Challenges and Goals in Addressing the Global Rise in Eating Disorders

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The actors and institutions of global health all too often neglect mental health, disregarding it as a lesser priority compared to other concerns, such as battling infectious diseases and infant and maternal mortality. The consequences of this dismissal of mental health, however, need to be carefully reexamined because according to Miller (2006), even though mental and behavioral disorders are incredibly burdensome as measured by the DALY, treatment for mental illness in developing countries are frequently viewed as an "expendable luxury" (458). Given that mental health problems hinder an individual's productivity, social well-being, physical health, and thus overall quality of life, the players in global health must no longer place mental illness on the backburner and begin to find effective ways to address mental health concerns. Achieving this goal, however, is easier said than done due to several challenges. According to the WHO, barriers to improving global mental health include a lack of understanding of the seriousness of and technologies that can improve mental illness, insufficient surveillance efforts, failure to consider sociocultural differences in the definitions, risk factors, and manifestations of mental illness, strong stigma associated with mental disorders that prevent individuals from seeking much needed mental health services, and insufficient resources dedicated to mental health. Despite the formidable nature of these challenges, they need to be addressed because according to the WHO, "there is no health without mental health."

An analysis of the global rise in eating disorders, specifically in China and Japan, in addition to in the United States, provides a case study of these challenges and themes of global mental health. Much like mental health in general, effectively addressing the increasing prevalence of eating disorders requires better awareness and understanding of the social, economic, and physical burden of eating disorders in the populations that they afflict, increased knowledge of the interventions available to treat and prevent eating disorders, improved

availability of effective interventions to those who need them, an in-depth consideration of sociocultural influences, and a general increase in funding for mental health promotion.

According to the WHO, epidemiological studies estimate that in industrialized countries, the prevalence of anorexia nervosa and bulimia nervosa among female adolescents and young adults are 0.5-1% and 0.9-4.1%, respectively, and an additional 5 to 13% suffer from partial eating disorder symptoms. While these rates are quite low compared to other more prevalent mental illnesses, such as depression, the consequences on sufferers of eating disorders can be devastating. To begin with, anorexia nervosa has the highest standardized mortality ratio of any psychiatric illness, with 15 to 19% of sufferers succumbing to starvation or suicide (Zhu & Walsh, 2002). Furthermore, the long term physical consequences of eating disorders include osteoporosis, infertility, gastrointestinal dysfunction due to excessive laxative usage, and heart attack. In addition to physical consequences, eating disorders negatively influence the patient's academic, occupational, and interpersonal function (Crow & Peterson, 2003).

In Japan and China, the prevalence of eating disorders has dramatically increased within recent decades but is still modest compared with statistics in Western industrialized nations. Community studies in China estimate that the prevalence of anorexia nervosa and bulimia nervosa among women is 0.01% and 0.5 to 1.3%, respectively (Tsai, 2000), and in Japan, estimates are 0.025 to 0.03% for anorexia nervosa and 1.9 to 2.9% for bulimia nervosa (Chisuwa & O'Dea, 2009). However, according to Chisuwa & O'Dea (2009), surveillance attempts in Japan and China of eating disorders face methodological issues that may in fact systematically lower estimates. To begin with, many of these studies survey a disproportionate percentage of subjects from rural areas, which likely have lower rates of eating disorders compared to more urban areas. Furthermore, in Japan and China, access to eating disorder treatment is limited,

leading the prevalence estimates obtained from clinical reports to be lower than the true rates. Insufficiencies in surveillance efforts unfortunately hinder action because players in global health will be less motivated to mobilize and intervene if they are not fully aware of the degree to which people are suffering (Farmer, 2003). Thus, in order to increase the visibility and urgency of eating disorders, surveillance efforts must increase to yield more accurate portraits of the prevalence and burden of eating disorders in Japan and China.

