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Title

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Journal

AAPI Nexus: Policy, Practice and Community, 8(2)

ISSN

1545-0317

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Publication Date

2010

DOI

10.36650/nexus8.2_21-38_LeongEtAl

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aapi nexus Vol. 8, No. 2 (Fall 2010): 21-38

Resource Paper

Comparative Effectiveness Research on Asian American Mental Health: Review and Recommendations

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Abstract

The purpose of this manuscript is to describe the *comparative effectiveness research* (CER) paradigm and its important role in guiding current federal funding of research and examine how this paradigm can be used to guide Asian American mental health research. We will begin with a review of comparative effectiveness research and provide several examples of Asian American studies, which fit into the paradigm. In discussing how we may map the CER onto Asian American mental health research, the problem of differential research infrastructure will be introduced and used to frame our recommendations for future research. We provide some recommendations for using CER in Asian American mental health research by noting the need for multiple approaches due to the problem of differential research infrastructure, and expanding the human capital and data infrastructure. The pros and cons of *randomized control trials* (RCT) are discussed and an example of a study being planned by the authors is presented to illustrate how to undertake studies on Asian American mental health using the CER paradigm.

Literature Review

Comparative Effectiveness Research

Despite the recent growth of treatment efficacy research indicating whether treatments are efficacious relative to a placebo or no treatment, scientists and practitioners still know little about the effectiveness of one treatment over an alternative treatment. *Comparative effectiveness research* (CER) attempts to bridge this gap by comparing two or more different methods for prevention, diagnosis, or treatment. The Institute of Medicine (IOM, 2009) defines comparative effectiveness research as

> …the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve health care at both the individual and population levels (p.13).

Thus, the ultimate goals of CER are to provide scientific evidence for the effectiveness of different methods and to establish what works for whom, when, and under what conditions, considering factors such as the patient's age, sex, ethnicity, and comorbidities. This paper will review the history, background, and current status of the CER movement and will present two examples of CER studies, followed by a discussion of existing comparative paradigms in Asian American mental health research. As a final point, the paper will provide a series of recommendations for comparative effectiveness research on Asian American mental health research.

According to the Congressional Budget Office (CBO, 2007), federal expenses on Medicare and Medicaid have nearly tripled as a share of gross domestic product (GDP), from 1.3 percent in 1975 to 4 percent in 2007. If this trend continues and costs per enrollee increase faster than per capita GDP, federal spending on these programs may increase up to 17 percent of GDP by 2050. Higher health care costs can create serious difficulties for both the government and private payers. In addition, newer and more expensive treatments are developed without having adequate information on their comparative effectiveness. Furthermore, it is not clear which treatments work best for which patients. These issues emphasize the urgent need for understanding the costs, risks, and benefits of different treatment options (CBO, 2007). The CBO report recommended the promotion of CER as a way to improve outcomes and constrain health care costs without compromising health.

Consistent with this recommendation, the American Recovery and Reinvestment Act (ARRA) of 2009 provided $1.1 billion over the next two years to start a federal comparative effectiveness research program (U.S. Department of Health and Human Services, 2009; DHHS). The Act allocated $400 million to the Office of the Secretary in the DHHS, $400 million to the National Institute of Health (NIH), and $300 million to the Agency for Healthcare Research and Quality (AHRQ). In addition, the Act established the

Federal Coordinating Council for Comparative Effectiveness Research (2009), which developed an initial report and recommendations for CER. Furthermore, the IOM (2009) consulted with stakeholders to identify and categorize priorities for CER. As a result, the Council developed a strategic framework that focused on four major areas of investments or activities: research (e.g., conducting comparative trials), human and scientific capital (e.g., training researchers and developing methodology), CER data infrastructure (e.g., developing data networks), and the dissemination and translation of CER. These four areas can cut across three themes: conditions (e.g., diabetes, depression), patient populations (e.g., elderly, ethnic minorities), and types of interventions (e.g., delivery system, behavioral change).

