant to mental health services include privacy in seeking services due to fear of stigma and the effects of the resulting stigma if privacy is breached. These effects include an unwillingness of the affected person to return and unwillingness of others to seek treatment and risk the same fate. Lack of faith in the intervention (appropriateness) or in the providers

(acceptability) also reduces access. Measuring these factors would require a community survey, while estimating logistic issues of time, distance, and cost can often be estimated from available data based on geography and service costs. Therefore, access assessment is usually limited to one or more of these logistic factors, most commonly distance from services. Programs report the proportion of the population (based on census or other existing data) that live within a certain distance of services with the cut-off distance chosen as locally feasible in terms of time and cost of travel.

While focusing on assessing and reducing logistic barriers is important, the results are clearly inadequate in mental health programming. The author and colleagues have frequently encountered programming where 'access' defined logistically is good while the actual use of services is poor, demonstrating the importance of identifying and measuring other types of barriers. Of these, the most important in mental health are appropriateness and acceptability. These are instead more typically indirectly addressed in the measurement of Uptake and Compliance.

### *Uptake*

Uptake is most simply what proportion of all persons who need and have access to services actually use them. However, given the difficulties in defining and measuring access, uptake is more frequently defined and measured as the proportion of persons directly offered services who then use them. This includes all persons who begin services even if they do not continue (see Compliance below). Motivation for accepting services is partly a function of their acceptability and appropriateness. When offered at a clinic it is assumed that these factors are important determinants of uptake because logistic factors are less important (since the person has come to the provider already). Therefore, uptake can be a key indicator of both and is important when these factors are not being measured by other means. Uptake is the inverse of a combination of the refusal rate for services and the 'no show' rate – those who accept services but never use them. It can mostly easily be measured and monitored based on provider and clinic records. Since low rates suggest problems with access and particularly acceptability and appropriateness, persons who refuse services should be asked why they are doing so since this may provide the best available indicator of problems in these areas short of a community-based study.

### *Compliance*

Compliance is the proportion of those beginning treatment who complete it according to provider instructions. Like uptake, it is a function of appropriateness and acceptability but based on experience with the intervention rather than expectations. The most commonly used indicator is the number of persons who complete

treatment, however the number of sessions that clients attend is helpful as a quantitative measure of compliance. Experience with psychotherapy programs suggests that number of sessions attended is also a good indicator of overall compliance since attendance is the most important issue: If clients attend sessions they usually also comply with provider instructions. Asking clients who drop out why they did so can provide useful information to redesign programs but this requires additional resources to contact clients if they end treatment without warning.

### *Other Perspectives*

Most program evaluation refers almost exclusively to the client perspective. In recent years the importance of incorporating the perspective of other stakeholders has become apparent. The new field of Dissemination and Implementation Research focuses on the provider perspective as being key to program feasibility and sustainability. Addressing provider perspectives is considered to be important to the expansion and long term maintenance of services. While often less relevant in the post-conflict situation this can be important where the post-conflict period lasts for years. The author and colleagues have also identified two other stakeholder categories relevant to long-term sustainability and feasibility: local administration (clinic staff), and policy personnel (government or service organization leaders). For these stakeholders and for providers, instruments and assessment approaches are increasingly being developed to assess acceptability, appropriateness, feasibility, and integration with existing services. In the future this information will be collected and combined with the client-level data described in the rest of this chapter in situations where long term programming needs to be sustained by integration with existing services.

### **Summary**

This chapter describes some of the major considerations in the development and evaluation of mental health interventions for common mental disorders in post-conflict settings. The author notes that what is appropriate varies with the type of post-conflict setting and that the highest priority interventions are often those that reduce stress by improving a difficult environment. Apart from environmental change, the interventions with the most widespread evidence of effectiveness and feasibility are currently psychotherapies based on cognitive behavioral therapy. Even these interventions require a prolonged process beginning with cultural adaptation to priority problems and conditions, followed by ongoing monitoring and iterative adjustment. The Chapter concludes with a discussion of the need to assess program performance beyond effectiveness, and to assess the needs and perspectives of other stakeholders, especially providers. This is necessary to reach the goal

of instituting programs that, once outside support is removed, will be maintained and valued for as long as they are needed.

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