In addition to improving surveillance to mobilize important players in global health, the limitations in current technologies and knowledge related to eating disorders need careful consideration. Given the complex nature of eating disorders, which involves a combination of sociocultural, psychological, and physiological risk factors, finding effective treatments for patients remains a challenge. The only intervention for eating disorders that received a grade A recommendation due to empirical support from well-conducted randomized trials is cognitive behavioral therapy over 4 to 5 months for the treatment of bulimia nervosa (Wilson & Shafran, 2005). In terms of battling eating disorders with pharmaceuticals, the antidepressant fluoxetine has been approved by the US Food and Drug Administration for the treatment of bulimia nervosa in adults, and the drugs topiramate and ondansetron show preliminary evidence of efficacy but require further investigation (Zhu & Walsh, 2002). Treatment of anorexia nervosa proves to be even more challenging, usually requiring a multidisciplinary approach involving psychological counseling, cognitive behavioral therapy, nutritional education, and a high-calorie diet to ensure weight gain. Unlike bulimia nervosa, pharmaceuticals have not empirically demonstrated their benefit for patients suffering from anorexia nervosa. Nonetheless, medication is frequently used as an adjunctive intervention to treat anorexic individuals (Zhu & Walsh, 2002).

Despite the fact that eating disorders are clearly highly influenced by social factors, according to the National Institute of Mental Health (NIMH), ever since mental illness has been recognized as a brain disorder, researchers have been increasingly searching for the physiological mechanisms behind eating disorders. Indeed, neuroscience and gene studies are currently hot in eating disorder research. In particular, scientists are racing to identify genetic markers associated with eating disorder risk and developing medications to target the neurobiological pathways implicated in disordered eating behaviors. According to NIMH, eating disorder research has essentially turned away from the investigation of psychological and behavioral components of eating disorders in favor of investigating physiological factors. While identifying the physiological basis of eating disorder etiology will certainly provide insight as to how to better treat suffers, eating disorders are at their core a social disease. According to Kleinman and Cohen (1997), the field of psychiatry has fixated so heavily on the "biological underpinnings of mental disorders while discounting the importance of such 'soft' variables as culture" in an attempt to raise the status of psychiatry as a "hard" science. By focusing too heavily on the biological components at the expensive of investigating the psychological and social factors involved, scientists lose to opportunity to gain key insights critical to understanding and combating eating disorders.

In all aspects of global health, ulterior motives and vested interests to promote certain values and beliefs must carefully be considered. Thus, key players in mental health must ask: who promotes and benefits from the view that mental illness is mainly biological in nature? According to Berger (2001), the pharmaceutical industry holds a strong economic interest in maintaining the physiological approach to mental health. Just as pharmaceutical companies are key actors in global health, so do they play an integral role in funding research in mental health.

Recently, the National Alliance on Mental health (NAMI), which is currently the top advocacy group in mental health, admitted that the majority of their funds, averaging 56% over the last five years, came from pharmaceutical companies (Sharav, 2009). This pouring of funds from drug companies for mental health research unfortunately does not stem from humanitarian interests but are instead strongly economically motivated. The potential consequences of the interests and motivations of this influential player in mental health need careful examination.

As Petryna (2009) demonstrates, pharmaceutical companies engage in a plethora of ethically compromised activities in order to assure high profit margins, which include withholding research data that questions the safety and efficacy of their medications, engaging in unethical clinical trial practices, and aggressively finding new opportunities to expand their drug markets even if empirical evidence suggests a low benefit to cost ratio. In mental health, pharmaceutical companies also are major players with high economic stakes, which unfortunately leads to ethically questionable practices. Indeed, Berger (2001) finds that despite weak or inconsistent empirical findings, pharmaceutical companies continue to push for increased markets for their psychotropic medications, at times resorting to distorted and even fallacious interpretations of research data. Thus, even though pharmaceutical companies and the research that they promote investigating the biological basis of mental illness are undoubtedly essential to finding effective interventions to battle mental illness, the other players in mental health need to carefully monitor potential ulterior motives of drug companies to avoid the dangers of unethical practices.

