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A Theoretical Model for Understanding Mental Health, Substance Use, and Work Performance Among Asian Immigrants

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Mental illness and substance use disorders are prevalent among workers. Each year businesses lose billions of dollars to decreased work performance associated with these issues. This article discusses a theoretical model that depicts relationships between social discrimination, job concerns, and social support and workers' mental health problems and substance use and work performance. The focus is Asian immigrant workers, a population underrepresented in the literature. This model serves to assist occupational health nurses in the practice and research arenas better understand the complexities of mental health problems and substance use among Asian immigrant workers. Occupational health nurses are in a prime position to recognize, identify, and respond to at-risk workers. Examples of areas that might be considered by occupational health nurses when using this model are included.

Mental illness and substance use disorders are prevalent among workers, profoundly affecting work performance, company profits, and the U.S. economy (Kessler et al., 2006; Kessler & Frank, 1997). Several surveys have consistently determined that mental illness affects close to 30% of the adult U.S. population (Kessler, Chiu, Demler, & Walters, 2005). According to a recent large-scale study of U.S. households (Kessler et al., 2008), 29.1%, 3.7%, and 1.7% of individuals 18 to 64 years old experienced mental disorders, alcohol use disorders, and illicit drug use disorders, respectively, during the 12-month period prior to the study interview. Depression and alcohol use disorders are the first and fourth leading causes of disability-adjusted life years in the region of the Americas (World Health Organization, 2008). Businesses lose billions of dollars annually because of lost productivity associated with mental health or substance use problems (Hilton, Scuffham, Sheridan, Cleary, & Whiteford, 2008; Kessler et al., 2006; Lim, Sanderson, & Andrews, 2000; Stephens & Joubert, 2001; Stewart, Ricci, Chee, Hahn, & Morganstein, 2003). Despite the serious worker safety and health consequences and the societal costs of mental illness and substance use, occupational health professionals have devoted significantly less attention to the occupational impact of mental health issues than to investigations of physical illnesses or workplace injuries.

Numerous reports from the U.S. Surgeon General's office call attention to the prevalence, seriousness, and societal costs of mental illness and substance use disorders among all Americans (U.S. Department of Health and Human Services, 1999); additionally, substantial evidence indicates disparities in mental health care exist for Asian and other ethnic minorities in the United States (U.S. Department of Health and Human Services, 2001). Asians, including both U.S.- and foreign-born, are particularly understudied and underrepresented in health research (Ghosh, 2003). Proportionally, few mental health studies have been conducted with Asian workers, who represent 4.4% of the work force and 34% of workers in the service sector (National American Industry Classification System [NAICS] codes = 51-56, 61, 71, 72, 81, and 92) (Bureau of Labor Statistics, 2005). National Occupational Research Agenda (NORA) Priority Research Areas

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(National Institute for Occupational Safety and Health [NIOSH], 1996) indicate that immigrant workers represent a special population at risk because they are particularly vulnerable to occupational injuries and illnesses. As a whole, these data indicate that more research is needed regarding occupational health risk factors and disparities among Asian immigrant workers.

During the past 30 years, researchers have established the pervasive influence of social factors (e.g., racism, sexism, socioeconomic position, income distribution, work environment, social network, social capital, and workplace) on health (Berkman & Kawachi, 2000). The concept of health disparities highlights health inequalities related to these social factors, and these inequalities are often social determinants of health. Occupational health science and practice have typically placed more emphasis on the specific effects of chemical, physical, and biological hazards than on psychosocial factors. Because the nature of work and work force demographics have changed, a broader view of the factors that influence worker health and performance is necessary to promote a more comprehensive approach to service delivery (Schulte, 2006).

The purpose of this article is to address the relationship between social determinants and Asian immigrant workers' mental health and work performance. Specifically, this article describes a theoretical model (Figure) that focuses on social discrimination, job concerns, and social support and their effects on Asian immigrant workers' mental health, substance use, and work performance. The current literature that supports each of the links in the model is described. Some closing thoughts on the implications of the model for occupational health nurses as they address immigrant workers' mental health in the United States are offered. In this article, an Asian immigrant is a foreign-born Asian who immigrates to the United States permanently. Asian American includes U.S.- and foreign-born Asians living in the United States.

