Brief Intervention Models in Psychosis for Developing Countries (Asia and Africa)

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12.1 Introduction

Low- and middle-income countries (LAMIC) have enormous burden of psychotic disorders with prevalence of schizophrenia between 1.4 and 4.6 per 1,000 (Jablensky 2000). While the burden is very heavy, the resources available to treat them are very limited. "For example, per 100,000 population, Psychiatrists working in the mental health sector in the most populous developing countries of Asia and Africa i.e., India, Pakistan, Nigeria and Ethiopia are 0.301, 0.185, 0.06 and 0.04 respectively" (World Health Organization 2011). A combination of limited access and cultural belief systems leads to many individuals' first accessing help from complimentary or alternate practitioners or spiritual healers. Additionally,

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there is an inverse relationship between GDP and duration of untreated psychosis (Large et al. 2008), and duration of untreated psychosis is shown to be correlated with adverse outcomes of poorer response to treatment and increased disability (Farooq et al. 2009).

12.2 Epidemiology and Outcomes of Psychotic Disorders in Developing Countries

Research data on epidemiology of severe mental disorders is limited from LAMIC (Jablensky et al. 2000). However, the small number of studies available paints a gray picture (Mahy et al. 1999; Menezes et al. 2007; Bhugra 2005; Saha et al. 2005). For example, Adams et al. (2006) estimated that in Bihar, one of most economically deprived states in India, the number of people suffering from schizophrenia is larger than in the whole North America. Similarly, these countries have large populations living in the age range which is high risk for psychotic disorders such as schizophrenia, e.g., 21.5 % of Pakistan population is in the age range of 15–24 years (Pakistan Demographic Profile 2014).

Strikingly, as far as outcomes are concerned, schizophrenia might have better outcomes in LAMIC (Isaac et al. 2007). The International Pilot Study of Schizophrenia (World Health Organization 1976) and later the International Study on Schizophrenia (ISoS) (Harrison et al. 2001) suggested better outcomes in the LAMICs. Kulhara and Chakrabarti (2001) reported that sociocultural factors might contribute to the better outcome of schizophrenia in LAMICs. However, in recent years Patel and his colleagues (2006) questioned this strongly held belief about better outcomes of schizophrenia in such countries. Calls for more research into this unexpected differential in outcome for psychosis between developed and developing countries continue (Hopper and Wanderling 2000).

12.3 Treatment of Psychosis in Lamic

There is very little evidence, if any, on the effectiveness of typical pharmacological and psychological interventions in these populations, although favorable outcome is reported by large studies (Jablensky et al. 2000; Leff et al. 1992). This is in contrast to voluminous literature on the epidemiology of schizophrenia in these countries. Evidence for the effectiveness of psychosocial interventions in psychosis is reasonably robust in high-income countries (NICE 2014) but differences in sociocultural factors and health systems may limit the generalizability of this evidence to LAMICs (Patel et al. 2006). In LAMICs the treatment gap for psychotic disorders is large because of the scarcity of resources to offer evidence-based interventions (Kohn et al. 2004). There is evidence for a significant delay in seeking treatment for people with psychotic disorders from LAMICs. Therefore the delivery of evidence-based interventions is a challenge in such countries and a global mental health priority (Lancet Global Mental Health Group 2007).

12.3.1 Psychosocial Interventions for Psychosis in LAMIC

12.3.1.1 Research on Beliefs About the Illness

It is important in this aspect to consider the concepts about the illness and its causes, as these lead to help-seeking behaviors. Our group has conducted research in both Pakistan and the UK to explore the beliefs about psychosis among Muslim South Asians in the UK and the local population in Pakistan. There is evidence to suggest that some Asian clients use a bio-psycho-social-spiritual model of understanding of illness (Table 12.1). Saravanan et al. (2007), for example, considered the dissonance of belief models about first-episode psychosis between patients and professionals in South India and reported that the majority of patients prioritized spiritual and mystical factors as the cause of the disorder, and this affected their pattern of help seeking. Looking at the same region, Joel et al. (2003) examined the beliefs of community health workers about psychosis and found a variety of indigenous beliefs which contradicted the biomedical model and so led to the conclusions that medical doctors could not help; clearly, this would have a significant impact on referral to and general accessibility of psychiatric treatment, including brief interventions.

12.3.1.2 Help-Seeking Behaviors

Beliefs about mental illness are likely to affect the way we seek help. They are also likely to have an effect on professionals' assessment of whether the individual may benefit from different treatments. Saravanan and colleagues (2007) reported that those patients who held a more conventional biomedical model of psychosis were scored as having greater insight; as we know, this concept is strongly linked to assessment of individuals as suitable for talking therapy, including brief therapy.