Important players in mental health must also be careful to not rely too heavily on medications as the sole technology used to combat eating disorders. Just as the magic bullet approach to global health intervention has resulted in numerous failures in the past (Cohen 2006;

Cueto 2007), programs in mental illness also need to be wary of the pitfalls of a narrow and vertical approach. As previously mentioned, eating disorders, like all mental illnesses, are complex and involve social, psychological, cultural, as well as physical components. By addressing only the physical aspects of eating disorders, interventions run the risk of not granting enough attention to the social and psychological contributors. In mental health, more holistic treatments that involve medication accompanied by evidence-based psychotherapy lead to the greatest potential for patient improvement (Wilson & Shafran, 2005). However, such holistic interventions are inevitably more costly and require more demands on the clinician's time. The convenience and lower direct costs of treating patients with just drugs appeal to researchers, clinicians, and insurance companies alike. However, this temporary convenience comes at a great price for eating disorder patients, who, without psychotherapy, greatly risk facing relapse (Raney, Shapiro, & Bulik, 2007). Despite the recent trend in psychiatry to view mental illness through a physical lens, in order to best benefit those suffering from eating disorders, a holistic approach, addressing the psychological, social, cultural, and physical contributions to mental illness need to be addressed.

In addition to implementing more holistic treatment options, technologies that seek to reduce the burden of eating disorders globally need to involve effective prevention programs. Just as interventions in battling infectious diseases in developing countries benefited from including both treatment and preventative measures (Farmer, 2005), so should eating disorder programs incorporate effective preventions in their toolbox of interventions. Given that eating disorders are on the rise globally and that current treatment options are costly and can be limited in effectiveness, players in mental health need to grant more attention to developing and implementing prevention programs. According to the Renfrew Center Foundation (RCF),

unfortunately, the prevention programs that are currently available are limited both in terms of number and effectiveness and do not receive enough funding from either the public or private sector. Indeed, the US Department of Health and Human Services Task Force on Eating Disorders found that previously implemented prevention programs designed to promote healthy body image and discourage eating disorder behavior are ineffective (RCF, 2010). Given the need for, yet current lack of, effective prevention programs for eating disorders, the players in mental health need to place prevention of eating disorders higher up on their list of priorities.

As much of a challenge as implementing effective interventions is in the United States and in other Western industrialized nations, the difficulties faced by other countries that are now just beginning to deal with the rise of eating disorders are even more formidable. Until the past few decades, eating disorders were primarily considered a Western disease, and as a result, almost all research investigating risk factors, symptoms, and interventions for eating disorders was conducted exclusively in Western industrialized nations. Now that eating disorders have become a concern in other countries, such as Japan and China, rather than simply superimposing the knowledges gained in the West, researchers need to carefully consider the influence of cultural differences on eating disorder risk. Given that the effectiveness of intervention programs are closely linked to appropriately addressing the risk factors associated with eating disorders, and the risk factor profiles of eating disorders in Japan and China may not necessarily reflect the ones identified in the United States, treatment and prevention programs designed and empirically supported in America and the West may not necessarily be the most beneficial programs for sufferers in Japan and China. Indeed, important sociocultural variations may result in different risk factor profiles that will likely impact the effectiveness of various interventions. Understanding the interaction between culture and mental illness is a crucial endeavor in global

mental health today, for according to Kleinman and Cohen (1997), the idea that knowledge of mental illness accrued in the West can simply be applied to the rest of the world "may be the most damaging myth of all" in psychiatry. Indeed, rather than imposing interventions deemed effective in the West to other countries, a careful analysis of the unique sociocultural history of Japan and China that may impact eating disorder vulnerability demonstrates the need to consider cultural differences to inform more effective treatment and prevention programs.

When considering risk factors in Japan, much like in Western industrialized nations, exposure to media that promotes extreme female thinness demonstrates a clear impact on eating disorder vulnerability. A questionnaire survey conducted by Ozawa, Tomiie, Miyana, Koyama, & Sakano (2005) found that young Japanese women who read more magazines that idealize thinness are more prone to displaying eating disorder symptoms compared to women who are not exposed as frequently to such magazines. As a result of this shared risk factor between the United States and Japan, researchers oftentimes presume that the risk factors identified in studies of women in the United States can generalize to women in Japan (Chisuwa & O'Dea, 2009). This assumption, however, is faulty. Although as previously mentioned, prevalence estimates of clinical eating disorders is lower than rates found in the United States, subclinical symptoms, such as body dissatisfaction and desire for weight loss are rampant among young women in Japan. Indeed, a cross-cultural study conducted by Wardle, Haase, & Steptoe (2006) found that despite having a low average BMI, Japanese women were the most likely to perceive themselves as overweight and to attempt to lose weight. Furthermore, Kowner (2002) found that young Japanese women demonstrated significantly lower body esteem scores compared to women in the United States, China, and Israel. The fact that subclinical symptoms of disordered eating

actually surpass rates found in the United States points toward the need to delve into potential sociocultural factors unique to Japan that may influence eating disorder risk.