MENTAL ILLNESS, SUBSTANCE USE DISORDERS, AND WORK PERFORMANCE

Prevalence of Mental Illness and Substance Use Disorders

Approximately 10% of adults worldwide have some type of mental illness (World Health Organization, 2001). Depression and alcohol use disorders are among the top 10 leading causes of disability in middle- and high-income countries, including the United States (World Health Organization, 2008). A nationally representative sample showed that in the United States, 13.2% of adults 18 years and older reported a lifetime experience of major depression and 5.3% reported major depression in the past 12 months. Among those with major depression in the prior 12 months, 14.1% also had an alcohol use disorder, 4.6% had a drug use disorder, and 36.1% had at least one anxiety disorder. Rates for co-occurring or "comorbid" depression-anxiety or depression-substance use disorders were even higher for those who reported lifetime major depression: 40.3% had an alcohol use disorder, 17.2% had a drug use disorder, and 41.2% had an anxiety disorder (Hasin, Goodwin, Stinson, & Grant, 2005).

Information about the prevalence of mental illness and substance use disorders among Asians is limited. The 1998 to 2003 U.S. National Health Interview Survey reported serious psychological distress among an estimated 1.4% of U.S.-born Asian adults and 1.7% of Asian immigrants (Dey & Lucas, 2006). Analysis of the 2001 to 2002 National Epidemiologic Survey on Alcohol and Related Conditions (Smith et al., 2006) showed that prevalence rates of depression, anxiety, alcohol use disorders, and drug use disorders among Asians were 4.9%, 6.9%, 4.5%, and 1.4%, respectively. Led by Takeuchi et al. (2007), the first national epidemiological household survey of Asian American adults (n = 2,095) was launched in 2000. The results showed that 17.3% reported lifetime experience with depression, anxiety disorders, or substance-related disorders and 9.2% had experienced one of these problems within the past 12 months. The Asian population (including foreign- and U.S.-born) accounted for 13.2 million or 4.4% of the U.S. population in 2007 (American Community Survey, 2007). Given the proportion of Asians in the U.S. population, these findings point to an unrecognized fact: mental illness and substance use are substantial health concerns for Asian Americans.

Impact of Mental Illness and Substance Use Disorders on Work Performance

Because of the potential pervasive influence on cognitive, physical, and social functioning, researchers have sought to elucidate the associations between mental illness and substance use and work performance, safety and health, and economic outcomes for employers and society. Depression, anxiety, and substance use disorders have been identified as the top three diagnoses for mental health claims (Conti & Burton, 1994). All are associated with increased absenteeism (time away from work because of health) and presenteeism (impaired job performance and productivity while at work) and, subsequently, long-term disability (Dewa, Goering, Lin, & Paterson, 2002; French & Zarkin, 1998; Kessler et al., 1999; Kessler & Frank, 1997; Wang, Adair, & Patten, 2006). Depression has a much greater impact on worker performance than either anxiety or substance use (Conti & Burton; Kessler & Frank). A recent U.S. Department of Education report indicated that adults with major depression averaged 35.2 days of lost work time in the past 12 months (Jans, Stoddard, & Kraus, 2004). It has been estimated that workers with depression cost approximately $31 to $36.6 billion more per year in lost productive work time than those without depression (Kessler et al., 2006; Stewart et al., 2003).

