

Pharmacotherapy for Southeast Asian Psychiatric Patients

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Refugees have been demonstrated to be at high risk for developing major depressive and posttraumatic stress disorders, but are often not able to benefit from modern advances in psychopharmacology. Besides difficulties in cross-cultural psychiatric diagnosis, problems also arise from cultural differences in the expectation of drug effects and in compliance. Recent evidence has suggested that pharmacokinetic and pharmacodynamic profiles of various psychotropic medications may be different in Asians than in non-Asian patients, leading to differences in dosage requirements and side effect profiles. These issues and their relevance to the care of refugee patients are reviewed.

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Since 1975, approximately one million Southeast Asian refugees have resettled in this country (Owan et al., 1985). Confirming early predictions based on field observations and epidemiological surveys (Lin et al., 1979; Tung, 1985), an increasing number of these refugees have been experiencing significant psychiatric symptoms (Lin, 1986). Substantial structural, cultural, and language barriers have deterred these refugees from seeking psychiatric help (Tung, 1985), but many of them have managed to reach the mental health care system. Concurrently, responding to this rapid rise in demand for specialized psychiatric care, clinics designed to provide culturally congruent psychiatric treatment for the Southeast Asians have been established in several areas where significant numbers of refugees congregate (Kinzie et al., 1980; Mollica et al., 1987). The concerted efforts of the clinicians and researchers involved in these clinics have resulted in a body of literature representing major advances in the psychiatric care of refugees, as well as other cross-cultural populations (Kinzie, 1985).

Prominently missing in the midst of this remarkable progress in our understanding of the psychiatric treatment of refugees is a substantial discussion of the proper use of psychotropic agents in these populations. Because most of these refugee patients suffer from major psychiatric conditions such as schizophrenia, major

depression, and posttraumatic stress disorder (PTSD) and definitely require the use of medication to alleviate their most disturbing symptoms, the relative paucity of information in this regard is problematic. Across the country, in practically all clinics involved in the care of refugees, psychopharmacology is seen as essential for the treatment of these patients (Kinzie, 1985; Lin, 1986; Tung, 1985), but there is no information about the efficacy of these agents. And, recent findings of the existence of substantial cross-ethnic variations in the responses to various psychotropics (Lin et al., 1986, 1988a, 1988b, 1989) make it essential that such factors be investigated in greater depth. For example, to what extent are medication effects pharmacologically based? Are the dose ranges currently used appropriate for the refugee populations? Are the side effect profiles different in these populations? Is compliance a major problem? How do we reduce the rate of noncompliance?

To address some of these issues, we will first systematically discuss various factors that impinge on the pharmacotherapy of refugee patients. We will also briefly review recent literature of ethnic differences in psychotropic responses. Although most of the issues discussed in this paper are primarily relevant to Southeast Asian refugee patients, some of them may also apply to other refugee, as well as immigrant, groups. Furthermore, since Southeast Asians share important common cultural heritages with other Asian groups, some of these issues will also be relevant to these groups as well.

Important Issues to Be Considered When Treating Refugee Patients

Diagnostic Issues

Diagnosis is the first and most essential step in treatment planning. This is especially true when biological treatments are considered. Unfortunately, psy-

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chiatric diagnoses may be particularly difficult and complicated when evaluating refugee patients. After resettlement, it usually takes years for most refugees to master the language of the host country. Although many refugees eventually manage to learn the new language, their skills may not be sufficient to communicate in psychiatric interviews, which are likely to be at a highly abstract or symbolic level. Even with those who are sufficiently bilingual, the nature and level of psychopathology reflected with interviews in their mother tongues may be different from those conducted in their second language (Marcos, 1976). The potential for distortion is even greater when we use interpreters/translators who have received no professional training and who have not worked with the clinicians regularly. In addition, cultural influences on experiencing, reporting, and interpreting symptoms could further complicate the interview process. Depending on the meaning as determined by the patients' culturally based beliefs, the significance and severity of a given symptom may be exaggerated or minimized from the clinicians' viewpoint. Thus, it is important that clinicians be systematic and complete in eliciting information during the interviews. In this sense, the use of structured interview instruments such as the Structured Clinical Interview for DSM-III (SCID) (Spitzer and Williams, 1985) may be particularly useful. The complexity of the refugee experiences also may make clinical evaluation difficult. Some of the events experienced by the refugee patients may be completely outside the comprehension of clinicians who are unfamiliar with refugee issues. Furthermore, the recounting and reexperiencing of severe past trauma may be so painful that refugees may often be extremely reluctant to reveal them (Kinzie et al., 1984). All these factors may interfere with the process of clinical evaluation.