Three aspects of Japanese culture seem particularly salient to the discussion of eating disorder risk. First, Japan historically endorses a strong emphasis on perfectionism, as reflected by the strict rules and customs surrounding self-presentation in Japanese social interactions. This social perfectionism is illustrated by the intricate tea ceremony, which requires strict adherence to sets of elaborate rules for pouring, serving, and accepting the tea, in addition to stringent guidelines for posture and attire (Lebra, 1983). This cultural emphasis on social perfectionism may place Japanese women at increased risk for developing eating disorders because research has demonstrated a correlation between high social perfectionism and eating disorder symptoms (Hewitt, Flett, & Ediger, 1995). Secondly, in traditionally collectivist societies such as Japan, the expression of negative emotions, particularly of anger, is unacceptable because such emotional displays threaten group harmony (Yates, Edman & Aruguete, 2004). Since Japanese women must inhibit themselves from expressing negative emotions, they are at greatest risk of internalizing these emotions (Zerman, Shipman, & Suveg, 2002), thereby leaving them more at risk for developing eating disorders because research conducted by Horesh, Zalsman, & Apter (2000) demonstrates a correlation between internalized anger and anorexia nervosa. Lastly, despite the emergence of the image of the independent and modern woman that resulted from urbanization and industrialization, the traditional female role in Japan continues to exert influence over women. Adherence to this gender role requires Japanese women to refrain from self-assertion, self-promotion, and self-praising (Chisuwa & O'Dea, 2009). This likely contributes to lower self-esteem and lower capabilities of coping with social problems, which

have been observed among Japanese women (Pike & Borovoy, 2004), which has been empirically linked to increased risk of disordered eating (Mayhew & Edelman, 1989).

A careful consideration of Japanese culture demonstrates that young Japanese women may face unique risk factors that are not as much of a concern in America. Given this different risk profile, the interventions developed for treating and preventing eating disorders in the United States are likely insufficient to battle eating disorders in Japan. In order to create more culturally relevant intervention programs, the players in global mental health need to take into account the fact that young Japanese women may face additional vulnerability to developing eating disorders resulting from a cultural tendency toward social perfectionism, inhibition of negative emotion displays, and pressure to adhere to traditional gender roles. In addressing these risk factors, however, interventions need to be wary of ethnocentrism. That is to say, although research indicates that inhibiting the expression of anger increases women's vulnerability to eating disorders, an intervention should not simply encourage young women to express their negative affect because such an approach is culturally insensitive and disrespectful and would likely fail due local resistance. Thus, in order to create culturally acceptable interventions, local actors and institutions should play an integral role in designing and disseminating programs because they have the necessary cultural knowledge to do so effectively (Mahmoud, 2009).

Much like in Japan, in order to effectively address the rise of eating disorders in China, players in mental health must investigate cultural differences. In particular, Kleinman and Cohen (1997) point out that "the symptoms of disorders vary markedly from one culture to another." Even though the DSM defines "fear of fatness" to be a necessary criteria of both anorexia nervosa and bulimia nervosa, this Western definition may not necessarily apply to all afflicted women in China. Indeed, research studies indicate that in China, fear of fatness is not necessarily

the primary motivator of women suffering from eating disorders to refuse food. Rather, many patients report poor appetite, bloating, and distaste as reasons for their self-induced starvation (Yates et al., 2004). This difference in symptom manifestation draws attention to the pitfalls of assuming cultural uniformity in the definitions of mental illness. By superimposing definitions established in the West and failing to consider cultural differences in symptom manifestations, the ability of clinicians to properly identify afflicted individuals becomes compromised, thereby preventing them from receiving the treatments that they need in China.

Equally problematic, inaccurate symptom profiles resulting from an ethnocentric approach to mental illness result in the dissemination of intervention programs that may be ineffective. The vast majority of psychotherapies for eating disorders designed in the United States strongly target cognitive distortions related to body image. Although these interventions have been empirically supported in the West, given that fear of fatness may not be a primary concern of eating disorder sufferers in China, interventions that target body image distortions may not necessary benefit Chinese patients. In order to develop more effective interventions in China, once again, players in global mental health must consider the inevitable relationship between mental illness and sociocultural factors (Kleinman & Cohen, 1997).