Absenteeism increases when

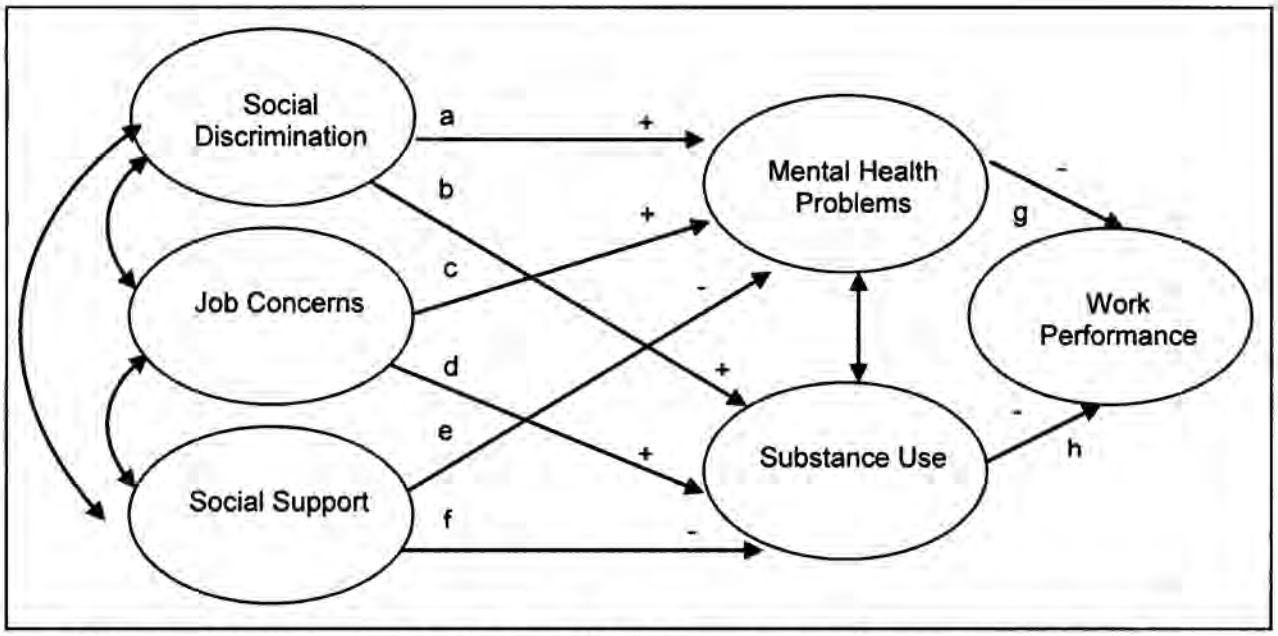

Figure. Determinants of Asian immigrant workers' mental health, substance use, and work performance using the theoretical model. The directed, single-headed arrows represent a directional relationship and potential causal connections between variables. The plus signs associated with directed arrows indicate positive relationships (e.g., greater social discrimination is associated with more severe mental health problems); minus signs indicate negative relationships (e.g., more social support is associated with less severe mental health problems). The curved arrows represent correlations between variables.

workers have co-occurring problems (e.g., depression-substance use). Workers with comorbid anxiety and depression were found to have the most time away from work because of their mental health problems; and comorbid anxiety-depression, anxiety-substance use, and anxiety-depression-substance use were associated with the most work cutback days (i.e., days when workers continued to work but were less efficient than usual) (Kessler & Frank, 1997). A Canadian study also found that more diagnoses increased the magnitude of the association between psychiatric syndromes and interference with workers' abilities to perform their jobs (Wang et al., 2006). Focus groups with workers who were taking psychiatric medications for anxiety or depression in the United Kingdom further suggested that somatic (e.g., headaches, dizziness, and trembling) and psychological (e.g., poor concentration, lack of motivation, and extreme emotional distress) symptoms inadvertently affected these workers' work performance and risk for occupational injuries. The side effects of psychiatric medications also contributed to workers' reduced work performance and more occupational injuries and falls. Self-medication with alcohol, larger than recommended doses of herbal products, or excessive use of caffeine also increased their risks for occupational injuries (Haslam, Atkinson, Brown, & Haslam, 2005).

SOCIOCULTURAL FACTORS, WORKER MENTAL HEALTH, AND WORKER PERFORMANCE

Researchers have examined the pervasive influence of various social factors on population health. Social discrimination, job concerns, and social support are the foci in this model (Figure).

Social Discrimination

Discrimination refers to unfair or preferential treatment toward individuals who are perceived to be members of certain social categories based on race, ethnicity, gender, or occupational gradients (Pincus & Ehrlich, 1994). Among workers who have experienced discrimination, race-, class-, and gender-based discrimination have had the most profound effects on human health (Krieger, Rowley, & Herman, 1993). Immigration status, citizenship, and language-based discrimination are specific to immigrants' experiences. The expression of discrimination ranges from insidiously subtle (e.g., lack of respect, racial or ethnic jokes) to blatantly overt behaviors (e.g., threatening gestures or comments, hate crimes) and occurs in daily life, in any setting, and at both individual and institutional levels.