The IOM (2009) released a report that identified broad-based priorities for CER, as requested by the Congress. The IOM Committee on CER Prioritization suggested a portfolio of 100 topics after an extensive consultation process with professional organizations and the public. Half of the recommended priorities emphasize health care delivery in terms of "*how* and *where* services are provided, rather than *which* services are provided" (IOM, 2009). Ethnic and racial disparities are addressed in one-third of the primary research areas. Other important priorities are cardiovascular disease, geriatrics, psychiatric disorders, neurologic disorders, and pediatrics (Inglehart, 2009). The funding for these priority areas has been distributed by the DHHS, the NIH, and the AQRC. Meanwhile, the Congress may consider the establishment of a permanent CER structure that will continue funding CER studies in the future (Inglehart, 2009).

Some researchers have argued that comparative effectiveness research may be particularly important for improving mental health care because, despite increased spending, less than a quarter of patients with serious mental disorders receive appropriate care (Wang, Ulbricht, and Schoenbaum, 2009). In order to illustrate better the implementation of CER in mental health care, we describe the main CER features and the most common CER methods; afterwards, we provide three CER examples. The IOM report from 2009 listed six defining characteristics of CER:

> 1) CER has the objective to inform directly a specific clinical decision

2) CER compares two or more alternative interventions

3) CER reports results at the population and subgroup level

4) CER measures outcomes that are important to patients

5) CER utilizes data and methods appropriate for making a decision

6) CER is conducted in settings that are similar to real-world settings.

However, if research is in the early stages of the intervention development, not all of these characteristics may be present. These characteristics determine what methodology is appropriate to use when conducting CER studies. The most common methods in CER are experimental studies (e.g., randomized controlled trials, head-to-head trials), observational studies (e.g., prospective or retrospective, cohort studies, case series), research syntheses, comparative effectiveness systematic reviews, meta-analyses, and technology assessments (IOM, 2009). The CER characteristic that requires reporting results at the population and subgroup level has important implications for the study of Asian Americans and Pacific Islanders (AAPIs). In particular, it provides a key justification for the disaggregation and oversampling of AAPIs in research studies. As a result, researchers will be able to run analyses and draw conclusions about particular subgroups, address questions, and provide evidence for issues that have been neglected due to small numbers of AAPIs in previous studies.

Sample and Proposed Studies

To illustrate the use of CER in mental health research, two conducted studies are described briefly. In addition, we discuss existing paradigms in Asian American psychology that are similar to CER and propose to carry out a CER psychotherapy study with Asian Americans. The first study examined the comparative effectiveness of interpersonal psychotherapy for depressed adolescents (IPT-A) and treatment as usual (TAU) (Mufson et al., 2004). In a study titled "Effectiveness research: Transporting interpersonal psychotherapy for depressed adolescents (IPT-A) from the lab to school-based health clinics" (2004), Mufson and colleagues adapted and transported IPT-A from a university setting to school-based health clinics, shifting the focus from efficacy to effectiveness research. The participants were 63 adolescents (84 percent female, 71 percent Hispanic, predominantly

low socioeconomic status) diagnosed with a depressive disorder, who were randomly assigned to receive IPT-A or TAU. IPT-A was a manualized time-limited twelve-session intervention with a focus on current problems. TAU was the psychotherapy that students usually received in the school-based clinic; most often, it resembled supportive counseling. The authors found that adolescents treated with IPT-A compared to TAU reported fewer depressive symptoms, better overall functioning, and greater clinical improvement post-treatment. Through research from "A randomized effectiveness trial of interpersonal psychotherapy with depressed adolescents" (2004), Mufson et al. concluded that IPT-A was an effective treatment for underserved depressed adolescents.

