

Master's Thesis

**My Nails, Your Health: An Analysis of Literature Promoting Health Among Low-Wage  
Asian Immigrant Women Nail Salon Technicians in the United States**

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Review Article

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## **ABSTRACT**

Low-wage and low-income workers are often in precarious work situations or workplaces that endanger their health. An example of a precarious, low-wage occupation is nail salon work. Nearly 8 in 10 nail salon technicians (NSTs) are considered low-wage workers, which is a percentage that is greater than the average occupation. Nail salon technicians, who may also be referred to as manicurists and/or pedicurists, are exposed daily to products and chemicals including toluene, formaldehyde, and phthalates. Better known as the “toxic trio,” these chemicals are used as polish hardeners, thinners, and plasticizers and can cause cancer and reproductive issues especially in women. NSTs are projected to grow by 10% by 2028. With this growth and the massive influx of mostly Asian immigrant technicians to fill these nail salon positions, there should be efforts focused on health promotion and health education for these vulnerable workers. There is largely a lack of health promotion and health education literature aimed specifically at nail salon technicians, even technicians who are Asian immigrant women. This literature review aims to bring together the complex relationships between the identities of Asian immigrant nail salon technicians and their health and to provide recommendations and considerations for such health programs.

## INTRODUCTION

Low-wage and low-income workers are often in precarious occupations and face an array of health hazards while on the job. This is especially of concern for the majority of the nail salon technician (NST) workforce who are mostly Asian American and Asian immigrant women and are therefore vulnerable due to issues such as low English proficiency, undocumented immigration status, employer and client discrimination, and employer exploitation through wage theft. These issues create hostile working conditions and fear that prevent NSTs from seeking health services. The workplace can also be a hazard for NSTs, who work in an industry that is rapidly growing with the rising demand for cheap, accessible nail care, exposing NSTs to nail chemicals and products. The Bureau of Labor Statistics estimates that by 2028, the nail salon industry will grow by 10%, which is faster than the average growth for all occupations in the United States (Manicurists and Pedicurists, 2018). As the industry grows, so do concerns for the average NST's health based on their status as low-wage and low-income and being Asian American and Asian immigrant women.

Ross and Bateman (2019) describe low-wage workers as workers who earn median hourly wages of \$10.22 and a median income of \$17,950. An NST's median hourly wage and median annual income are \$11.70 and \$24,330, respectively (Manicurists and Pedicurists, 2018); however, these estimates may vary depending on what is classified as low-wage and low-income. Sharma et al. (2018) in their comprehensive report on NSTs, classifies low-wage as earning  $\frac{2}{3}$  of the median full-time wage, classifying 8 in 10 NSTs as low-wage earners. In addition to being low-wage earners, in the United States around 76% of NSTs are Asian, with over 74% born in Vietnam, followed by 7% born in China, and 4% born in Korea (Kang, 2010; Sharma et al., 2018). Almost half of technicians have limited English proficiency (do not speak English or do not speak English well) and a large majority (81%) of NSTs are women (Sharma et al., 2018). For the purpose of this review, Asian immigrant women will be defined as first-generation immigrants who were born outside of the United States. Due to the high percentage of NSTs in survey reports and research studies identifying as foreign-born (namely from Vietnam, China, South Korea, India, and Philippines), foreign-born Asian women and foreign-born low-wage workers are the populations of interest for this review.

Nail salon work is considered a precarious occupation since it involves exposure to hazardous nail products and chemicals, exploitation, limited health benefits, low earnings, and

sometimes a lack of employment continuity (temporary employment) (Benach and Muntaner, 2007; Hoang, 2015). In several studies and reports, NSTs have reported experiencing symptoms such as musculoskeletal problems, headaches and lightheadedness, eyes, nose, and throat irritation, skin irritation, and even reproductive harm (i.e. miscarriages) (Ford, 2014; Ma et al., 2019; Roelofs et al., 2008). In addition to low-wage and low-income status, immigration status, limited English proficiency, and work exposures, NSTs can also be vulnerable due to barriers such as lack of health insurance possession and lack of programs tailored to the average NST's specific identities. Lack of access to these resources may prevent technicians from utilizing services to treat and diagnose health issues either generally or issues acquired from their occupation (David, 2014). Despite extensive health concerns and occupational hazards encountered as an NST, there still is a lack of federal, state, and local government oversight for manufacturers of nail salon products and chemicals and targeted technician health and safety programs (Quach et al., 2013).