Differences in Communication Styles between Clinicians and Refugee Patients

The differences in communication styles not only affect the process of diagnosis, but also impact on interaction patterns between clinicians and refugee patients. Differing from Anglo-Americans, who have more direct communication styles, Asian refugee patients often are less expressive and less direct. This is especially true when they are confronted with authority figures such as the helping professionals. Clinicians unaccustomed to the subtlety of this relatively less direct communication style may be baffled as to why some of the refugee patients often appear to readily agree with the treatment plan, yet do not comply with it (Tung, 1985). On the other hand, refugee patients may feel obliged to follow the prescribed treatment recommendations, which may not make sense to them

in the context of their culturally shaped health belief systems.

Issue of Compliance

Noncompliance is a major problem in the treatment of chronic medical conditions (Sackett and Haynes, 1976). Most psychopharmacotherapies require long-term treatment, and are often plagued by a significant degree of poor compliance. Recent studies have indicated that the assurance of medication compliance is even more problematic with refugee patients. For example, Kinzie et al. (1987) reported that 61% of their depressed, medicated refugee patients showed no tricyclic antidepressants (TCA) in their blood, and that another 24% of them revealed only very low TCA serum levels, even though all of them were treated with apparently adequate TCA dosage. When confronted subsequently, the majority of them admitted to not taking the prescribed TCAs and pretending compliance for various reasons. After education regarding proper TCA use and the need for maintaining appropriate blood levels, many patients became much more compliant. In a recent study examining the relationship between the clinical effects of the neuroleptics and their serum concentrations in 30 Cambodian refugee patients, we similarly found that about 50% of them revealed extremely low serum neuroleptic levels, even though some of them were prescribed very high neuroleptic doses.

Beliefs in and Expectations of Psychiatric Medications by Refugee Patients

Clinicians working with refugees and with Asian populations have reported that both groups tend to expect Western medicines in general to exert their therapeutic effects swiftly, if not instantaneously, to have high potential for severe side effects, and to be effective only for the control of the "superficial" manifestations, but not the underlying conditions, of the diseases (Owan et al., 1985). These perceptions, possibly fostered by their earlier experiences with antipyretic and antibacterial agents, can be especially problematic in the case of psychotropic agents. Unless explained carefully and emphasized repeatedly, Asian refugees often have difficulty appreciating the need for maintenance therapy in most psychiatric conditions. The lack of immediate therapeutic effects and the 2- to 3-week lag time needed for most psychotropics (especially TCAs) to exert their maximal effects are incongruent with the preconceptions of the refugee patients toward "Western medicines." Furthermore, when side effects occur, these can easily be taken as proof that "Western medicines" are indeed too strong for them. Therefore, examining refugee patients' indigenous health beliefs and eliciting their expectations about "Western medicines" are important

when psychotropic agents are prescribed. Through such inquiries, misunderstandings and mismatched expectations might be minimized.

Influences of Family and Social Network

Reflecting the importance of family relationships in Eastern cultures, clinicians (Lin and Lin, 1978) and social scientists (Hsu, 1980) have labeled various Asian cultures as family or group centered, in contrast to the Occidental emphasis on individualism. However, the clinical implication of these differences in family involvement has not been adequately explored. How such differences in the nature of and influences from family and social networks might affect patients' responses to psychotropic drugs is even less understood. In our recent study in Los Angeles comparing the responses of 26 Asian and 26 Caucasian schizophrenic patients to haloperidol treatment, 19 Asians versus four Caucasians were accompanied by family members at their initial assessment, and 25 Asians versus 12 Caucasians had at least some family involvement during the 3-month treatment course. The results of this project confirmed our earlier impression of the importance of including the family in all the major treatment decisions of Asian patients.