A study of clinicians' attitudes to cognitive behavior therapy (CBT) in Tanzania (Stone and Warren 2011) indicated more positive beliefs about the utility of this particular type of brief intervention, but this was not specific to psychosis. Unpublished qualitative data from this cohort identified key themes which influenced clinicians' views about CBT (and its effectiveness), including the medical model's dominance among trained professionals, the novelty of a talking therapy approach, the practicalities of implementing it, and the personal cultural influence the individual therapist brought. Interestingly, it seems that local views of psychotherapeutic interventions may depend very much on the degree to which the culture is interpersonally attuned and syntonic and therefore able to benefit from an interpersonal form of treatment. In Tanzania, psychotherapeutic interventions appear to be gaining in popularity (despite the scarcity of providers) and may not suffer from the same stigma that traditional psychiatric treatments have.

12.3.1.3 Examples of Tried Interventions

There are not many published studies in this area. The limited work so far has focused on effectiveness of short but practical interventions that tested cost-effective strategies to improve outcomes in schizophrenia. For example, Farooq and colleagues (2011) conducted a RCT including 110 patients with schizophrenia or schizoaffective disorder to evaluate the effectiveness of an intervention that involves a family member in

Table 12.1 Bio-psycho-social-spiritual model

Pakistan (Naeem et al. 2014c)	UK (Rathod et al. 2010)	UK (Bhikha et al. 2012)	Pakistan (Awan 2015)
Psychosocial	*Previous wrongdoing* +++++	*Spiritual/religious causes* (55 %)	*Psychosocial*
Stress or worry (25)			Stress (24)
Poverty (22)			
Loss of balance of mind (2)	*Supernatural beliefs* +++++	*Psychosocial*	Interpersonal (11)
Too much thinking (1)		Stress (18 %)	
Personality (1)		Interpersonal causes (20 %)	
Biological	*Social factors* ++++		*Spiritual/religious*
Hereditary (4)	*Biological* +++	*Biological* (4.4 %)	Spiritual (17)
Chemicals in brain (6)	*Being arrested* +++*		Taweez/jadoo (17)
Childbirth (1)	*Drug induced* +++*	*Dual explanatory models of psychosis* [combining prescribed medication and seeing a traditional faith healer as a treatment method] (77.7 %)	Supernatural (3)
Phlegm (1)			
Increased heat in the liver (1)	*For African Caribbean only. The rest are similar for both Asians and African Caribbeans		
Spiritual/religious and cultural			
Spirits, magic, taweez, fear of Hawaii things (like ghosts) (8)			*Biological*
Learning of spiritualism (2)			
Evil eye (1)			Hereditary (2)
Gods will (1)			Physical illness, e.g., fever (6)
Other causes			
Masturbation (1)			
Don't know (6)			*Don't know* (11)
			Others [THC, head injury, sleep deprivation, suspiciousness, side effect of other medicines] (22)

supervising treatment in outpatients for schizophrenia (STOPS) compared with treatment as usual (TAU). Following assessment, it was concluded that supervised treatment can play a useful role in enhancing adherence to treatment in LAMI countries. Others have tested the impact of psychoeducation on the burden of schizophrenia on the family (Nasr and Kausar 2009) and culturally adapted CBT for psychosis for inpatients (Habib et al. 2015). In India, Hegde and colleagues (2012) studied the effectiveness of cognitive retraining program in a RCT for 45 patients with first-episode schizophrenia, on neuropsychological functions, psychopathology, global functioning, psychological health, and perception of level of family distress in their caregivers. Patients and one of their caregivers were assessed at baseline, post-assessment (2 months), and follow-up assessment (6 months). The addition of home-based cognitive retraining along with TAU led to significant improvement in neuropsychological functions.

12.3.2 Development and Testing of a Brief Culturally Adapted CBT for Psychosis (CBTp) Intervention in a LAMI Country

12.3.2.1 Rationale and Background for Developing Brief CBTp

There is evidence to suggest that for nonpsychotic disorders, many cognitive behavior therapy (CBT) treatments delivered in a brief format lead to significant clinical improvement and symptom reduction, relative to other forms of psychotherapy (Bond and Dryden 2005). Various approaches have been tried to increase the efficiency of CBT treatments including adapting individual treatments to a group format and develop self-help resources, bibliotherapy, and eMedia-assisted therapy program (Hofmann et al. 2012; Hazlett-Stevens et al. 2002). The most common approach for efficiency enhancement is to make existing CBT treatments brief by reducing the number of treatment sessions.