The abundance of studies demonstrates the need to focus on the health hazards of NSTs, especially given the rapid growth of this occupation. While there is a lack of health promotion and health education literature specifically aimed at Asian American and Asian immigrant NSTs, the purpose of this review is to bring awareness to potential solutions for mitigating the adverse health effects of an NST's daily exposure to toxic nail salon products and chemicals. To date, most literature is focused on characterizing, assessing, and identifying NSTs' health risks and occupational exposures. Some literature even provides recommendations for public health professionals and policymakers to mitigate adverse health effects and exposures. This review will additionally provide an overview of federal and state policies regarding cosmetic product regulation and use, detail existing examples of health-promoting programs and collaboratives, and discuss potential barriers to aspects of health promotion and health education for NSTs. Finally, the review article will highlight recommendations made by both existing literature and organization efforts for promoting NST health. Given that most literature on health among NSTs inadequately incorporates key socioeconomic, linguistic, racial and ethnic considerations, this review additionally aims to draw in findings from studies with comparable low-wage occupations and Asian American and Asian immigrant women's health.

## **METHODS**

This review article is taking an exploratory approach. Peer-reviewed literature was analyzed using various search terms: low-wage workers (especially those working in small businesses and are immigrants and foreign-born), nail salon workers/nail salon technicians, small business health promotion, Asian women immigrant workers, and Asian American women workers. Literature related to the health promotion and health education of these populations was of particular interest. Grey literature, mainly reports from organizations and researchers as part of a collaboration with academic institutions, were also analyzed. These documents mostly reported the current state of nail salon technicians (numbers, demographics, and earnings) and/or had policy and research recommendations on improving NST health. Exclusion criteria included literature that was related to research conducted outside of USA, UK, or Canada (especially if studying non-Asian American women), about hairdressers and barbers, and about health promotion that is at the site of a large or mid-sized employer or workplace.

To integrate community-based participatory research principles into this review, community organizations working with nail salon technician and projects aimed at various Asian immigrant and Asian American groups were interviewed or analyzed and incorporated as community-based advocacy efforts for NST health and safety. Informal, semi-structured interviews were conducted with representatives from these organizations. Contacts from each organization were obtained through snowballing, the author's social networks, and cold contact via email.

## **AN OVERVIEW OF THE HEALTH HAZARDS AND HEALTH ISSUES OF NAIL SALON TECHNICIANS, A VULNERABLE POPULATION**

Though there are health hazards on the customer's side, these concerns overshadow the health hazards for the technicians who are exposed to nail salon products and chemicals every day (Ford, 2014; Kang, 2010). Of particular concern is exposure to the "toxic trio," a hazardous chemical combination comprising of formaldehyde, toluene, and phthalates. These chemicals are known by the Occupational (OSHA) and Environmental Protection Agency (EPA) to cause a variety of symptoms. Formaldehyde, commonly seen in nail polish and nail hardeners, can cause difficulty breathing, coughing, asthma-like symptoms, wheezing, allergic reactions, eye, skin, and throat irritation, and even cancer (Health Hazards, 2020). Toluene is often used in nail polish

and fingernail glue and can cause dry or cracked skin, headaches and dizziness, numbness, eyes, nose, throat, and lung irritation, kidney and liver damage, central nervous system damage, and harm to fetuses during pregnancy (Fung, 2014; Health Hazards, 2020). Lastly, phthalates, usually dibutyl phthalate (DBP), is used in nail polish and has been linked to nausea, eyes, skin, nose, mouth, and throat irritation, and reproductive damage (Fung, 2014; Health Hazards, 2020). There are growing concerns around the combination of these with other potentially dangerous chemicals found in nail salon products as well (Ford, 2014). Additionally, work-related ergonomic body pain and other musculoskeletal problems, such as pain and issues in the wrist, hand, neck, and back, are commonly reported among NSTs due to poor and uncomfortable posture (Sharma et al., 2018). More research needs to look into relationships of chemical exposures and NST health outcomes (White et al., 2015). However, current studies have assessed, identified, and reported various symptoms that NSTs have reported experiencing given their occupational exposure to nail salon products.

One mixed methods study conducted by Roelofs et al. (2008) with Vietnamese immigrant workers in nail salons in the Boston, Massachusetts area reported that common complaints workers had were skin disorders from no glove use, headaches, respiratory irritation, and musculoskeletal symptoms (numbness, pain, tingling) during work (Roelofs et al., 2008). NSTs not only reported their symptoms but often mentioned the smells of the products they use and mix: “When making the paste, I have to use the primer; this liquid has a really bad smell that makes me very uncomfortable” (Roelofs et al., 2008). The study used a community-based occupational health survey and surveys were administered in the Vietnamese language. When NSTs were asked about whether or not their employers informed them about their exposure hazards, many either had no response or had reported they were not informed (Roelofs et al., 2008). Similarly, Huynh et al. (2019)’s qualitative study elicited major themes of interest regarding health symptoms NSTs experienced including: musculoskeletal pain (shoulder, back, hands), respiratory and eyes irritation, headaches, and dry and cracked skin (Huynh et al., 2019). The study was also conducted primarily in the Vietnamese language, with a few interviews conducted in English. Like Roelofs et al. (2008), some NSTs were aware of health and safety issues while others were not. The authors interviewed a nail salon owner in the study who commented on her fear of nail salon products causing harm to the fetus during pregnancy:

“I was nervous at first. Because I heard that women who work in the nail industry during pregnancy, may have some effects on their children later on. I also asked the doctor. The doctor also advised me to wear protective masks and other things... We should also pay attention to any little thing at the time of pregnancy...” (Huynh et al., 2019).