Ethnic Differences in Psychotropic Responses

In the past 10 years, studies using increasingly sophisticated methodologies have confirmed some of the earlier clinical observations regarding different therapeutic dose ranges of various psychotropic medications between Asian and Caucasian patients (Lin et al., 1986, 1988a, 1988b, 1989). These studies, however, have so far not included Southeast Asian patients or subjects. Different Asian subcultural groups certainly share some important common traits that could significantly influence drug responses. For example, there are likely to be similarities among different Asian groups in the distribution of genes governing the rate of drug metabolism. Asian diets also tend to be similar in terms of their carbohydrate to protein ratio, which has been shown to significantly influence the metabolism rate of some commonly prescribed drugs (Clark et al., 1988). Inasmuch as most Asians come from areas with similar degrees of socio-economic development, their exposure to various enzyme-inducing agents, including prescribed drugs, street drugs, and industrial toxins, is also likely to be similar. However, at the same time, the heterogeneity among different Asian groups should be kept in mind. In terms of genetic endowment, the distribution of the "slow" acetaldehyde dehydrogenase serves as a good example. Whereas close to 50% of Chinese, Japanese, and Vietnamese experience significant "facial flushing" after

taking small amounts of ethanol because of this specific enzyme aberration, only about one-third of Koreans manifest this characteristic (Kalow et al., 1986). Among Asians of Malay and Thai background, the incidence of "facial flushing" is low, and the percentage of the population having the slow acetaldehyde dehydrogenase is not substantially different from that observed among the Caucasian populations (Kalow et al., 1986). Since Laotians share common ancestral heritages with the Thai, and Cambodians are commonly regarded as proto-Malays (Lin and Masuda, 1981), it is likely that they will not manifest the special sensitivity to ethanol commonly observed in other Asian groups. However, these possibilities have not been objectively demonstrated.

In terms of environmental influences on drug metabolism and responses, again there are reasons to suspect that refugees may differ in some significant ways from other Asians. Although they come from the same geographic area as other Asians, Southeast Asian refugees have experienced decades of warfare, and many have suffered from incarceration, starvation, infections, and other medical conditions during their escape or while waiting in relocation camps. These factors could all conceivably have some effect on the activities of the enzyme systems governing the biotransformation of psychotropic medications.

Other Important Issues

Besides the issues raised above, there are other issues that are also important in relation to pharmacological treatment of refugee patients. Some of these will be discussed here.

The Pharmacotherapy of PTSD

Recent studies have consistently shown extremely high prevalence rates of PTSD among most, if not all, Southeast Asian refugee groups (Kinzie et al., 1984). The PTSD symptoms they experience are likely to be severe, persistent, and require psychopharmacological intervention (Kinzie et al., 1984). However, without carefully designed outcome research, it is unclear whether their responses to these interventions are similar to nonrefugee PTSD patients and what the most rational pharmacotherapeutic strategy is for treating refugee patients suffering from these very distressful and disabling symptoms.

The Use of Monoamine Oxidase Inhibitors (MAOIs)

MAOIs have been demonstrated to be useful in the treatment of "atypical depression" and panic disorders (Liebowitz et al., 1988; Sheehan, 1985). They are also possibly effective in the control of some of the PTSD symptoms (Hogben and Cornfield, 1981). Thus, it is

important that these drugs be added to the therapeutic armamentarium for the care of refugee patients. However, because of the uncertainties regarding possible interactions between MAOIs and some of the Asian dietary practices, such as the use of soy sauce, fish sauce, and many other fermented or pickled Asian foods, MAOIs have rarely been used with Asian patients. For the Chinese, this issue has recently been addressed by a study which systematically measured the tyramine content of the foodstuffs commonly consumed by the Chinese (Sung et al., 1986). Similar studies should be conducted in other Southeast Asian groups so that these refugee patients can also benefit from therapeutic trial with these potentially useful medications.