A growing body of evidence reveals positive associations between discrimination and distress, depression, anxiety, and substance use (Figure, paths a and b). Racial discrimination has been studied most intensely, although the focus has not been on Asian Americans and Asian immigrants (Araujo & Borrell, 2006; Krieger et al., 1993; Williams & Williams-Morris, 2000). A 2003 review concluded that despite variation in methodological quality, the consistency of the findings regarding the association between racial discrimination and physical or psychosocial problems was robust (Williams,

Neighbors, & Jackson, 2003). More recently, Schulz et al. (2006) examined longitudinal data from a survey of African American women residing in Detroit to test the hypothesized causal relationship between everyday discrimination and depression and general health status. They found that increased discrimination across time was associated with increases in depression and decreases in self-reported general health status, regardless of age, education, or income. Longitudinal data from young African American adults also showed that men and women experiencing any discrimination had poorer mental and physical health than their counterparts experiencing no discrimination (Borrell, Kiefe, Williams, Diez-Roux, & Gordon-Larsen, 2006). The likelihood of developing a mental health problem was found to be positively associated with the number of types of discrimination (e.g., age, gender, immigration status, and race) that ethnic minorities experienced (Stuber, Galea, Ahern, Blaney, & Fuller, 2003).

Relative to other racial and ethnic groups in the United States, discrimination research focusing on Asians is underdeveloped. Understanding the discriminatory experiences of Asians is additionally complex because, as a race, Asians are heterogeneous; "Asians" have many cultures of origin. As a result, Asians may report discriminatory experiences because of their race, but also because of their language status or accents (Goto, Gee, & Takeuchi, 2002). U.S.-based studies showed positive relationships between discrimination and mental illness and substance use disorders among Filipino Americans (Gee, Delva, & Takeuchi, 2007; Mossakowski, 2006) and Chinese Americans (Gee, 2002; Goto et al.). A Canadian study showed similar evidence for the association between perceived discrimination and depressive symptoms among Southeast Asian refugees (Noh, Beiser, Kaspar, Hou, & Rummens, 1999). Qualitative studies found that Asian immigrants received race-related negative comments as early as elementary school. For instance, Taiwanese immigrant youth in elementary schools were commonly teased for their accents by English-speaking peers. Although English as a second language (ESL) classes are meant to assist, being in an ESL class often becomes a label that further separates immigrant from mainstream youth (Tsai, 2006). A study in England found that Asian children were bullied more frequently than Caucasian children in junior and middle schools (Moran, Smith, Thompson, & Whitney, 1993). High school Asian youth in the United States also reported experiencing race-related violence and conflicts (Semons, 1991). Such lifetime discrimination experiences affect Asian immigrants' psychosocial well-being into adulthood (Pincus & Ehrlich, 1994; Sue & Sue, 1971). Discrimination research focusing on Asians is in its early development. Discrimination studies conducted with other ethnic minority groups and the existing data for Asians, however, warrant systematically investigating the effects of discrimination on mental health, substance use, and work performance of Asian immigrant workers.

Job Concerns

Job concerns include a range of organizational psychosocial factors that influence occupational safety and health and work performance. Such concerns frequently involve individual job content, salary, benefits, and welfare issues; lack of career prospects; job insecurity; anticipation of job loss or change; work relationships; physical and psychological demands; autonomy over duties; and lack of work task variety (Cheng, Guo, & Yeh, 2001; Escriba-Aguir & Tenias-Burillo, 2004; Johnson & Hall, 1988; Karasek, Triantis, & Chaudhry, 1982; Marchand, Demers, & Durand, 2005; Stansfeld, Fuhrer, Head, Ferrie, & Shipley, 1997). Each concern can operate as a stressor and adversely affect workers' well-being. Taking psychosocial health as an example, a study with transit operators in San Francisco revealed an increase in alcohol consumption following employment as a transit driver. Results also showed a positive relationship among job stressor frequency, perceived job stress severity, and alcohol consumption (Figure, path d) (Ragland, Greiner, Yen, & Fisher, 2000). A national survey in Taiwan found that, after adjusting for age and education, workers who perceived higher job stress had increased risks of somatic symptoms, which might be expressions of emotional distress, given the cultural context (Cheng et al.). Further analysis showed that job insecurity was associated with lower levels of mental health, vitality, and general health and increased risks of other health complaints (Cheng, Chen, Chen, & Chiang, 2005). The Whitehall II study in London also showed that job demands were associated with depression and anxiety and that anticipation of job change or loss was associated with poorer mental health (Figure, path c) (Stansfeld et al.).