Our group has culturally adapted CBT for psychosis both in the UK and Pakistan (Rathod et al. 2015 and Naeem et al. 2015b). In our previous work in Pakistan to culturally adapt CBT for depression, open-ended interviews were conducted by a psychiatrist trained in CBT and qualitative methods. We further developed semi-structured questionnaires that could be used by psychology graduates, thus reducing the cost and further standardizing the process of interviews (Naeem et al. 2009a, b, 2010, 2012, 2015a; Naeem and Ayub 2013). In order to do this, interview transcripts were repeatedly read from previous studies and their results. This exercise focused on the topics and the questions used in our past work and formed the basis of the semi-structured interview guide. These semi-structured interviews consisted of open-ended questions, with prompts and guidance on exploratory questions. A total of 92 interviews were conducted by 3 psychologists. We conducted qualitative interviews with mental health professionals ($n=29$), patients ($n=33$), and their carers ($n=30$). The results of the mentioned studies highlighted the barriers in therapy (e.g., lack of awareness of therapy, family's involvement, traveling distance and expenses, and uncooperative family caregivers) as well as strengths while working with this patient group. Patients and their carers in Pakistan use a bio-psycho-social-spiritual model of illness (Table 12.1). They seek help from various sources, including faith healers. Therapists make minor adjustments in therapy. Findings from these studies have been described in separate papers (Naeem et al. 2014a, b, c).

12.3.2.2 Development and Testing of CaCBTp Intervention

Adaptations were made to reflect the views of therapists and carers by our group in Pakistan. However, the major issue to be tackled was overcoming resources related barriers-finances, therapy time, transport, distance from the service facility, etc. We had numerous discussions among the group members and contacted the patients who had either received therapy or had shown an interest. Finally, the consensus was built that therapy should be time limited and brief for it to be acceptable. We therefore used a brief version of this therapy that we had culturally adapted. This therapy was provided according to a manualized treatment protocol (Kingdon and Turkington 1994) by psychology graduates with more than 5 years of experience of working in mental health, trained by an expert and supervisions. Although therapy was provided flexibly, the sessions typically focused on formulation and psychoeducation; normalization and introduction to stress vulnerability model; working with delusions, hallucinations, and negative symptoms; and termination work and relapse prevention. In addition a spiritual dimension was included in formulation, understanding, and therapy plan; Urdu equivalents of CBT jargons were used in the therapy; culturally appropriate homework assignments were selected and participants were encouraged to attend even if they were unable to complete their homework; and folk stories and examples relevant to the religious beliefs of the local population were used to clarify issues. Families are heavily involved in patient's care and serve as the main caregivers to psychiatric patients in Pakistan. Also, through our experience of adaptation of CBT for Pakistan, it is understandable that their involvement can enhance the acceptability of treatment. Therefore, this brief version consisted of 6 sessions for the participant plus one session for the family/carer. During this session, a key carer was identified (acting as a co-therapist) with whom the therapist worked closely. The carer attended the sessions with the patient's consent and helped in therapy (e.g., with homework, if required).

This brief version was found to be effective in the first trial of CBT for psychosis from outside the western world. A total of 116 participants with schizophrenia were recruited to this RCT from 2 hospitals in Karachi, Pakistan. A brief version of CaCBTp was provided over 4 months. Participants in treatment group showed statistically significant improvement in all measures of psychopathology at the end of the study compared with control group (Naeem et al. 2015b). These findings, though highly encouraging, need replicating in other low- and middle-income countries.

12.3.2.3 Focus of Adaptation

The process of adapting CBT for specific groups should focus on three major areas of therapy, rather than simple translation of therapy manuals. These are related to the barriers in delivering therapy. These include:

(a) Awareness of relevant cultural issues and preparation for therapy:
   (i) *Culture and related issues* (*culture*, *religion, and spirituality*; *language and communication*; *family-related issues*)
   (ii) *Capacity and circumstances* (*individual issues*, *systems of support and treatment*, *and pathways to care and help-seeking behavior*)

(iii) *Cognitive errors and dysfunctional beliefs which are directly related to the problem and its treatment*

(b) Assessment and engagement

(c) Adjustments in therapy

12.4 Barriers to Psychosocial Interventions in LAMIC

There are a wide range of factors that act as barriers to any type of psychotherapeutic intervention in LAMIC.

12.4.1 Engagement Issues

Often people with psychosis struggle to engage with treatment as their predominant model of illness might be based in spiritual and religious explanations. They seek help from faith healers. If the mental health professionals are not respectful of their views, they are less likely to engage.