The second study explored the cost-utilization and treatment outcomes associated with the use of ethnic-specific and mainstream services for Asian Americans (Lau and Zane, 2000). Lau and Zane explored whether increased utilization of ethnic-specific services (ESS) by Asian Americans is related to better outcomes and lower use of more intensive and expensive mental health services (e.g., crisis intervention). Data from the Los Angeles County Department of Mental Health for 3,178 Asian Americans with first episodes of care were drawn, in which 1,981 used ESS and 1,197 received mainstream services. When controlling for functioning at admission, diagnosis, primary language, age, and insurance coverage, Asian Americans who received ESS showed more favorable treatment outcomes than Asian Americans who used mainstream services. As might be expected, the cost-utilization at ethnic-specific centers was higher than the cost-utilization at mainstream centers. However, the authors found a significant relationship between cost-utilization and treatment outcome for ESS outpatients, but not for mainstream outpatients. In conclusion, this study suggested that ethnic-specific mental health care for Asian Americans is more effective than mainstream care (Lau and Zane, 2000). The reviewed examples provide evidence for how CER may help researchers reduce health disparities and improve mental health care for ethnic and racial minority populations.

Although CER may appear as a new idea in ethnic minority research, some of the early paradigms in Asian American mental health research are already comparative in nature. In other words, researchers in this field have already integrated the concept of CER in their studies, but it was framed differently. Previous research that

explored Asian American mental health compared effectiveness at two levels, groups and treatments. At the group level, the variable can be either the therapist or the patient. For instance, Sue and colleagues (1991) tested the hypothesis that therapist-client matches in ethnicity and language will lead to more favorable outcomes for clients than no matching. Ethnic matching was associated to longer treatment for all groups—Asian American, African American, Mexican American, and White clients. Furthermore, for clients who did not speak English as a primary language, ethnic match was related to more treatment sessions and better outcomes (Sue et al., 1991). Other similar studies found that Asian Americans who received ESS had a higher return rate, better retention (Takeuchi et al., 1995), and better participation measured by the number of sessions attended than those in mainstream services (Flaskerud and Hu, 1994). In addition to examining the role of the therapist's ethnicity, researchers compared patients at the group level examining whether ESS for Asian Americans would create different outcomes with White patients and found no differences in service effectiveness for the two groups (Zane et al., 1994).

The second level of comparison examines the effectiveness of different treatments for the same group. Such evaluations can either compare the effectiveness of different treatments for a certain population or the effectiveness of a culturally adapted treatment to a non-adapted treatment. However, research that compares the effectiveness of different treatments with Asian Americans is extremely scarce. Huey and Pan (2006) conducted a pilot study with fifteen Asian Americans with simple phobia that compared three different treatments: culturally responsive one-session treatment, standard one-session treatment, and manualized self-help treatment. The authors concluded that the combined scores of the two active interventions led to greater reduction in phobic avoidance and anxiety than the self-help group. In addition, it was suggested that the culturally adapted version showed trends for better outcomes. Unfortunately, this study was the only experimental effectiveness study with Asian Americans that we could find.

In order to compare the effectiveness of treatments, knowledge of the theoretical models behind them is needed. Within the area of cross-cultural psychotherapy, we would like to discuss and compare two models: the *Cultural Accommodation Model* developed by Leong and his colleagues (Leong, 1996; Leong and Lee, 2006) and

the *Cultural Adaptation Model* for psychotherapy. The Cultural Accommodation Model (Leong, 1996) integrates the universal, group, and individual dimensions and is superior to both the universalist and cultural assimilation approaches. It recognizes the importance of specific cultural elements that may be ignored in traditional Western models of psychotherapy and fills in the cultural gaps by incorporating culturally specific concepts. When Leong and Serafica (2001) first proposed the Cultural Accommodation Model, they indicated that we need to determine the model's incremental validity above and beyond culturally unaccommodated theories and models. In order to evaluate incremental validity, studies should investigate the amounts of variance that are accounted for by culture-specific variables (e.g., acculturation, self-construal, individualism/collectivism) in the personality and behavior of racial and ethnic minority individuals. Another important parallel development to the Cultural Accommodation Model is the Cultural Adaptation Model that seeks to integrate the cultural competence literature with that of the Evidence-Based Practice (EBP) in psychology (Hwang, 2006; Lau, 2006). These models of cultural adaptations are quite similar to the Cultural Accommodation Model in identifying important cultural variables that need to be incorporated into the treatment, but differ in that they concentrate on adapting treatment approaches instead of helping the therapist accommodate to the client. However, both approaches are essentially advocating the same goal of providing culturally relevant and effective psychotherapeutic services.