The effect of job concerns on immigrants' health, however, has not been systematically examined. Measures of job concerns typically do not include items specific to immigrant workers. Discrimination, language proficiency, immigration status, length of stay, availability of personal resources, and existence of ethnic communities influence immigrants' job choices and create job concerns unique to this working population (Aroian, 1990; Baker, Arseneault, & Gallant, 1994; Lipson & Omidian, 1997; Salazar, Napolitano, Scherer, & McCauley, 2004; Tsai, 2003). A recent study showed that job concerns were associated with Filipino immigrant workers' adverse health outcomes and that the association was the strongest for the newest immigrants (de Castro, Gee, & Takeuchi, 2008). Migrant farm workers reported concerns related to job insecurity, legal status, language barriers, poor housing conditions, discrimination, and absence from family or friends (Kim-Godwin & Bechtel, 2004; Magana & Hovey, 2003). Studies with Chinese immigrants suggested that, for economic survival, immigrants worked in positions requiring less skill and conveying lower socioeconomic status than

positions they had had in their home countries. To protect their jobs, Chinese workers often did not communicate with their employers when they experienced unfair treatment at work or occupational safety and health problems (Tsai & Salazar, 2007). A Canadian study of Chinese immigrant women with chronic health problems showed that, because of their position in the labor force and their related sense of job insecurity, Chinese women were more hesitant than Euro-Canadians to disclose their diabetic status to coworkers or employers. They feared that if they were injured at work due to low blood sugar, no one would know how to help them. However, they feared the consequences of disclosing their illness even more (Anderson, Blue, Holbrook, & Ng, 1993).

Clearly, job concerns represent a major threat to the physical and mental health of workers. This threat is exacerbated by workers' socioeconomic status, ethnicity, culture, and immigrant status. Studies specific to Asian immigrant workers are limited (Anderson et al., 1993; de Castro et al., 2008; Tsai & Salazar, 2007). However, many of the circumstances described in available research are consistent with conditions experienced by this population of workers. This situation warrants further investigation to better understand the unique relationship between job concerns and Asian immigrant workers' health and job performance.

Social Support

Social support has been conceptualized and measured in multiple ways. Generally, the conceptualization of social support includes three common aspects: (1) support is an interactive process involving multiple linkages to the social environment, (2) individuals involved in these linkages exhibit instrumental and expressive actions and behaviors toward one another, and (3) social support contributes to an individual's psychosocial and physical well-being (Lin, 1986; O'Reilly, 1988).

The social support effects on mental health (Figure, path e) and substance use (path f) are well recognized by researchers. Based on longitudinal data, a Canadian study found that social support in the workplace decreased the risk of repeated episodes of psychological distress but had no effect on the risk of a first episode, whereas support outside of the workplace reduced both first and relapse episodes among adult workers (Marchand et al., 2005). Other studies found that low social support in the workplace increased workers' risk of poor mental health, poor vitality, poor emotional and social function, and short episodes of mental illness absence (Escriba-Aguir & Tenias-Burillo, 2004; Stansfeld et al., 1997). Low social support could even exacerbate existing anxiety and depression (Haslam et al., 2005). Intervention studies confirmed the effects of social support reducing emotional distress among high-risk youth (Thompson, Eggert, Randell, & Pike, 2001) and the severity of alcohol use among adult substance users (Dobkin, Civita, Paraherakis, & Gill, 2002).