(a) Gender
Gender roles are widely understood to affect different social behaviors across different countries, including LAMIC. Assertiveness is often not encouraged in some diverse cultures among women which clearly has implications for treatment seeking both in initial (or prodromal) phases of psychosis and ongoing engagement in interventions in acute or chronic stages.

(b) Collectivist cultures
In collectivist cultures, the self is defined in terms of group identity and interdependence with group members (Owusu-Bemph 2002). As such, group goals have supremacy over individual goals and individuals suppress their own needs for the communal needs. The emphasis is on the group need rather than individual needs, in stark contrast to individualistic western cultures. Individuals from collectivist cultures tend to oscillate between the culture of the country of origin, culture of host country, and communal culture (Rathod and Kingdon 2009).

(c) *Guru-Chela* (*student*) versus *Socratic method of teaching*
There are wide differences between Asian and eastern clients in their views of the therapists. While CBT uses a Socratic method and is based in collaborative empiricism, the Asian model of learning is usually more like a Guru-Chela relationship. In Asian clients like sermons and didactic teaching, therefore it is not surprising that they prefer a more structured and prescriptive approach to therapy (Iwamasa 1993).

(d) *Spirituality/religion*
Spiritual development is a vital part of many different cultures (Laungani 2004). In Western countries, a clinician's ignorance or interpretation of spiritual experiences as manifestations of psychopathology and lack of confidence may result in this not being addressed. The influence of religion and spirituality remains strong

in non-Western cultures despite westernization and acculturation when they immigrate (Williams et al. 2006) and, rather than a barrier, could be an asset when offering brief interventions in LAMIC. Spiritual healers may play a constructive role if collaborations are developed with them (Ramakrishnan et al. 2014).

12.4.2 Social Behaviors

Social validity (acceptability and viability of the intervention) by the community is vital in negating barriers to the effectiveness of interventions for psychosis. For many groups in LAMIC, the community trusts its network and prefers it to mainstream services initially. Reliance on word of mouth has been emphasized by members of South Asian Muslim communities and both the Pakistani and Bangladeshi participants in a study by Rathod and colleagues (2010) reported that often individuals would go to their general practitioners and request that they be prescribed the same medication as "that person" because they have been told that it works. They would also act on informal information to see a particular "faith healer" because a member of the community has recommended them. Ball and Vincent (1998) emphasized that in order for psychological interventions to be accessible and acceptable to LAMIC, individual communities would need to see the benefits that are revealed through "word of mouth" to other community members.

(a) Racism
Racial discrimination is common in many cultures, e.g., across ethnic, caste, and tribal groups, and may affect treatment seeking and engagement in psychological treatment for psychosis. Vulnerable individuals often find it difficult to talk about this with clinicians, while clinicians may similarly avoid discussing or addressing anything that could be considered as discriminatory. Therapist should be aware of stereotypical assumptions of the groups they are working with and ensure that these are addressed so that they do not impact on therapy process.

(b) Stigma
Stigma of mental illness affects populations across the world, leading to delays in help seeking and other difficulties with therapeutic interventions, but for LAMIC may need greater attention due to the possible likelihood of misinformation about psychosis. In LAMIC, the subject of mental illness is frequently seen as a taboo and therefore not talked about openly. Acceptance of psychosis in some LAMI countries is varied; some view people with psychosis as "spiritually" and will respect them, whereas others will stigmatize them and label them as "insane." The shame associated with stigma that mental illness brings to individuals and their immediate families adds on to the existing problem (Phiri 2012).

Often, dealing with somatic presentations common across cultures of LAMIC (e.g., South Asian groups) is emphasized in therapy. Tsai and Chenston-Dutton

(2002) argue that somatic presentations were common among Chinese psychiatric patients. Rathod and colleagues (2010) reported that South Asian Muslim participants preferred expressing somatic complaints, as they were less embarrassing and feared being stigmatized as holding bizarre beliefs. Chinese groups share a similar belief on somatization.

12.4.3 Access and Referrals

A systemic barrier to effective treatment for psychosis in LAMIC is the issue of access to services and providers offering appropriate interventions and difficulties with the referral process. In places where investment in and resources for mental health services are scant, services may not actively seek referrals and their role may in fact include "gate keeping" due to overwhelming demand. In rural areas, geography plays a significant challenge for access to healthcare services and appropriate interventions; for instance, villagers may need to travel long distances to the city areas to seek psychological input, travel costs will impact on limited resources, and where income depends on individuals tilling the land, they may decide against traveling to the city in order to ensure other needs are met.

(a) *Referrer's perceptions*
We learned through our qualitative studies in Pakistan that psychiatrists are psychopharmacologically oriented and therefore less likely to refer their patients for psychotherapy to psychologists. They are also not convinced that the therapy works. This can be a major barrier in access to psychological therapies.