When the authors asked a technician about any musculoskeletal issues from working in awkward postures, one mentioned what she heard about other NSTs: “There are people who have to have surgery on their fingers because they hold customers’ hands for too long... Some people lost sensation on their finger” (Huynh et al., 2019). These two studies, conducted over a decade apart from each other, highlight that steps need to be taken to reduce chemical exposures and musculoskeletal hazards and that these efforts should be on the parts of the “[NSTs], owners, clients, policy makers, and enforcers” to ensure policy and behavioral change (Huynh et al., 2019; Roelofs et al., 2008).

Harris-Roberts et al. (2011) and Ma et al. (2019), the former of which was conducted among NSTs in the United Kingdom, both found that workers reported symptoms similar to those found by the two studies above. Harris-Roberts et al. (2011) demonstrated a higher prevalence of musculoskeletal problems and respiratory symptoms among NSTs when compared to control groups of non-exposed female office workers. However, despite reports of these symptoms and adverse health outcomes, symptoms could potentially be underestimated because of the high turnover rate of nail salon work, where workers may have left their positions before their symptoms became worse (Ma et al., 2019).

Workers have reported miscarriages during their time working at the salon (Chhetri et al., 2018; Ma et al., 2019; Seo et al., 2019a; Seo et al., 2019b; White et al., 2015). Sharma et al. (2018) in their comprehensive report also cites other studies where 10% of NSTs were working while pregnant and around 8% of NSTs knew an NST who had reproductive issues while working (i.e. birth defects, miscarriages, and issues conceiving). Ford’s (2014) report, titled “Overexposed, Underinformed”: Nail Salon Workers and Hazards to Their Health / A Review of the Literature,” found that many studies related to NSTs’ exposures focused on chemical absorption through the skin rather than other methods of absorption (such as the gastrointestinal tract, eyes, respiratory tract, urogenital tract, and parenteral and transplacental) and that women in particular are most affected due to their hormonal differences (Ford, 2014). Ford (2014) and Ford and Scott (2017) argue that NST health is a women’s health and environmental justice

issue. This is important to keep in mind when developing health promotion programs for NSTs since around 81% to all nail salon technicians are women (Sharma et al., 2018).

Another health concern seen among NSTs is access to and possession of health insurance. White et al.'s 2015 study, conducted among Oregon NSTs who were predominantly Vietnamese immigrants, found that the percentage of NSTs with access to health insurance was a little under half. Sharma et al.'s report, found that around 29% of NSTs in the United States are uninsured and of the 71% of those who are insured, 29% are covered through public programs. The percentage of NSTs who utilize public insurance programs is much higher than the national average of 19% (Sharma et al., 2018). Seo et al. (2019a) and Seo et al. (2019b) conducted studies that looked into health insurance and health service utilization differences among NSTs, mostly differences between Chinese versus Korean NSTs. They found differences among ethnic groups and health insurance possession. Chinese NSTs tended to have higher insurance rates and higher health service utilization while Korean NSTs had higher levels of educational attainment but lower health insurance rates and lower health services utilization. Knowledge of ethnic differences in health insurance possession should guide efforts to improve health insurance possession among NSTs.

Though there is ongoing research and many long-term effects of nail salon products have yet to be studied, it is evident that NSTs risk their health through daily exposure to the chemicals they work with. Because some studies mentioned that an NST's lack of knowledge of chemical exposure might be because information was provided in English or was too technical, providing NSTs with linguistically and culturally appropriate information regarding these health hazards while on the job is imperative.

## **CURRENT FEDERAL AND STATE GUIDELINES FOR NAIL SALON PRODUCTS AND HEALTH AND SAFETY FOR NAIL SALON TECHNICIANS**

There is generally an absence of attention and oversight of salon chemicals in the United States and Canada by federal, state, and local governments (Ford, 2014; Fung, 2014). The Food and Drug Administration (FDA) regulates cosmetic products through the Federal Food, Drug, and Cosmetic Act passed in 1938, which prohibited marketing and use of cosmetic products that have been adulterated or misbranded (Fung, 2014). This act, however, does not protect NSTs from potential health and safety issues since it allows the use of these products for their intended

use (i.e. for nail salon work and not ingested) (Fung, 2014; Sharma et al., 2018). It also does not require FDA approval for products and ingredients to be sold nor does it regulate ingredient formulations (i.e. must be customary formulations used before in previous products) (Fung, 2014; Sharma et al., 2018). Therefore, it is left up to the nail product manufacturers to deem products safe for use.