Social support as a buffer against the stressors of life events has been a focus of study since Cassel's article (1976) was published in the mid-1970s. Based on his review, social support appeared to buffer or to ameliorate the physiological or psychosocial consequences of exposure to stressful situations. Evidence for such moderating effects of social support, however, is less clear than that for its direct effects. An earlier U.S. study found that social support in the workplace had a moderating effect on the relationship between workers' task strain and depressed mood and life dissatisfaction. Emotional support from coworkers had a more consistent effect on measures of health than instrumental support from supervisors or coworkers (Karasek et al., 1982). A significant moderating effect of supervisor support on workers' depressive symptoms was supported when the time lag was 8 months in a longitudinal study. However, a moderating effect of coworker support was not found (Dormann & Zapf, 1999). Another study found that social support from family and friends was a buffer for perceived unfair treatment and health conditions among Filipino Americans in Honolulu. No significant relationship was found in the San Francisco sample (Gee et al., 2006). A study with African Americans found extended kin support to be a buffer for life events in the past year and for males in general. However, extended kin support was not a buffer for chronic stressors or for females in general (Dressler, 1985). These findings suggest that moderating effects of social support may vary by gender, age, geographic location, source of support, or type of stressor.

Immigrants face numerous sociocultural stressors in new countries, including finding a place to live and shop, navigating community systems, rebuilding social networks, occupational demotion, and discrimination (Aroian, 1990; Baker et al., 1994; Tsai, 2006). Some stressors (e.g., housing and food) are likely to be resolved in a short period; others, such as discrimination and occupational demotion, are persistent. Despite scarce quantitative studies testing the moderating effects of social support (Kuo & Tsai, 1986), qualitative studies have pointed to the ameliorating influence of social support on the relationship between these sociocultural stressors and immigrant mental health and substance use (Aroian, 1990; Lipson & Omidian, 1997; Lynam, 1985). Because of shared language and culture, support from co-ethnics or individuals sharing the same ethnic background is particularly critical to immigrants' abilities to alleviate stress responses and promote their own mental health (Aroian, 1992; Baker et al.; May, 1992; Noh et al., 1999). Sociocultural stressors such as discrimination, occupational demotion, and related job concerns cannot be eliminated easily. Thus, understanding the moderating effects of social support from family, friends, and the workplace on the relationship between such stressors and immigrants' mental health and substance use is critical in light of its practical implications for inter-

ventions targeting immigrant worker health and safety.

CLOSING THOUGHTS

The adverse effects of mental illness and substance use disorders on work performance cannot be overstated. In addition to the exorbitant costs borne by the employer as a result of these problems (i.e., billions of dollars annually), mental illness has a direct effect on the resources and well-being of workers and their families (Karp & Tanarugsachock, 2000). Given the known literature on the effects of discrimination and immigrant-specific job concerns on immigrants' mental health, the magnitude of these effects for both the employee and the employer may be compounded when employees are non-White immigrants whose first language is not English.

Early assessment and identification of mental illness and substance use disorders is essential to the success of workplace interventions (Roman & Blum, 2002; Sauter, Murphy, & Hurrell, 1990). Occupational health nurses are poised to recognize, identify, and respond to at-risk workers. To be most effective, occupational health nurses need a basic understanding of the complexities inherent in mental health problems and substance use and to be knowledgeable about the unique constellation of factors that may affect immigrant workers. The theoretical model proposed in this article can serve as a guide for occupational health professionals who confront these serious workplace issues among Asian immigrants. The model provides a strategic approach to assessing the often overlooked issues that may affect Asian immigrant workers. Some specific examples of areas that might be considered when using this model include the following:

- In terms of social discrimination, the occupational health nurse might examine how individuals within the organization interact with the affected worker. For example, how is the worker treated by coworkers? By managers? By health professionals? Are some workers treated unfairly due to language (accents) or immigration status, and does this treatment unduly affect workers' abilities to maintain healthy psychological well-being and perform their jobs? If yes, has anyone sought to assist workers with these issues?
- Questions related to job concerns might be: Have workers been unfairly passed over for promotion? Are the jobs the workers perform consistent with workers' skills, education, and work experience in their countries of origin? Do workers feel secure in their current positions? Do workers feel they need to work harder than their American-born coworkers to keep their jobs or be promoted?
- In terms of social support, workers may be asked if they are able to seek assistance with their jobs when needed. The occupational health nurse may also want to assess workers' personal situations as a means to determine the level of social support available from workers' families and the community.