(b) *Communication and Interpreters*
The populations of LAMICs may often entail groups speaking diverse languages, meaning service users and clinicians may not hold the same first language or share any language in common at all. For example, as India is such a large country, it is very likely that there is a linguistic mismatch between the therapist and client. Language barriers account for an increase in healthcare costs (Bischoff and Denhaerynck 2010) which of course are already a significant issue in many LAMICs. Meanwhile, all clinicians are well aware that "Language is the principle investigative tool in mental health. Without it we cannot assess a patient effectively" (Farooq and Fear 2003). Therapists may vary in their degree of experience or confidence in using an interpreter (Phiri 2012). Farooq and Fear (2003) have identified key factors to consider for an appropriate interpreter which is helpful in aiming for a gold standard.

(c) *Expectations of treatment*
There may be discrepancies between the individual's or family's ultimate aims and those of the service provider. Goals for treatment that are seen as appropriate in West, such as improved quality of life, self-determination, and independence (Pinninti et al. 2005), may not be those that patients, families, and

Table 12.2 Barriers and possible solutions to psychosocial interventions in LAMIC

Barriers	Possible solutions
1. Lack of resources (trained therapists, distance from hospital, transport, etc.)	1. Developing low-cost interventions, use of technology (e.g., Skype) for supervision, etc.
2. Mistrust of services/practitioners	2. Understanding local norms
3. Worries about confidentiality/breach	3. Confidentiality has different meaning in different cultures. Therapist should be aware of these issues
4. Poor information on psychological therapies/accessibility	4. Psychoeducation is normally a major part of culturally adapted interventions
5. Language and terminology	5. Culturally sensitive language and terms, rather than literal translations
6. Fear of being stigmatized	6. Reattributing illness to a bio-psycho-social spiritual model and understanding of stigma (e.g., stigma might be due to genetic causes of illness)
7. Doubt regarding CBT being empowering enough	7. Offer tester sessions and choosing initial interventions that provide an experience of improvement.
8. Cultural incompetence or Eurocentric approach	8. Use of culturally adapted CBT manuals
9. Clinician's beliefs in the power of drugs	9. Working with medical professionals
10. Faith/spirituality and religion	10. Better understanding of these issues, as well as working together with clients' families and religious scholars
11. Gender issues	11. Trying to help family understand the cost of the illness (e.g., impact of mothers' illness on children's education)
12. Financial implication	12. Focus on low-intensity, brief, and guided self-help or self-help

clinicians would be satisfied with in LAMI countries. Thus, clinicians working in LAMIC may need to adapt the typical examples of therapeutic goals they find in the literature and evidence-based writing in order to meet the needs of those individuals they offer interventions to.

Table 12.2 gives a quick overview of the barriers as well as suggesting possible solution to overcome these barriers.

12.5 Key Skills, Clinical Approaches, and Training Implications

In considering brief intervention models for the treatment of psychosis in LAMIC, important issues for reducing barriers to access and adapting existing approaches have already been highlighted. Brief interventions may be more successful in LAMIC due to a variety of reasons, including but not limited to therapists' factors (e.g., limited number and time), patient factors (e.g., having to travel long distances to bigger cities and to return to work as there is no financial support for disability),

and system factors (e.g., too many patients). Further to these, we would like to draw attention to some additional key skills for providing clinically effective therapies:

