

**“We Spend Our Days Working In Pain:”
A Report on Workplace Injuries in the Garment Industry**



Photo by Barbara Burgel

**Asian Immigrant Women Workers Clinic
Oakland, California
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by

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“We Spend Our Days Working In Pain”: A Report on Workplace Injuries in the Garment Industry

--Executive Summary --

California sewing factories employ over 100,000 sewing machine operators, most of whom are Asian and Latina immigrants. Health and safety violations are common in the mostly small factories that employ these minimum wage workers. This report is based on the clinical findings and survey results from sewing machine operators seen at the Oakland-based Asian Immigrant Women Workers Clinic (AIWWC), a free clinic for garment workers sponsored by Asian Immigrant Women Advocates (AIWA) and the University of California San Francisco (UCSF). Findings include:

- ▶▶ **Garment workers are being injured on the job and are at substantial risk of permanent disability from their injuries.** Ninety-nine percent of AIWWC patients had one or more diagnosed work-related conditions, including back, neck or shoulder sprains or strains. Ninety-four percent experienced pain severe enough to interfere with their daily activities.
- ▶▶ **Working conditions in garment factories are frequently substandard.** Approximately 94% of patients reported one or more problems with their workstations including inadequate seating (90%), awkward bending and twisting (67%), breathing problems due to fabric dust (48%), less than adequate rest breaks (40%), and being yelled at by their bosses (36%).
- ▶▶ **Garment workers typically work over 40 hours per week for low pay and no benefits.** Patients reported earnings of \$6.32 an hour, 25% less than the poverty level for a family of four. Only 22% of patients had health insurance and only 12% reported paid sick leave.
- ▶▶ **The overall health status of garment workers is far worse than that of the**

general population. A total of 66% of the garment workers in this study reported “poor” or “fair” health. This is three to four times higher than the rate for women in California.

- ▶▶ **Garment workers have inadequate access to occupational health care, specialty treatment services and general preventive health care.** Nearly one-third of these women had never been seen by a health care provider for their ongoing musculoskeletal problems. Only a small fraction had been treated by clinicians trained in recognizing and treating occupational health problems.
- ▶▶ **Garment workers are effectively prevented from using the Workers Compensation system.** Ninety-seven percent of workers seen in the clinic were eligible to file for workers compensation for their injuries, but refused to do so primarily due to lack of knowledge about the system or because they feared reprisals on the job.
- ▶▶ **Musculoskeletal injuries experienced by garment workers are preventable.** Technology is not the problem. In many cases there are simple, cost-effective ergonomic solutions that would prevent the common musculoskeletal problems these workers experience.

Recommendations

The responsibility for improving health and safety conditions for garment workers rests with the apparel industry in California. However, improving the occupational health of garment workers and other low-wage immigrant workers must be made a priority by government agencies, community-based and worker organizations, public health officials, foundations and medical providers, as well as employers, if significant

changes are to be made. We have identified the need for funding and policy changes to implement key recommendations in the following five areas:

ACCESS TO CARE

- ▶▶ Develop community-based occupational health clinics to provide basic treatment services statewide.
- ▶▶ Increase the awareness and resources of existing community health care providers to recognize and treat occupational health problems among low wage immigrant workers.
- ▶▶ Fund research to identify other barriers that prevent low-wage immigrant workers from effectively using Workers Compensation and recommend actions to remove these barriers.

COMMUNITY OUTREACH AND LEADERSHIP DEVELOPMENT

- ▶▶ Fund grassroots leadership development and peer outreach and education programs to promote awareness of workplace health rights and occupational injury and illness prevention among low wage and immigrant workers.
- ▶▶ Translate all pertinent Workers Compensation and worker health and safety materials into Spanish, Chinese, Vietnamese, Korean and other major languages spoken in California.

PREVENTION

- ▶▶ Provide safety grants to garment factories to upgrade equipment, redesign workflow and conduct worker training to reduce the number and severity of injuries on the job.
- ▶▶ Develop models for proactive, community-based occupational health injury and illness prevention activities through education and outreach to these

businesses and others that employ low-wage immigrant workers.

ENFORCEMENT

- ▶▶ Ensure that all garment industry employers carry Workers Compensation insurance by requiring evidence of insurance before licenses are issued or renewed and by periodic comparisons with the insurance records kept by the Workers Compensation Rating Bureau of California.
- ▶▶ Require minimal ergonomic standards (e.g., for adequate seating) in the Division of Labor Standard Enforcement (DLSE) licensing requirements for garment manufacturers. Include ergonomic and other risk factors on the checklist for enforcement of health and safety standards.
- ▶▶ Identify and remove barriers that prevent low-wage immigrant workers from effectively using OSHA and other existing enforcement programs.

RESEARCH

- ▶▶ Fund research to identify the causes and implement practical and effective prevention of occupational injury and illness in the most vulnerable low-wage occupations.
- ▶▶ Fund special surveillance studies to identify underreporting of injuries among garment workers and other occupations that employ primarily low-wage and immigrant workers.