In addition to the FDA's federal authority the Occupational Safety and Health Administration's (OSHA) also plays a role in regulating permissible exposure limits (PELs) in workplaces (Sharma et al., 2018). OSHA also requires that employers provide their workers with Material Safety Data Sheets (MSDS) for products containing toxic chemicals that are used on the job (Sharma et al., 2018). Latex gloves are required for anyone handling acetone while nitrile gloves should be used for harsher chemicals while on the job, per OSHA guidelines (Basch et al., 2016). There are, however, concerns around updating PELs and enforcing employers' distribution of SDS to technicians, so much of the enforcement is left to states and municipalities, especially those seeing large increases in NSTs and the nail salon industry.

States and municipalities have their own regulations for NST licensure eligibility and business practices (Walsh, 2013). Certain municipalities, states, and countries have stricter regulations than others when it comes to nail salon products regulation and the nail technician licensure process. For example, Connecticut is currently the only state that does not require NSTs to obtain licenses to practice manicuring. What follows are some examples of how these laws compare:

#### New York State (NYS) and New York City (NYC), New York, USA

New York State has the strictest regulations for nail salons in the United States (Ma et al., 2019). In 2015, *New York Times* articles uncovered health and safety hazards that NSTs are exposed to on the job and prompted Governor Andrew Cuomo to set new ventilation requirements and require owners to provide personal protective equipment to their workers the following year (Seo et al., 2019a). As a result, technicians must wear nitrile or another similar non-permeable material as gloves, there must be enough gloves available, and a new pair must be used per new customer (Basch et al., 2016). Prior to the ventilation and PPE requirements, New York also mandated the following for nail salons: stores must post an NST's bill of rights, cease and desist postings, an anti-worker exploitation task force, new bond and insurance

requirements, authority to close businesses in violation of laws, and training resources for NSTs (Sharma et al., 2018). New York's training resources include free English classes and licensing process in multiple languages (Sharma et al., 2018). This work was largely informed by and done in collaboration with nail salon advocates in New York, like Adhikaar and Workers United NY/NJ.

### California, USA

California has the second strictest regulations for nail salon businesses in the United States. San Francisco, California was the first city in the United States to pass the healthy nail salon recognition program ordinance in 2012, which partnered with the California Healthy Nail Salon Collaborative to recognize compliant, healthy salons (James, 2014). After the California Safe Cosmetics Acts in 2005, California passed the Assembly Bill 2125 in 2016 which requires the California Department of Toxic Substances Control to create guidelines for implementing the healthy nail salon recognition program (AB-2125, 2016). It also requires education for the consumer, presentation of guidelines to local health officers, and dissemination of information on websites (AB-2125, 2016).

Although some states and cities have stricter regulations than other states, the enforcement of these regulations is questionable in many cases. This is a point of concern for many nail salon advocates concerned with NST health and safety.

## **HEALTH PROMOTION FOR ASIAN IMMIGRANT WOMEN AND LOW-WAGE IMMIGRANT WORKERS IN SMALL WORKPLACES: TAILORING PROGRAMS TO THE IDENTITIES OF NAIL SALON TECHNICIANS**

Health programs have been found to benefit and potentially deliver promising results for low-wage workers even in small business settings (Laing et al., 2012; Stiehl et al., 2018). Stiehl et al. (2018), however, also emphasize that there is still a need to look into the factors that encourage participation in programs, how these programs can expand their access, and effective delivery mechanisms for low-wage workers. An older study suggests that health promotion programs for working class workers should focus on "social contexts and daily realities" of workers across different ethnic groups (Sorensen et al., 2005). Strickland et al.'s (2015) qualitative study found similar issues to existence and access of programs, where although health

promotion programs for low-wage workers are necessary, workers mentioned that they were not effectively implemented, fell short in reach, and programs were unsure of how to reach their diverse workers. When developing health programs, we must consider these realities and contexts for NSTs and the intersections of their identities. To address these concerns, I will look into literature on health programs for Asian immigrants (specifically Asian immigrant women, if applicable) and comparable low-wage workers, especially those who are non-Asian immigrants, ethnic minorities, and/or working in small workplaces.