- In order to increase the social validity of brief interventions, user acceptability and satisfaction must be given priority.
- Behavioral or environmental change may offer a tangible route to prevention in either prodromal stages or when working on relapse prevention. Therefore patients, clinicians, and researchers should advocate and explore the notion that social factors play an important role in mental disorders such as psychotic phenomenon (Van Os and McGuffin 2003) and use this within brief therapies.
- Clinicians working in LAMIC face unique challenges through having limited access to relevant literature, training, and supervision/support in their practice. Initial education and ongoing professional development should be focused on ensuring that professionals are aware of those factors pertinent to cultural adaptations of brief therapies as well as to wider issues of treatment seeking and the reduction of DUP.
- Clinicians should be mindful of the importance of language in delivering interventions. For example, where issues of stigma are prominent and clients present with a focus on somatic complaints, re-labeling or reframing of organic symptoms into psychological terminology may become acceptable only as the therapeutic relationship develops.
- Barriers to seeking treatment, accepting brief interventions, and engaging fully in the therapeutic process could be reduced through new advances in development and technology – such as the use of mobile phone communication and apps. Likewise, new approaches to integrating CBT models with other approaches (e.g., family-focused therapies, motivational interviewing) could also play a role in overcoming obstacles common to populations in LAMIC
- When considering cultural adaptations, we would promote the idea of cultural sensitivity, i.e., flexible consideration of a diverse balance between numerous factors affecting definitions of culture, including religion, ethnicity, class, gender roles, socioeconomy, etc. We can now acknowledge that the way in which culture influences the course of psychosis through specific patterns and timing is complex; and much closer, on-the-ground documentation of local contingencies is required (Hopper and Wanderling 2000).
- Role of religion in psychological well-being can act as coping strategy, e.g., when an orthodox follower of a particular religion refrains from unhelpful behaviors and believes that in following God's teaching, they will go to heaven. Spirituality can enable one to strive to create a meaningful and purposeful life, thereby promoting a sense of well-being. One may maintain a personal relationship with one's deity and gain mental strength to see one through stressful periods.
- When addressing issues of religion and spirituality, consulting religious experts where appropriate can help understand how far an individual may be deviating from cultural norms and how much distress this is causing them; working with religious experts can also serve to recruit a co-therapist who may have a uniquely therapeutic relationship with the patient, relatives, and others.
- Given that culture and religion are entwined in LAMIC, use of culturally relevant explanations sensitive to the individual's beliefs, norms, and values is essential to fostering engagement.

- At the outset we would recommend that clinicians emphasize that trust will be earned and use examples of situations where the individual implies trust as leverage to engaging in a therapeutic relationship.

Conclusion

Although the epidemiological data are insufficient, there are reasons to believe that a high number of individuals in LAMIC are affected by psychotic disorders. There are also reasons to believe that the outcomes are not as positive as we once believed. Treatment strategies are at a very preliminary stage, with a focus on psycho pharmacological interventions. It is therefore not surprising that psychosocial interventions are not often reported from LAMIC. There is an underlying assumption that psychosocial interventions need to be culturally adapted for use in non-western cultures. There are significant barriers in providing psychosocial interventions in LMIC. The most notable of these barriers include time, distance, and resources. The limited work so far highlights many barriers to promote psychosocial interventions for this population and one way these might be overcome is by developing brief interventions for psychosis for these countries.

References

Adams CE, Tharyan P, Coutinho ES, Stroup TS (2006) The schizophrenia drug-treatment paradox: pharmacological treatment based on best possible evidence may be hardest to practice in high-income countries. Br J Psychiatry 189(5):391–392

Awan NR (2015) Explanatory model of illness of patients with schizophrenia and the role of educational intervention. Shaheed Benazir Bhutto Women University Peshawar, Peshawar

Ball SJ, Vincent C (1998) I heard it on the grapevine: hot knowledge and school choice. Br J Sociol Educ 19(3):377–400

Bhikha AG, Farooq S, Chaudhry N, Husain N (2012) A systematic review of explanatory models of illness for psychosis in developing countries. Int Rev Psychiatry 24(5):450–462. doi:10.3109/09540261.2012.711746

Bhugra D (2005) The global prevalence of schizophrenia. PLoS Med 2(5):e151–e152

Bischoff A, Denhaerynck K (2010) What do language barriers cost? An exploratory study among asylum seekers in Switzerland. BMC Health Serv Res 10(1):248–254

Bond FW, Dryden W (2005) Handbook of brief cognitive behaviour therapy. Wiley, Chichester

Farooq S, Fear C (2003) Working through interpreters. Adv Psychiatr Treat 9:104–109

Farooq S, Large M, Nielsson O, Waheed W (2009) The relationship between the duration of untreated psychosis and outcome in low-and-middle income countries: a systematic review and meta analysis. Schizophr Res 109(1-3):15–23

Farooq S, Nazar Z, Irfan M, Akhter J, Gul E, Irfan U, Naeem F (2011) Schizophrenia medication adherence in a resource-poor setting: randomised controlled trial of supervised treatment in out-patients for schizophrenia (STOPS). Br J Psychiatry 199(6):467–472. doi:10.1192/bjp.bp.110.085340

Habib N, Dawood S, Kingdon D, Naeem F (2015) Preliminary evaluation of culturally adapted CBT for psychosis (CA-CBTp): findings from developing culturally-sensitive CBT project (DCCP). Behav Cogn Psychother 43(2):1–9

Harrison G, Hopper K, Craig T, Laska E, Siegel C, Wanderling J, Wiersma D (2001) Recovery from psychotic illness: a 15-and 25-year international follow-up study. Br J Psychiatry 178(6):506–517