Of importance when using this model is its focus on the social determinants of mental health and substance use (i.e., social discrimination, job concerns, and social support) as a first step in assessing a situation. Although the model is designed to examine the influence of specific determinants of health among Asian immigrant workers, the theoretical underpinnings are likely relevant to all immigrant workers.

When mental illness or substance use disorder exists in the workplace, occupational health nurses must be prepared to collaborate with professionals from other disciplines who can provide the array of services that may be needed for an individual worker. If employee assistance counseling and referral services are available within the organization, these should be the first line of consultation and support. In some cases, social workers, case managers, or other professionals may assist with or have the primary responsibility for the coordination of services for workers. Regardless of which professionals are involved, the delivery of services typically begins and ends with the occupational health nurse, who plays a pivotal role in all aspects of any intervention. When an affected worker returns to work, a plan must be in place to assist the worker with re-entry. It is not likely that mental illness and substance use disorders will be cured when the employee returns to work (Kalina & Haag, 2003); thus, the possibility of recurrence must be considered. The occupational health nurse may need to institute workplace strategies and mechanisms to provide support and advocacy for workers. For example, Kalina and Haag suggest daily group meetings as one mechanism to address the aftercare of workers affected by substance abuse.

Many immigrant workers are employed in small businesses (e.g., food and drinking services) that may not have any occupational health and safety services and most certainly do not have an occupational health nurse. Yet, they often work in jobs that could exacerbate their concerns (American Federation of Labor-Congress of Industrial Organizations, 2005). Providing occupational health and safety services to these workers and addressing their mental health needs is particularly challenging. Reaching these workers may require innovation in service delivery. McCauley (2005) describes four key steps to providing services to immigrant workers, including those who work in small businesses: improving cultural competence, increasing access to health care, improving workplace surveillance and research, and advocating for changes in health policy.

Cultural competence is essential in all occupational settings, but particularly those that employ immigrant workers. Occupational health professionals should actively engage in activities that improve cultural sensitivity and the ability to respond to the unique needs of immigrant workers. In terms of health care access, McCauley (2005) suggests that more community-based clinics be established and that in addition to providing clinic services, nurses should reach workers who may not seek

IN SUMMARY

A Theoretical Model for Understanding Mental Health, Substance Use, and Work Performance Among Asian Immigrants

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1. Mental illness and substance use disorders profoundly affect workers' job performance and risk for injuries. Existing data indicate that absenteeism, presenteeism, and disability associated with these conditions cost businesses billions of dollars each year.
2. These adverse effects are seriously compounded when a worker is a non-White immigrant whose first language is not English. Social factors that influence the occupational health of immigrant workers include social discrimination, job concerns, and social support.
3. The theoretical model described in this article provides a means for occupational health nurses to better understand these social determinants of occupational health among Asian immigrant workers.
4. The research and testing of this model will lead to more effective interventions specific to Asian immigrant workers, and are likely to provide valuable information that can also be applied to other immigrant workers.

consultation or other services from health care providers. Another issue is the dearth of data about immigrant workers. Research and surveillance systems need to be established to learn about the unique needs of immigrant workers. Finally, occupational health nurses should be advocates for regulatory changes aimed at protecting immigrant workers' health and safety, challenging the status quo embedded in the social ideologies that unfairly treat immigrant workers.

In summary, although the literature review presented here provides strong support for the relationship of specific social determinants (i.e., social discrimination, job concerns, and social support) to mental health and substance use, and the relationship of mental health and substance use to work performance, the interrelationship of these factors among Asian (and other) immigrant workers has not been well examined. Furthermore, few studies address mental illness and substance use among Asian immigrant workers. Although it is acknowledged that mental illness and substance use disorders can seriously compromise affected workers, workplaces, workers' families, and society, most research focuses on determining the extent of the problem, understanding the impact of these conditions on the workplace, and identifying and testing interventions (Kalina & Haag, 2003; Tourigan, 2003). However, little research has focused on the root causes of these problems embedded in the ideologies and structure of society. In addition to developing a more complete understanding of the relationship between mental health and substance use and work performance, nursing has a compelling need to examine the social determinants of these conditions among Asian immigrant workers. The application and testing of this model will contribute to understanding this phenomenon. This understanding will lead to more effective interventions to ameliorate the effects of these issues.

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