Environmental and occupational hazards are of most concern for Vietnamese populations in the United States due to their growing presence in the nail salon industry (Le and Nguyen, 2013). Many studies related to NST health have studied these hazards, with some focusing on or incorporating Vietnamese identity. Quach et al. (2008) pioneered a study surveying Vietnamese NSTs in a California county. This preliminary survey highlighted the need to begin focusing specifically on the health of Vietnamese immigrant women, who make up so much of the nail salon workforce in California. It is therefore important to look into the literature that looks specifically at programs that are tailored to Vietnamese immigrant women, for example. Another part of an NST's identity is their classification as low-wage and low-income workers since NSTs on average earn \$24,330, though the data actually varies due to job misclassification. This is especially important for those working in smaller workplaces (fewer than 20 employees). Sharma et al. (2018) reports that 92% of nail salons have less than 10 NSTs working. White et al. (2015)'s survey found that a little over half of the salons had 1 to 5 workers and over one-third had 6 to 10 workers. An example of a comparable area is work in the restaurant industry, where work is often characterized by long hours, physically demanding tasks, and low wages (Minkler et al., 2010). Phan (2016) compares the nail salon business to car washers, whose workers are primarily low-wage, from immigrant Latino communities, and see similar issues with chemical exposures, safety, and unionization. As such, comparisons will also be drawn from other small, immigrant-owned businesses that face health and safety issues on the job, such as restaurant workers and if applicable, workers who are also immigrant workers.

Lam et al.'s (2003) study incorporated the community-based participatory research (CBPR) framework into Pap smear outreach to Vietnamese women in California. The authors found that using lay health workers with cultural knowledge, sensitivity, and social networks can improve outreach and knowledge of Pap smears for this population while incorporating

community input. However, it should be noted that this is an older study and the population of Vietnamese American and Vietnamese immigrant women has increased since then. Although it does not focus specifically on NST (occupations of participants were not specified), it does provide culturally relevant information related to a health service for Vietnamese immigrant women.

Similarly, Minkler et al. (2010) uses CBPR, by incorporating workers into methods design and dissemination, among immigrant restaurant workers in San Francisco's Chinatown. The authors believe that the lack of payroll, health insurance, and injuries and illness data among restaurant workers makes it difficult to research this population. Moreover, immigrants are already often excluded from occupational health data. Additional similarities can be drawn from immigrant restaurant workers and NSTs due to their diverse workforce, low-wage worker status, and being in the service industry. The study found that CBPR is promising in studying and promoting health and safety among an already hard to reach population of immigrant Chinese restaurant workers.

In Seattle, Allen et al. (2015) used qualitative techniques to assess how feasible health promotion programs could be for restaurant workers, who tend to be at risk for chronic conditions and are difficult to reach. The study concluded that health promotion programs such as on-site flu vaccination programs and promoting limited smoking-break policies and equitable breaktimes are important starting points for health promotion for restaurant workers. The authors believe that programs like these would work because they are targeted at a population that mostly do not have health insurance. They also noted that these programs are particularly important for Hispanic workers who may face linguistic barriers related to accessing these health programs. Although the study does not mention Asian immigrant workers in the restaurant industry specifically, similarities can also be drawn from linguistic barriers that these two populations face considering almost half of NSTs who were born abroad have limited English proficiency (Sharma et al., 2018).

Like Minkler et al., Pih et al. (2012) looked at Chinese immigrant low-wage workers in the Southern California area who mostly worked in the service industry (i.e. restaurant workers, masseuses). The study also used a CBPR framework and qualitative methods. Pih et al. found that although being part of an "ethnoburb" (close-knit ethnic community) gives a worker valuable social capital, there is also a lack of cultural capital which keeps workers from obtaining

information from mainstream American society. The authors argue that this makes the social capital that workers obtained ineffective. Observing that the majority of workers lacked health care coverage, the authors suggest this is because employers that are not providing health insurance. Therefore, health information and programs are necessary for this population, focusing on health insurance, health care access, and health information outreach. Tsai and Bruck's (2009) ethnographic study of Chinese, Hong Kong, and Taiwanese immigrants who are Seattle restaurant workers suggests occupational health professionals should not only look at physical and environmental health and safety risks but should also take into account psychosocial and sociocultural aspects when designing health promotion programs for this population. Workers mentioned receiving no formal training on health and safety prior to working at restaurants, so handling health and safety issues were learned by observing other workers. These present unique challenges and vulnerabilities. Like Pih et al., Tsai and Bruck found that social networks assisted and shaped workers' employment choices.

These studies show that health promotion programs aimed to improve the health and safety of Asian women workers and immigrant workers need to be tailored, both culturally and linguistically.