Hazlett-Stevens H, Craske MG, Roy-Byrne PP, Sherbourne CD, Stein MB, Bystritsky A (2002) Predictors of willingness to consider medication and psychosocial treatment for panic disorder in primary care patients. Gen Hosp Psychiatry 24(5):316–321

Hegde S, Rao SL, Raguram A, Gangadhar BN (2012) Addition of home-based cognitive retraining to treatment as usual in first episode schizophrenia patients: a randomized controlled study. Indian J Psychiatry 54(1):15–22

Hofmann SG, Asnaani A, Vonk IJJ, Sawyer AT, Fang A (2012) The efficacy of cognitive behavioral therapy: a review of meta-analyses. Cogn Ther Res 36(5):427–440

Hopper K, Wanderling J (2000) Revisiting the developed versus developing country distinction in course and outcome in schizophrenia: results from ISoS, the WHO collaborative followup project. Schizophr Bull 26(4):835–846

Isaac M, Chand P, Murthy P (2007) Schizophrenia outcome measures in the wider international community. Br J Psychiatry 191(50):71–77

Iwamasa GY (1993) Asian Americans and cognitive behaviour therapy. Behav Ther 16:233–235

Jablensky A (2000) Epidemiology of schizophrenia: the global burden of disease and disability. Eur Arch Psychiatry Clin Neurosci 250(6):274–285

Jablensky A, McGrath J, Herrman H, Castle D, Gureje O, Evans M et al (2000) Psychotic disorders in urban areas: an overview of the study on low prevalence disorders. Aust N Z J Psychiatry 34:221–236

Joel D, Sathyaseelan M, Jayakaran R, Vijayakumar C, Muthurathnam S, Jacob KS (2003) Explanatory models of psychosis among community health workers in South India. Acta Psychiatr Scand 108(1):66–69

Kingdon D, Turkington D (1994) Cognitive behavioral therapy of schizophrenia. Lawrence Erlbaum Associates, Hove

Kohn R, Saxena S, Levav I, Saraceno B (2004) The treatment gap in mental health care. Bull World Health Organ 82(11):858–866

Kulhara P, Chakrabarti S (2001) Culture and schizophrenia and other psychotic disorders. Psychiatr Clin N Am 24(3):449–464

Lancet Global Mental Health Group (2007) Scale up services for mental disorders: a call for action. Lancet 370(9594):1241–1252

Large M, Farooq S, Nielssen O, Slade T (2008) Relationship between gross domestic product and duration of untreated psychosis in low-and middle-income countries. Br J Psychiatry 193(4):272–278

Laungani P (2004) Asian perspectives in counselling and psychotherapy. Brunner-Routledge, New York

Leff J, Sartorius N, Jablensky A, Korten A, Ernberg G (1992) The international pilot study of schizophrenia: five-year follow-up findings. Psychol Med 22(01):131–145

Mahy GE, Mallett R, Leff J, Bhugra D (1999) First-contact incidence rate of schizophrenia on Barbados. Br J Psychiatry 175(1):28–33

Menezes PR, Scazufca M, Busatto GF, Coutinho LM, Mcguire PK, Murray RM (2007) Incidence of first-contact psychosis in So Paulo, Brazil. Br J Psychiatry 191(51):102–106

Naeem F, Ayub M (2013) Culturally adapted CBT (CaCBT) for depression, Therapy manual for use with South Asian Muslims. Pakistan Association of Cognitive Therapists, Pakistan (Kindle Ed).

Naeem F, Gobbi M, Ayub M, Kingdon D (2009a) University students' views about compatibility of cognitive behaviour therapy (CBT) with their personal, social and religious values (a study from Pakistan). Ment Health Rel Cult 12(8):847–855. doi:10.1080/13674670903115226

Naeem F, Ayub M, Gobbi M, Kingdon D (2009b) Development of Southampton adaptation framework for CBT (SAF-CBT): a framework for adaptation of CBT in non-western culture. J Pak Psychiatr Soc 6(2):79–84

Naeem F, Gobbi M, Ayub M, Kingdon D (2010) Psychologists experience of cognitive behaviour therapy in a developing country: a qualitative study from Pakistan. Int J Ment Heal Syst 4(2):1–9

Naeem F, Ayub M, Kingdon D, Gobbi M (2012) Views of depressed patients in Pakistan concerning theirillness,itscausesandtreatments.QualHealthRes22:1083–1093.doi:10.1177/1049732312450212

Naeem F, Sarhandi I, Gul M, Khalid M, Aslam M, Anbrin A, Saeed S, Noor M, Fatima G, Minhas F, Husain N, Ayub M (2014a) A multicentre randomised controlled trial of a carer supervised culturally adapted CBT (CaCBT) based self-help for depression in Pakistan. J Affect Disord 156:224–227. doi:10.1016/j.jad.2013.10.051