Next, we will describe a proposed study to compare the relative effectiveness of Cultural Accommodation Model and the Cultural Adaptation Model. The Cultural Accommodation Model is essentially a training model where psychotherapists learn about cultural differences that may influence diagnosis and treatment, and attempt to accommodate for these differences in the psychotherapeutic process. The significant cultural differences to be accommodated for are selected from empirical literature, but the actual accommodation process is fluid and not pre-determined. The Cultural Adaptation Model, on the other hand, is modeled after manualized therapy studies, where treatment manuals are prepared according to a particular theoretical orientation (e.g., Cognitive-Behavior Therapy) and therapists apply these treatments in strict adherence to the manual in order to assess the effectiveness of the approach. For the Cultural Adaptation Model, a manualized

treatment model is selected and then adapted for potential cultural differences to make it for culturally appropriate for specific racial and ethnic minority groups (e.g., for Mexican Americans). Whereas the Cultural Accommodation Model is focused on providing cultural competence training to the *therapist* and allowing her or him to proceed with the therapy in a dynamic fashion, the Cultural Adaptation Model is focused on modifying existing therapy models by adding cultural elements and, hence, is focused on the *therapy* (and not the therapist).

In our proposed comparative trial, we will randomly assign Asian American patients in a treatment clinic to three conditions:

1) Treatment as usual in that clinic with no modifications

2) Cultural Adaptation Model, in which a manualized culturally adapted form of therapy is provided

3) Cultural Accommodation Model, in which patients are assigned to therapists who are trained in and will utilize it as outlined above.

The Asian American patients assigned in these three conditions will then be compared in terms of their satisfaction at the end of their first, third, and sixth sessions, their ratings of the cultural competence of their therapist, their rates of premature termination, their GAF scores at every third session, and their final outcome assessment at the end of treatment. As stated earlier, the IOM prioritizes conducting CER research, such as comparative trials, which suggests that similar studies are highly desirable.

Problem of Differential Research Infrastructure

In reviewing the CER paradigm and how it may be useful in guiding future research on Asian American mental health, we are required to shift to a different level of analysis. Whereas traditional reviews have tended to examine the status of a particular topic or area (e.g., Asian American depression or academic achievements), trying to map the CER paradigm onto Asian American mental health research requires us to examine the whole field of Asian American psychology. This, in turn, brings us to the problem of differential research infrastructure. Different subfields of psychology or psychiatry progress at different rates, and some are more advanced than others. For example, there have been considerably more studies of psychiatric epidemiology of White European American samples (as

evidenced by the Epidemiological Catchment Area studies) than of African Americans. Despite the oversampling of African Americans in several of the ECA sites and the funding of the program researching African American mental health spearheaded by James Jackson at the University of Michigan, our knowledge base on psychiatric epidemiology for White European Americans is simply more advanced and more developed than for African Americans. Similarly, the subfield of psychiatric epidemiology for African Americans is more advanced and more developed than those for Latinos and Asian Americans. The dearth of psychiatric epidemiological data for Latinos and Asian Americans is what led to the conceptualization and funding of the National Latino and Asian American Study (NLAAS).

The problem of differential research infrastructure and the associated developmental lag in which some subfields of inquiry are more advanced than others is often overlooked or ignored by funding agencies, review boards, and even scientists themselves. While it is difficult to specify definitively the causes for this differential research infrastructure across subfields, one clear factor has to do with the politics of numbers. Many subfields do not receive attention or investment of resources until a critical mass or critical number of agents and players are involved, which is sometimes referred to as the "tipping point." The *Workforce 2000* report (1987) from the Hudson Institute highlighted the impending demographic shifts in our country and alerted business leaders that we would be facing a significantly diverse workforce. This report led to the rise of attention to cultural diversity issues and initiatives in organizations. Similarly, the *Supplement to the Surgeon General's Report on Mental Health: Culture, Race and Ethnicity in Mental Health* (2001), noted the significant ethnic minority mental health disparities and the critical knowledge gaps in those subfields.