### **CALIFORNIA'S HEALTHY NAIL SALON COLLABORATIVE (CHNSC), SAN FRANCISCO'S HEALTHY NAIL SALON RECOGNITION PROGRAM (HNRP), AND NEW YORK HEALTHY NAIL SALONS COALITION (NYHNSC)**

Some initiatives from New York and California are highlighted as model examples of programs and collaboratives that can improve NST health and safety:

In 2005 in California, the California Healthy Nail Salons Collaborative (CHNSC) was co-founded by Asian Health Services and public health and environmental advocates, community-based organizations, NSTs and owners, and government agency representatives as a response to frequent NST complaints of health and safety issues (Quach et al., 2011; Sharma et al., 2018). Working alongside with workers, owners, and organizations in the area, the Collaborative has advocated for counties and cities in California to adopt the Healthy Nail Salon Recognition Program and has integrated different stakeholders in their research, advocacy, and outreach (Quach et al., 2011; Sharma et al., 2018). As of 2018, over 200 nail salons across California have become certified as Healthy Nail Salons per the recognition program (Sharma et

al., 2018). With this interdisciplinary and collaborative environment, the Collaborative develops research and policy recommendations that account for the diverse issues that NSTs face (Quach et al., 2011).

A healthy salon recognition program in San Francisco found that these programs and similar government-administered programs have the potential to reduce chemical exposures by pushing for the creation of safer nail product alternatives, incentivizing participation and completion of the program, and increasing awareness and knowledge of health impacts among workers (Garcia et al., 2015). As of 2015, healthy salon recognition initiatives are in San Francisco and other parts of California (Garcia et al., 2015). However, many barriers may hinder participation in healthy salon programs, such as limited English proficiency, undocumented immigration status, and lack of licensure and credentials (Sharma et al., 2018).

In New York, the New York Healthy Nail Salons Coalition (NYHNSC) was established in 2014 with community-based organizations (notably Adhikaar) and the New York Committee for Occupational Safety and Health (Sharma et al., 2018). Later, Workers United and Service Employees International Union joined (Sharma et al., 2018). The Coalition works on labor rights, reproductive health and occupational health issues, and public interest law (Sharma et al., 2018). Its member organizations hold health and safety trainings, collect health symptom data, hold workers' forums, and advocate for nail licensing trainings to be available in different languages (Sharma et al., 2018).

## **OTHER INITIATIVES FOR NAIL SALON TECHNICIAN HEALTH PROMOTION AND HEALTH EDUCATION: EFFORTS THROUGH COMMUNITY-BASED ADVOCACY ORGANIZATIONS**

In addition to programs and collaboratives, some of which incorporate organizations like the ones below, a number of community-based organizations across the nation advocate for NST rights and work with NSTs to improve health and safety:

Adhikaar is a NYC-based organization focused on providing for the Nepali immigrant community in the area. Because many NSTs in NYC are of Nepali background or are Nepali-speaking, the organization has co-founded and currently help lead the New York Healthy Nail Salon Coalition to assist its Nepali technicians. When speaking to an organizer of the nail salon program, she often mentioned language barriers and the lack of PPE usage. The organization

currently provides NSTs with health and safety trainings in different languages, health insurance help, technician mentorship programs, and nail salon job training. It also partners with efforts across the nation. Adhikaar organization hopes to push forward a nail salon grading program, which ranks salons based on how well they comply with NYS and NYC regulations for nail salon businesses.

Boston's Greater Boston Legal Services provides in-language and culturally relevant services in their Asian Outreach Unit. To accommodate the large Vietnamese population outside of Boston (especially in Dorchester), many of whom work in nail salons, the Unit does work with organizations in the community related to advocating for labor rights, such as table side ventilation policies. To better help improve outreach and reduce any language barriers, the Unit has Vietnamese speakers on their team. The Unit is currently working on a project to understand individual technicians' concerns about their work, including health and safety in the workplace and wage and hour issues.

Mekong NYC is an NYC-based organization aiming to improve the lives of Southeast Asian populations in the Bronx and the greater NYC area by providing safety nets, promoting culture and art, and community organizing (Mekong NYC, 2020). Recently, the organization is attempting to revamp their NST organizing efforts to build better relationships with small businesses in the area. Previous efforts were led by a Vietnamese speaking nail salon owner in the area. Mekong hope to focus their program on the health and resiliency of NSTs and community building.

NST-focused efforts from these three organizations look at very specific issues ranging from helping NSTs obtain health insurance to collecting stories and data from NSTs in their respective areas. What these organizations also have in common is that they all provide in-language assistance to NSTs with workers who have similar or the same ethnic backgrounds as the populations of NSTs they work with.

## **CONSIDERATIONS FOR IMPLEMENTING HEALTH AND SAFETY PROGRAMS AND IMPROVING NAIL SALON TECHNICIAN HEALTH**

There are many barriers and issues to consider when developing efforts to protect the health and safety of NSTs. Because the majority of NSTs are Asian American or Asian immigrant women, their identities and social relationships influence some of these barriers. Kang

(2010) argues that there is a wide gap between what NSTs know they should do and what they actually are able to do. Therefore, it is crucial to look deeper into identity-related issues such as interpersonal relationships, social networks, health literacy, and language barriers.