Rather than focusing on the body dissatisfaction that has been implicated in the United States as a key risk factor, more attention should center on the potential influence of face dissatisfaction in China. According to Yates et al. (2004), traditional Chinese ideals of female beauty center not on the body but on the face, and Jackson and Chen (2007) found a correlation between preoccupation with facial appearance and facial acne with eating disorder symptoms among young Chinese women, proposing that that Chinese women who have facial acne combined with a strong desire to satisfy the traditional Chinese definition of facial beauty may

refuse to eat foods that they believe to cause acne, eventually leading to disordered eating. Thus, in China, facial dissatisfaction, rather than body dissatisfaction, may be the primary risk factor to address in interventions for eating disorders.

Clearly, considering the influence of unique cultural factors is crucial to effectively address the global rise in eating disorders. In addition to these culture-specific considerations, certain challenges are independent of culture and currently afflict all countries facing eating disorders. As with mental illness in general, a great deal of stigma is attached with having an eating disorder. Ironically, even as research is focusing too exclusively on investigating the biological mechanism behind eating disorders, lay people around the world still disregard eating disorders as a self-imposed problem (RCF, 2003). Indeed, research indicates that the fallacious view that people suffering from eating disorders are capable of recovering without treatment is widespread (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000). This stigma, along with the self-blame that oftentimes accompanies eating disorders, prevents many individuals who are suffering from being appropriately diagnosed and seeking the treatment that they need. In order to allow available interventions to better reach those afflicted with eating disorders, programs need to find ways to address this strong stigma.

Another obstacle that prevents suffering individuals from receiving the best standard of care currently available to treat eating disorders are the incredibly high healthcare costs needed to properly treat eating disorders. In China, the healthcare system has increasingly engendered a fee-for-service system that demands payment that the vast majority of Chinese families cannot afford, thereby preventing eating disorder patients from receiving needed treatment (Chang & Kleinman, 2002). Mental illness patients in Japan face similar economic concerns because psychologists are unable to seek reimbursement for their services unless working directly under a

licensed psychiatrist in a hospital setting. However, according to Enns & McRae (2007), such collaborations between psychiatrists and psychologists are rare, forcing Japanese patients, even those holding health insurance policies, to pay for psychotherapy out-of-pocket, which most people cannot afford. In the United States, even though insurance plans oftentimes cover to some extent the cost of mental health services, coverage offered for eating disorders is insufficient. According to RCF (2003) approximately 80% of females who seek treatment for an eating disorder do not receive the intensity or duration of treatment necessary to fully recover and prevent relapse. Indeed, 96% of eating disorder professionals believe that their anorexic patients' health is threatened when insurance policies mandate early discharge. Given the potential dangers of not treating or terminating treatment of eating disorders before the patient has fully recovered, players in global and mental health need to push for legislation and policies to make mental health services more affordable, accessible, and accommodating to the patient's needs.

Unfortunately, an additional challenge facing efforts to combat the global rise in eating disorders is the lack of support from the major actors and institutions normally involved in promoting global health. In the private sector, the Gates Foundation is the largest funder of research and intervention programs aimed to enhance health and reduce poverty worldwide. Despite the normally pivotal philanthropic role that it plays in global health, in the arena of mental health, and particularly in eating disorders, the Gates Foundation is minimally involved. Indeed, when searching for grants on the Gates Foundation's website, the search "mental illness" yields only 8 grants since 1999, and no grants were dedicated to investigating or implementing programs for eating disorders. To place these numbers in perspective, a search of grants dedicated to malaria, tuberculosis, and HIV/AIDS yields over 6000 results each.[1] Clearly, the Gates Foundation, a major actor in global health, does not consider the global rise in eating

[1] http://www.gatesfoundation.org/grants/Pages/search.aspx

disorders a priority, which is problematic because it is precisely such major institutions that play a pivotal role in determining which health problems get addressed.