It is not difficult to see that the developmental lags across subfields are related to the differential research infrastructure. In general, the subfields at earlier stages of development tend to have fewer investigators, fewer journals, fewer grant-funded research projects, and, therefore, less of an empirical base and fewer theoretical advances. Just as health disparities research is concerned with correcting the differential (poorer) treatment and outcomes for different groups, we need to also be concerned with the research disparities created by the current differential research infrastructure across subfields.

To provide a quick index of this differential research infrastructure and the associated research disparities, we noted that for the year 1998-1999, there were 2,103 European Americans enrolled in Ph.D. psychology programs in comparison to 187 African Americans, 137 Hispanic Americans, and 217 Asian Americans. Conversely, for the year 2000, 2,601 European Americans received doctorates from graduate departments of psychology compared to 193 African Americans, 194 Hispanic Americans, and 149 Asian Americans. Granted that not all psychological scientists will conduct research related only to their own racial and ethnic groups, one can get a sense of the differential research infrastructure related to mainstream versus racial and ethnic minority psychology. This problem is directly related to some of CER's major areas, human and scientific capital. The training of researchers who will advance the specific fields of racial and ethnic minority psychology is an important prerequisite for conducting CER research. Similarly, in conducting a search in the PsychInfo database, we found 266,797 entries for the word "depression," of which only 7,983 studies concerned depression among African Americans and 1,948 studies concerned depression among Asian Americans. Finally, the *American Psychologist* was established in 1946, whereas the *Journal of Black Psychology* was established in 1974 and the *Asian American Journal of Psychology* was established last year (2010).

While we do not have the space to provide a detailed discussion of the "manpower problems" or the "challenges of capacity building" for minority scientists within the NIH, we do want to highlight the critical problem of differential research infrastructure and the shortage of human capital that serves as a barrier for implementing the CER paradigm within Asian American psychology. The contextual factors contributing to these research disparities need to be included as important elements in our national plan to advance our understanding and improvement of the mental health of racial and ethnic minorities, including Asian Americans.

Recommendations

Need for Multiple Approaches in Research

Given this problem of a differential research infrastructure, it would be important for the field of Asian American mental health to be strategic in what studies are designed and undertaken in order to provide the foundation for competing for grant-funded proj-

ects within the CER paradigm. At the same time, there is a need for the use of multiple approaches in order to accumulate the necessary knowledge base for us to compare the relative effectiveness of different treatment approaches for Asian Americans and Pacific Islanders.

As part of the APA Advanced Training Institute (ATI) directed by the first author at Michigan State University, a session taught by Leong covered methodological approaches to psychotherapy outcome assessment with culturally diverse populations. In this session, a variety of methods were discussed in terms of their potential use in psychotherapy outcome research, which includes clinical case studies, analog and simulation studies, comparative studies of treatment models, randomized control trials, archival research and secondary analysis of datasets, and meta-analyses. There are advantages and disadvantages to each of these methods, but the point of Leong's session was that the field needs a variety of data generated by these multiple approaches in order to build the convergent knowledge base for the field. For example, the clinically rich and experience-near data generated by the case study approach can generate hypotheses to be tested with analog and simulation studies in the lab. The results from these analog and simulation studies can help us construct culturally relevant treatment models, which can then be compared with regards to their relative effectiveness either through a comparative treatment design or a RCT design (in which one treatment is tested at a time). As these treatment studies accumulate, we can then conduct meta-analysis to provide a more generalizable set of findings and principles to guide practice and interventions.

Of the multiple approaches mentioned above, we would like to comment on two of them. First, whereas the RCT method is the gold standard in the medical field as well as in treatment and intervention studies, there are both pros and cons to the use of this method with Asian American mental health research. Second, we would like to recommend the use of the comparative treatment design and specifically discuss a study in which we are planning to compare and contrast the cultural adaptation approach to the cultural accommodation to cross-cultural psychotherapy.