### Interpersonal Relationships and Finding Employment Within Social and Ethnic Networks

Often, NSTs are drawn to the occupation because they can obtain the job easily through social and ethnic networks and there is little formal training and little use of the English language (Quach et al., 2013); however, as previously discussed, this kind of ethnic community network can create a lack of access to mainstream resources such as health insurance, hospital systems and other forms of preventative care (Pih et al., 2012). Kang (2010) found that NSTs often feared the inability to work again and inability to find other work outside of the nail salon since NSTs often found work through their own social networks. As one of her participants put it, “There’s no work like nail salon work” (Kang, 2010). Hoang’s (2015) work on labor relations among Vietnamese nail salon employees and nail salon owners argues that employment by fellow Vietnamese immigrants in an ethnic enclave can work against an NST’s favor. Bosses tend to exploit their own employees by denying their workers of benefits and cutting their wages (Hoang, 2015). Additionally, most NSTs are low-wage and low-income workers and are typically not protected by union membership (Ford, 2014; Sharma et al., 2018). NSTs may also fear that talking about their health would result in judgment from other workers and owners or even negatively impact their immigration status or job security (David, 2014; Ford, 2014).

Nail salon owners are the gatekeepers of their employees’ health and safety. Owners should be the ones providing employees with protective equipment (PPE) and health and safety training. Consistently using personal PPE is a crucial method for NSTs to protect themselves against exposure to nail products and chemicals. However, workplace relationships between workers and owners and workers and customers complicate this. One pilot study looked at personal protective equipment use among Vietnamese NSTs and found that NSTs fear they may lose customers if they wear a mask (which stops them from socializing with customers) or fear they are signaling mistrust with their customers when using gloves (Ho et al., 2007). Kang (2010) interviewed an NST who reported similar feelings about using PPE:

When you use gloves, customers feel bad, so I don't use them [and]... the owner doesn't like it when you wear a mask with regular customers... because she wants you to talk to them (Kang, 2010).

These issues create a hostile environment for NSTs to seek health services especially for symptoms they experience from their jobs.

### Limited English Proficiency and Low Health Literacy Levels

Low health literacy and limited English proficiency are also unique barriers that many NSTs face when receiving health and safety information and programs. Around half of NSTs born abroad have limited English proficiency, so an estimated total of 46% of workers have limited English proficiency or do not speak English at all (Sharma et al., 2018). Limited English proficiency has been found to be a barrier to quality health care and health care access among Vietnamese and Korean immigrant populations in NYC, for example (Sentell and Braun, 2012; Seo et al., 2019b). Asian immigrant NSTs with low socioeconomic status and limited English proficiency are therefore a vulnerable population since they lack access to societal resources, especially health care services and face issues with proper hazards training and licensure and know-your-rights materials available in their languages (Seo et al., 2019b; Sharma et al., 2018). This is a major consideration for health and safety programs, where they must consider offering programs to NSTs in different languages and with less technical terminology.

## **RECOMMENDATIONS**

Many recommendations are provided both within the literature and by advocacy efforts to improve NST health and safety. These include ways to reach more NSTs by culturally and linguistically tailoring programs and health outreach efforts, ensuring NSTs sign up for health insurance, and more. Ideally, as Phan (2016) suggests, there should be widespread use of California's Healthy Nail Salon Collaborative's structure and ideas. From reviewing the literature, this article will make the following recommendations, which all incorporate ideas from CHNSC, for programs centered on NST health and safety:

### Culturally and Linguistically Tailored Health and Safety Programs

Some reports and articles suggest providing technicians and owners with health and safety information offered in different languages especially in places like New York City and in various counties in California (James 2014; Quach et al., 2013). This information should include safe practices at the salon. Quach et al. (2013) argue for worker trainings that are culturally and linguistically tailored to the NST population, and the dissemination of the information learned can pass down to newer NSTs from owners and more experienced NSTs. It would also help NSTs understand more technical information.

NSTs should also receive health insurance information. Though the estimates range, some studies have estimated that around half to two-thirds of NSTs are insured (Sharma et al., 2018). American Community Survey (2012-2016) results found that the percentages of NSTs who are insured (71%) falls below the national average of 88% (Sharma et al., 2018). This creates an avenue for ensuring that NSTs are covered by some form of health insurance, whether it is employer-sponsored or through state or federal health insurance exchanges (i.e. California's Medi-Cal and national Medicaid). Also, as mentioned previously, health insurance outreach should recognize that limited English proficiency and low health literacy levels act as barriers for NSTs receiving and accessing health information and health care. For example, Adhikaar's nail salon program works with NSTs who are uninsured and provides them with health insurance information in their preferred language.