Interactions between Traditional Asian Herbal Medicine and Psychotropics

Evidence indicates that, despite the availability of Western-style medical services, the use of traditional herbal medicines continues to be popular and extensive in various Asian populations (Kleinman, 1980), including those residing in the United States (Chan and Chang, 1976). Some of these herbal drugs clearly have active pharmacological properties, and may interact with psychotropic drugs in different ways (Jones and Runikis, 1987; Shader and Greenblatt, 1988). For example, the anticholinergic properties inherent in some of these drugs may cause atropine psychosis, particularly when ingested concomitantly with TCAs or low potency neuroleptics. As long as patients continue to rely on these traditional herbs in addition to pharmacotherapy, the clarification of these issues remains important.

Conclusion and Recommendations

This brief survey of the literature concerning the psychopharmacotherapy of Southeast Asian refugees raises more questions than answers. Because of the nature and the severity of the psychopathology experienced by refugees, and their help-seeking patterns discouraging mental health contact unless absolutely necessary, biological interventions will remain an essential component for the care of psychiatric patients with refugee backgrounds. At the same time, both for pharmacological and nonpharmacological reasons, their responses to these powerful therapeutic agents are likely to differ significantly from the responses of those with other cultural and ethnic backgrounds. Despite the substantial progress of research in the field, much remains unknown in regard to what comprises rational psychopharmacotherapy for Southeast Asian refugees.

In order to address these admittedly complicated

issues, research efforts with diverse designs and strategies will be needed. Surveys of prescription patterns, dosage, compliance, and side effects of refugee patients receiving psychotropic medications are needed because they provide valuable information on what may be working for, or at least tolerated or accepted by, refugee patients. At a higher level of sophistication, longitudinal naturalistic studies involving trials of specific regimens or therapeutic agents can often provide important information. A recent report by Kinzie and Leung (1989) demonstrating the efficacy of clonidine in the treatment of PTSD serves as a good example for the utility of such an approach. Insight derived from these "hypothesis generating" studies, as well as from clinical observations, can then be further tested with research protocols utilizing more vigorous designs, including double-blind testing of psychopharmacological agents for the treatment of specific conditions and studies involving pharmacokinetic, pharmacogenetic, and pharmacodynamic measurements. Because the tasks involved in these approaches are substantial, complex, and multifaceted, collaborative efforts should be encouraged. These should not only include collaboration between psychiatric clinicians and researchers and socioculturally oriented and biologically oriented psychiatrists, but also collaboration among psychiatric researchers and scientists of other disciplines, such as pharmacology, brain imaging, genetics, and nutrition.

The need for future research notwithstanding, there is consensual agreement among most experts in the field regarding several important issues that should not be overlooked when treating Southeast Asian refugee patients. Some of these practical guidelines for general clinicians are listed below.

1. Information regarding patients' beliefs about their illnesses and what effective treatment consists of should be elicited on routine bases. Symptoms that have significant meaning for the patients should not be brushed aside. Proposed treatment should be explained in culturally congruent terms.

2. At the same time, patients' beliefs in the traditional Asian medical practices, such as the use of herbs, should also be routinely elicited. If necessary, the active ingredients of these herbs can be determined by consulting a specialist in pharmacognosy.

3. Issues of compliance should be brought up with patients and their family members in a nonthreatening and open manner. Regular monitoring of serum or plasma drug concentrations may be performed as an adjunct to ensure compliance.

4. In most cases, key family members should be included in discussions regarding diagnoses and treatment planning.

5. Because of their smaller body sizes, and the pos-

sibility of significantly different pharmacokinetic and pharmacodynamic profiles seen in other Asian groups, it would be prudent to start Southeast Asian patients with approximately half the dosage regimen usually given to non-Asian patients. However, at the same time, it should be kept in mind that huge (up to 40-fold) interindividual differences in the kinetics and dosage requirements exist within any ethnic group, which may in individual cases override cross-ethnic differences. Hence, the clinician should not hesitate to increase the dosage of a particular medicine, if the patient has been compliant yet does not respond within a reasonable period of time and manifests no significant side effects. Again, the determination of serum drug concentration may be useful in making this decision.

With recent advances in research methodologies in both cross-cultural psychiatry and psychopharmacology, we are now in a position to provide better psychopharmacological care to Southeast Asian refugee patients, and also to substantially improve our understanding of these issues. In the coming decade, such clinical and research efforts should significantly benefit the majority of the refugee patients increasingly confronting psychiatric clinicians.

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