Naeem F, Farooq S, Kingdon D (2014b) Cognitive behavioural therapy (brief versus standard duration) for schizophrenia. Cochrane Database Syst Rev 4:CD010646, http://dx.doi.org/10.1002/14651858.CD010646.pub2

Naeem F, Habib N, Gul M, Khalid M, Saeed S, Farooq S, Munshi T, Gobbi M, Husain N, Ayub M, Kingdon D (2014c) A qualitative study to explore patients', carers' and health professionals' views to culturally adapt CBT for psychosis (CBTp) in Pakistan. Behav Cogn Psychother 2:1–13, http://dx.doi.org/10.1017/S1352465814000332

Naeem F, Gul M, Irfan M, Munshi T, Asif A, Rashid S et al (2015a) Brief culturally adapted CBT(CaCBT) for depression: a randomized controlled trial from Pakistan. J Affect Disord 177:101–107

Naeem F, Saeed S, Irfan M, Kiran T, Mehmood N, Gul M et al (2015b) Brief culturally adapted CBT for psychosis (CaCBTp): a randomized controlled trial from a low income country. Schizophr Res 164(1-3):143–148

Nasr T, Kausar R (2009) Psycho education and the family burden in schizophrenia: a randomized controlled trial. Ann Gen Psychiatry 8(17):1–6

National Collaborating Centre for Mental Health UK (2014) Psychosis and schizophrenia in adults: treatment and management. National Clin Guidel 178, http://www.nice.org.uk/guidance/cg178

Owusu-Bempah K (2002) Culture, self and cross-ethnic therapy. In: Mason B, Sawyer A (eds) Exploring the unsaid: creativity, risks and dilemmas in working cross-culturally. Karnac, London

Pakistan Demographic Profile 2014, (2015, Nov 10). Retrieved from http://www.indexmundi.com/pakistan/demographics_profile.html

Patel V, Cohen A, Thara R, Gureje O (2006) Is the outcome of schizophrenia really better in developing countries? Rev Bras Psiquiatr 28(2):149–152

Phiri P (2012) Adapting cognitive behaviour therapy for psychosis for black and minority ethnic communities. University of Southampton, Southampton

Pinninti NR, Stolar N, Scott T (2005) 5-minute first aid for psychosis. Defuse crises; help patients solve problems with brief cognitive therapy. Curr Psychiatry 4:36–48

Ramakrishnan P, Rane A, Dias A, Bhat J, Shukla A, Lakshmi S et al (2014) Indian health care professionals' attitude towards spiritual healing and its role in alleviating stigma of psychiatric services. J Relig Health 53(6):1800–1814

Rathod S, Kingdon D (2009) Cognitive behaviour therapy across cultures. Psychiatry 8(9): 370–371

Rathod S, Kingdon D, Pinninti N, Turkington D, Phiri P (2015) Cultural adaptation of CBT for serious mental illness: a guide for training and practice. Wiley-Blackwell, Chichester

Rathod S, Kingdon D, Phiri P, Gobbi M (2010) Developing culturally sensitive cognitive behaviour therapy for psychosis for ethnic minority groups by exploration and incorporation of Service User's and Health Professionals views and opinions. Behav Cogn Psychother 38(5):511–533

Saha S, Chant D, Welham J, Mcgrath J (2005) A systematic review of the prevalence of schizophrenia. PLoS Med 2(5):e141–e161

Saravanan B, Jacob KS, Johnson S, Prince M, Bhugra D, David AS (2007) Belief models in first episode schizophrenia in *World Psychiatry* South India. Soc Psychiatry Psychiatr Epidemiol 42(6):446–451

Stone L, Warren F (2011) Cognitive behaviour therapy training in a developing country: a pilot study in Tanzania. Cogn Behav Ther 4(4):139–151

Tsai JL, Chentsova-Dutton Y (2002) Understanding depression across cultures. In: Gotlib IH, Hammen CL (eds) Handbook of depression. Guildford, New York, pp 467–491

van Os J, McGuffin P (2003) Can the social environment cause schizophrenia? Br J Psychiatry 182:291–292

Williams PE, Turpin G, Hardy G (2006) Clinical psychology service provision and ethnic diversity within the UK: a review of the literature. Clin Psychol Psychother 13:324–338

World Health Organization (1976) Schizophrenia. An international follow-up study. Wiley, New York

World Health Organization. Mental Health Atlas (2011) Available from URL: http://www.who.int/mental_health/evidence/atlas/profiles/en/