### Encouraging Personal Protective Equipment (PPE) Usage

NYC has strict glove-use policies for NSTs, requiring that NSTs must have enough gloves available at the workplace and must wear gloves when handling waste or during cleanup and when performing services that can break the skin (Basch et al., 2016). An observational cross-sectional study conducted among NYC nail salons found that despite this, only around 25% of observed NSTs used gloves when performing services (Basch et al., 2016). When speaking to an organizer at Adhikaar, PPE usage among NSTs was often mentioned as an issue. It was suggested to start at owners and more "senior" NSTs who can influence and encourage other NSTs to wear PPE. Adhikaar has a mentorship program for the NSTs it works with, where more senior NSTs mentor and train newer NSTs. One important aspect that mentors are trained to stress among newer NSTs is the use of PPE to protect themselves. The organizer suggested reframing the purpose of PPE by making it more customer centered. When a customer prefers

that NSTs work without a mask or gloves, the NST should tell customers that they might be sick and wish to protect the customer, or that the NST is afraid of stirring up possible allergies in the customer.

### Using the Social Ecological Framework (SEF) to Address Health and Safety

Social networks are large influences on healthy behaviors. Baron et al. (2014)'s study looked into the use of the social ecological framework (SEF) for improving health outcomes of low-income workers. The SEF integrates multiple levels to address health protection and health promotion, including the intrapersonal (individual), interpersonal, institutional, community and society, and policy levels (Baron et al., 2014). At the intrapersonal level, health information can be disseminated to workers and where they can seek care. Healthy snacks can be provided in salon breakrooms to promote healthy eating habits. Institutions can play a part by advocating policy changes that include mandatory breaks and appropriate salon ventilation. Policy level changes may include ordinances that control exposures to chemical products and install proper ventilation. Policy level changes may also include better funding for health insurance, especially a state-funded insurance exchange like California's Medi-Cal (Fung, 2014, considering that 29% of NSTs receive coverage through a public health insurance program (Sharma et al., 2018).

### Policies for Creating a Healthy Salon: Healthier Workers and Promoting Green and Eco-Friendly Product Alternatives

Workers, advocates, and health professionals should pressure governments for additional NST protections to regulate products and ingredients. Ford (2014) suggests phasing out chemicals and products currently in use at salons with alternatives while testing and implementing more green products. NSTs should also know what is in these products and should be informed of product changes. One way to incorporate this up-to-date information is through NST licensure trainings. Most states require aspiring NSTs to obtain licensure through a training course. Content and length of training courses vary from state to state, but training courses must cover information on health and safety. One problem when providing training and testing for licensure of NSTs is language barriers and health literacy. Adhikaar works with aspiring NSTs to provide in-language nail technician training and has advocated for trainings in New York in

different languages, but this may not be the case in other states. This ultimately puts the responsibility of training on the owners and more experienced NSTs at the salon.

Nail salons must also comply with healthy salon guidelines and one way to ensure this is to grade salons (like NYC restaurants) based on how well salons adhere to regulations for NSTs and the salon environment (Chhetri et al., 2018; Garcia et al., 2015). James (2014) and Sharma et al. (2018) suggest having better, more rigorous nail salon inspections, as long as the findings are transparent and widely available to the public like restaurant inspection results are available online. A starting point could be to promote health and safety in general for small businesses. For example, the Boston safe shops model was established in 2004 by the Boston Public Health Commission to improve safety and environmental practices of small businesses (Roelofs et al., 2010). The effort extended to nail salons in 2007, where it provides salons with walk-through assessments, training sessions on worker protection and pollution prevention (Roelofs et al., 2010). Another starting point, as Ho et al. (2007) suggest, is to enforce better ventilation guidelines and glove and mask use.

## **CONCLUSIONS**

Nail salon technicians are a vulnerable population who face a variety of health and safety hazards while on the job. This review highlights a number of issues that NST face, the barriers to efforts to foster NST health and safety, and recommendations for NST health and safety efforts. Lax government oversight of nail salon products and chemicals that NSTs are exposed to daily, salon owners' lack of responsibility for their employees' health and safety, NSTs' lack of awareness of their symptoms, the network of barriers for personal protective equipment usage, and many other issues all contribute to the exacerbation of health symptoms experienced by NSTs. It is crucial for government and other entities to create and fund health and safety promotion and education programs that are culturally and linguistically tailored to the diverse NST workforce. Future research directions need to focus on how these findings can be applied to implement health and safety programs for NSTs, especially by incorporating community-based organizations who work with NSTs and NST advocates.

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