In the governmental sector, the major funder of health-related research, the National Institute of Health (NIH) and its mental health sector, the National Institute of Mental health (NIMH) address the issue of eating disorders in a rather limited way. In the NIMH's online grant database, only 38 grants total were dedicated to funding eating disorder research, and the vast majority of these research proposals deal solely with investigating the physiological basis of eating disorders.[2] Promisingly, the visibility of eating disorders in the sector of mental health research as increased substantially within the past decade, for according to RCF (2003), NIMH in 1999-2000 did not dedicate any funding for eating disorder research. Despite this increased attention granted to eating disorder research by the NIMH, this funding is scant compared to funding dedicated to more prominent mental health disorders. Indeed, a search for grants for depression research on the NIMH grant database yields approximately 1450 results. Although eating disorders are slowly gaining recognition as a mental illness worthy of research investigation, the funding that they receive from the major players in health and mental illness research is still incredibly modest and needs to increase in order to find and implement more effective interventions to treat and prevent eating disorders.

Along institutions that provide funding, advocacy organizations play a critical role in increasing the visibility of health issues. Unfortunately, in both Japan and China, due a general lack of advocacy for patients suffering from eating disorders, awareness and mobilization toward action are insufficient. Indeed, in China, there currently appear to be no well-known organizations dedicated to eating disorders, and in Japan, the Eating Disorders Network of Japan

[2] http://projectreporter.nih.gov/reporter.cfm

and The Japan Society for Eating Disorders appear to be the only two prominent advocacy groups.[3] Since advocacy groups play a crucial role in increasing awareness and pushing for necessary policy change, the dearth of such organizations in China and Japan leaves the increasing number of individuals suffering from eating disorders voiceless and unaware that they need and deserve treatment.

Given the longer history of eating disorders in the United States, unlike in China and Japan, several advocacy groups are working to increase awareness in addition to support and resources for individuals and families coping with eating disorders. Many of these support and advocacy groups, such as Andrea's voice, the Elisha Project, and the Hope Network, are the result of grassroots movements led by parents of individual who lost their lives as a result of an eating disorder (F.E.A.S.T.). Such groups are motivated by a desire to prevent other girls from suffering or dying from this devastating mental illness and seek to educate the public of the signs and symptoms of and treatment options for eating disorders. In addition to these parent-led support groups, several prominent national organizations in the United States are playing a pivotal role in mobilizing action on behalf of those suffering from eating disorders. Just to name a few, the National Eating Disorders Association works to increase awareness of eating disorders by promoting Eating Disorder Awareness week, the Eating Disorders Coalition for Research, Policy, and Action, a coalition of major nonprofit organizations, aims to increase federal funding dedicated to eating disorders, and the Renfrew Center Foundation serves to increase education, research, and access to treatment for eating disorders (RCF, 2003). Despite the general lack of attention granted to eating disorders from policy-makers, major governmental organizations, and private philanthropic organizations, the advocacy of these nonprofit advocacy and support groups offer a great source of mobilizing power to increase both awareness and action.

[3] Based on a search for eating disorder organizations in Japan and China on www.google.com

In sum, given the serious social, economic, and physical consequences of eating disorders, action must be taken to appropriately address the rising rates and increasingly global nature of eating disorders. As with any new endeavor in global health, the players hoping to decrease the burden of eating disorders will inevitably face a plethora of formidable challenges, Despite these obstacles, in the United States, many nonprofit advocacy groups and grassroots movements recognize the need to do more for those suffering from eating disorders and are pushing for increased awareness, funding, and legislation. Hopefully, the advocacy of these groups will mobilize the major actors and institution in global health to come on board to tackle the rise in eating disorders. These advocacy groups should push for several key policy reforms in both the United States and in other countries facing the burden of eating disorders These reforms should including increasing education for medical professionals to better recognize patients who may be suffering from eating disorders, increased epidemiological efforts to more accurately track the prevalence of mortality rates of eating disorders around the world, more funding from major organizations dedicated to eating disorder research, research efforts to design more culturally sensitive and targeted interventions, health care reform that requires insurance companies to allow eating disorder patients to receive treatment for the length they need to fully recover, and the implementation of more prevention programs in nations where eating disorders are an increasing concern. If the actors and institutions in global health increase the status of eating disorders on their priorities list, hopefully, they will begin to achieve these necessary goals.

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