Pros and Cons of RCT

In the field of medical research, Randomized Controlled Trials (RCT) are considered the most rigorous methods for evaluating

the effects of various treatments. This is because the treatments are (a) randomly applied to patients to reduce confounding variables, (b) controlled by using single, double, or triple-blind procedures, and (c) administered to various control groups.

While RCTs are methodologically powerful tools, they are also limited by ethical and practical concerns. Exposing patients to an intervention or treatment believed to be inferior to current treatment or one that is suspected not to work is often considered unethical. An example would be the early effective treatment of angina, which initially contained of foxglove (digitalis) and a mixture of more than twenty other plants (Huxtable, 2001). It was eventually discovered that the foxglove was the active ingredient, but would anyone volunteer herself/himself or their family members for an RCT study to determine which of the components is the active ingredient?

Even when RCTs can be conducted ethically, there are sometimes circumstances where they are not feasible, such as when physicians and therapists refuse to randomly subject their patients and clients to interventions that include placebos. Relatedly, another limiting factor is that RCTs are generally more costly and time consuming than other studies to conduct. Therefore, careful consideration needs to be given to their use and timing.

Experimental field studies are very costly and difficult to conduct, and they disrupt normal clinical services in treatment agencies; hence, there is great resistance among these agencies to permit such studies. In the field of psychotherapy, the approach of using RCTs or experimental field studies began as Empirically Validated Treatments (EVT). In 1993, a Division 12 Task Force examining Empirically Validated Treatments recommended that the field systematically review and classify psychotherapeutic interventions as either (a) well-established treatments or (b) probably efficacious treatments, with the latter grouping being labeled as experimental.

In reaction to the criticisms about the arbitrariness of criteria as to when a treatment has been sufficiently validated, the field moved to the more relativistic concept of Empirically Supported Therapies (EST) with varying levels of support for different therapies. According to Chambless and Hollon (1998), ESTs are those that have been demonstrated to be superior in efficacy to a placebo or another treatment. In anticipating criticisms regarding EST, Chambless and Hollon (1998) noted that: "In particular, we recognize that not all would agree that randomized controlled clinical

trials or their logical equivalents (e.g., single case experiments) represent the best (although not the only) means of detecting causal agency or that efficacy takes priority over effectiveness" (16).

Even this concept of EST came under fire as being too narrow. The field then moved to the broader concept of Evidence-Based Practice (EBP), which was borrowed from medicine. The EBP movement can be traced back to Archie Cochrane's paper (1979), calling for the field to assemble a critical summary, adapted periodically, of all scientific evidence related to treatment approaches that have proven to be effective using randomized clinical trials. This seminal idea soon gave rise to the Oxford Database of Perinatal Trials in the 1980s, which culminated in the Cochrane Collaboration in 1993, which has served as the exemplar of Evidence-Based Practice in Medicine. Over the last two decades, psychology has begun to follow medicine in recognizing the importance of Evidence-Based Practice.

Given the high cost of conducting RCT in mental health intervention studies with Asian Americans, such studies will tend to require major grant funding in order to be undertaken. However, owing to the differential research infrastructure mentioned above, the chances of proposals for RCT studies on Asian Americans competing successfully with others are somewhat limited. For example, using a quick and crude comparison, a search was conducted in the NIH Reporter database, which tracks funded studies. Selecting all years and the "Biobehavioral and Behavioral Processes Study" section, a total of 6,310 studies were found. Typing in the search term "African Americans" within this set of studies, thirty-eight studies were found. When replacing the "African American" search term with "Asians," only three studies were found. Therefore, the field cannot wait for these Asian American RCT studies to accumulate, since it will likely take a very long time given the problems with limited human capital and data infrastructure.

Expanding Human Capital and Building of Data Infrastructure

The problem of differential research infrastructure is hampering the progress of racial and ethnic minority psychology, in general, and Asian American psychology, in particular, as witnessed by the low rates of NIH-funded grants for Asian American RCT studies. In order to address this issue, we recommend the re-institutionalization of funding for research and clinical training of

ethnic and racial minority members (e.g., Career Opportunity Research Program, Minority Fellowship Program). Because the *Surgeon General's Report on Mental Health* (1999) and the *President's New Freedom Commission on Mental Health* (2003) recommended training more specialists in areas related to racial and ethnic minority mental health research and services, more funds need to be provided for the establishment and maintenance of such training initiatives. Ideally, the funding opportunities for promising doctoral students should be available for an unlimited time until the gap between mainstream and racial and ethnic minority psychology is closed.

Additionally, the establishment and expansion of data infrastructure will help the field of Asian American psychology to advance more quickly. One of the recommendations previously discussed is to use multiple methods and approaches in research (e.g., clinical case studies, comparative studies of treatment models, RCTs, archival research and secondary analysis of datasets) that can provide rich information and contribute to the knowledge base. Moreover, the CER's characteristic to report results at the population and subgroup levels should encourage attention to racial and ethnic minorities and initiate more studies, such as the National Latino and Asian American Study and National Survey of American Life. In fact, to address this problem, the National Institute of Health has instituted a policy requiring the sampling of racial and ethnic minority groups in their extramural grant funding program (unless a reasonable justification can be provided) in order to enrich our knowledge base about cultural diversity and health (Leong, 2007). To sum up, from a policy point of view, expanding human capital and data infrastructure will enable Asian American psychology to catch up and provide the foundation for conducting comparative effectiveness research.

Dissemination and Translation

In its essence, the goal of CER is to help consumers and providers choose the best methods for prevention, diagnosis, treatment, and monitoring of various health conditions. While research is an integral part of CER, dissemination and translation of the findings to health providers and community organizations are necessary in order to complete the cycle. Some important tasks for community organizations will be continuing to increase awareness of mental disorders and overcoming stigma among Asian Ameri-

cans. In addition, the active involvement of community organizations in the comparative effectiveness research process will help improve public awareness of effective treatments.

Conclusion

In this article, we have argued for the field of Asian American mental health to move to the comparative effectiveness research (CER) paradigm being advanced by various federal funding agencies (including the NIMH) in order to stay current and relevant to developments within the field. In support of that argument, we have provided a brief review of comparative effectiveness research, followed by several examples of Asian American studies. We then provided some recommendations for using CER in Asian American mental health research by proposing the use of multiple approaches in addition to the gold standard of Randomized Control Trials (RCT). Consistent with the proposal to move our field forward by adopting the CER paradigm, we advocated for conducting studies to compare different treatment approaches within both Cultural Accommodation Models and Cultural Adaptation Models that have developed in recent years, ending with an example of one such study.

References

American Recovery and Reinvestment Act of 2009. H.R.1. 2009. http://thomas.loc.gov/cgi-bin/bdquery/z?d111:h.r.1: (accessed April 4, 2010).

Congressional Budget Office. 2007. *Research on the comparative effectiveness of medical treatments: Issues and options for an expanded federal role.* The Congress of the United States (Pub. No. 2975).

Cochrane A. L. 1979. "1931-1971: A critical review, with particular reference to the medical profession." Pp. 1-11 in *Medicines for the year 2000*. London: Office of Health Economics.

Department of Health and Human Services. 1999. *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

Department of Health and Human Services. 2009. *Text of the Recovery Act Related to Comparative Effectiveness Funding: American Recovery and Reinvestment Act of 2009*. http://www.hhs.gov/recovery/programs/cer/recoveryacttext.html (accessed April 4, 2010).

Federal Coordinating Council for Comparative Effectiveness Research. *Report to the President and the Congress.* Washington DC: U.S. Department of Health and Human Services, June 30, 2009.

Flaskerud, Jacquelyn H. and Li-tze Hu. 1994. "Participation in and outcome of treatment for major depression among low-income Asian Americans." *Psychiatry Research* 53: 289-300.

Huey, Stanley J. and David Pan. 2006. "Culture-responsive one-session treatment for phonic Asian Americans: A pilot study." *Psychotherapy: Theory, Research, Practice, Training* 43(4): 549-554.

Huxtable, Ryan J. 2001. "The erroneous pharmacology of a cat." *Molecular Interventions* 1(2): 75-77.

Hwang, Wei-Chin. 2006. "The psychotherapy adaptation and modification framework: Application to Asian Americans." *American Psychologist* 61: 702-15.

Iglehart, John K. 2009. "Prioritizing comparative-effectiveness research – IOM recommendations." *The New England Journal of Medicine* 361(4): 325-328.

Institute of Medicine. 2009. *Initial National Priorities for Comparative Effectiveness Research.* Washington, DC: The National Academies Press.

Lau, Anna. 2006. "Making the case for selective and directed cultural adaptations of evidence-based treatments: Examples from parent training." *Clinical Psychology: Science and Practice* 13: 295-310.

Lau, Anna and Nolan Zane. 2000. "Examining the effects of ethnic-specific services: An analysis of cost-utilization and treatment outcome for Asian American clients." *Journal of Community Psychology* 28(1): 63-77.

Leong, Frederick T.L. 1996. "Toward an integrative model for cross-cultural counseling and psychotherapy." *Applied and Preventive Psychology* 5: 189–209.

—. 2007. Cultural accommodation as method and metaphor. *American Psychologist* 62(8): 916-927.

Leong, Frederick T.L. and Szu-Hui Lee. 2006. "A cultural accommodation model for cross-cultural psychotherapy: Illustrated with the case of Asian Americans." *Psychotherapy: Theory, Research, Practice, Training* 43(4): 410-423.

Leong, Frederick T.L. and Felicisima C. Serafica. 2001. "Cross-cultural perspectives on Super's career development theory: Career maturity and cultural accommodation." Pp. 167-205 in *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow,* eds. Frederick T.L. Leong and A. Barak. Mahwah, NJ: Lawrence Erlbaum Associates.

Leong, Frederick T.L. and Anna S.L. Lau. 2001. "Barriers to providing effective mental health services to Asian Americans." *Mental Health Services Research* 3(4): 201-214. (Special Issue on Barriers to Mental Health Services for Racial and Ethnic Minorities).

Mufson, Laura, Kristen P. Dorta, Priya Wickramaratne, Yoko Nomura, Mark Olfson, and Myrna M. Weissman. 2004. "A randomized effectiveness trial of interpersonal psychotherapy with depressed adolescents." *Archives of General Psychiatry* 61: 577-584.

Mufson, Laura, Kristen P. Dorta, Mark Olfson, Myrna M. Weissman, and Kimberly Hoagwood. 2004. "Effectiveness research: Transporting interpersonal psychotherapy for depressed adolescents (IPT-A) from the lab to school-based health clinics." *Clinical Child and Family Psychology Review* 7(4): 251-261.

Sue, Stanley, Diane C. Fujino, Li-tze Hu, David Takeuchi, and Nolan W.S. Zane. 1991. "Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis." *Journal of Consulting and Clinical Psychology* 59(4): 533-540.

Takeuchi, David T., Stanley Sue, and May Yeh. 1995. "Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles." *American Journal of Public Health* 85(5): 638-43.

The Cochrane Collaboration. 2010. http:// www.cochrane.org/reviews/clibintro.htm (accessed February 6, 2011).

The President's New Freedom Commission on Mental Health. *Achieving the promise: Transforming mental health care in America, executive summary.* Rockville, MD: SAMHSA, 2003.

Wang, Phillip S., Christine M. Ulbricht, and Michael Schoenbaum. 2009. "Improving mental health treatments through comparative effectiveness research." *Health Affairs* 28(3): 783-91.

Zane, Nolan, Herbert Hatanaka, Samuel S. Park, and Phillip Akutsu. 1994. "Ethnic-specific mental health services: Evaluation of the parallel approach for Asian-American clients." *Journal of Community Psychology* 22: 68-81.

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