Introduction

The Asian Immigrant Women Workers Clinic (AIWWC) was opened in April 2000. The clinic is a joint project of Asian Immigrant Women Advocates, the University of California San Francisco (UCSF), School of Nursing, Department of Community Health Systems and the UCSF School of Medicine, Division of Occupational and Environmental Medicine. Funding for the clinic was provided by a grant from the California Wellness Foundation.

AIWWC was originally conceived as an occupational health screening and referral service for low income Asian immigrants working primarily in the garment industry in Oakland, California and in nearby communities. Due to the lack of specialty services for follow-up care and the barriers most of these workers faced in accessing occupational health care, the clinic almost immediately expanded its mission to include basic treatment services.

Background

The Garment Industry. Worldwide, the United States is the largest consumer of apparel and second only to China in apparel production.¹ Since the late 1970s, the center of manufacturing in the United States has shifted from New York to California. Apparel production has become one of California's principal industries, producing more than \$13 billion in products annually and accounting for more than \$1 billion in exports.²

¹ International Labour Organization, "Labour practices in the footwear, leather, textiles and clothing industries," TMLFI/2000, Geneva, 2000. China has 3.7 million people employed in the apparel industry compared to 793 thousand in the U.S.

² California Trade and Commerce Agency, Office of Economic Research, "Apparel and Fashion Industry," June 2000.



AIWWC clinicians examine garment worker experiencing knee problem. *Photo by Kathy Sloane*

Apparel is a highly competitive \$336 billion global industry. Many observers consider the industry a paradigm for globalization. Clothing designed in one country, may be manufactured in another and shipped to and sold in a third country. Labor costs, fabric availability, production speed, flexibility, and shipping and delivery factors all influence decisions about where a product will be assembled.

In California, the industry specializes in women's wear, a niche dependent on extremely fast turnaround, small orders, and frequent changes in assembly lines. There are approximately eight times more manufacturing jobs in women's and misses' wear than men's wear in the state.³ Constantly changing production and fierce competition for orders is a given for most of the factories in the state.

Competition from NAFTA treaty countries, particularly Mexico, has resulted in some job losses due to extremely low labor costs in these third world countries. Overseas production is also increasing for basic commodity items (e.g., undergarments and men's wear) that undergo fewer design changes and can be ordered in advance in large quantities.

However, proximity to design centers and the consumer markets coupled with the inventory demands of the new "lean" model of retailing

³ Ibid.

make it likely that production for the rapidly-changing women's fashion market will continue to be located in California.⁴



Interior of typical small garment factory in Oakland. Blocked aisles and cramped workspaces are common. Photo by Jackie Chan.

California Firms. There are 6,500 apparel firms currently operating in California, most of which are relatively small in size.⁵ Seventy-five percent employ less than 20 people. Approximately 45% have four or fewer employees.

These businesses--clothing designers, sewing factories, cutting services and clothing wholesalers--along with related support services cluster in two major manufacturing centers in the state. The Los Angeles basin is by far the largest, accounting for 80% of California's apparel and textile industry.⁶ The San Francisco Bay Area is the state's second largest apparel

⁴ Abernathy, FH, Dunlop, JT, Hammond, JH, Weil, D. *A Stitch in Time: Lean Retailing and the Transformation of Manufacturing - Lessons from the Apparel and Textile Industries.* Oxford University Press, 1999. This book from the Harvard Center for Textile and Apparel Research provides valuable insights into the structure and future of the apparel industry in the US.

⁵ This figure includes licensed firms from the California Department of Industrial Relations database (9/01). Approximately 75% are sewing contractors, subcontractors or manufacturers (who may operate sewing factories.)

manufacturing center with design firms and sewing factories located in San Francisco as well as in Oakland and surrounding communities.

Industry Employment. Though estimates vary and employment may be declining somewhat due to increasing foreign competition, the industry is reported to employ 144,000 people, the majority of whom are minimum-wage immigrant women working as sewing machine operators.⁷ Approximately 80% of these workers are employed in the Los Angeles region. Employment in the San Francisco Bay Area is estimated at slightly over 12,000 workers. These figures do not include workers in the underground economy, which is thought to be widespread in the garment industry⁸.

Researchers have estimated that the true employment figure for Los Angeles alone exceeds 150,000, of whom some 110,000 may be sewing machine operators.⁹

According to the 1990 US Census, 88% of garment workers in California are persons of whom the workers are from Mexico, Central America or other Latin American countries. Most observers believe that most garment workers in the Los Angeles industry are undocumented and thus at high risk of exploitation.

Garment workers in the San Francisco Bay Area are predominately Chinese. Knowledgeable community organizers believe that the majority

⁶ California Trade and Commerce Agency, op.cit.

⁷ California Employment Development Department, Labor Market Information. "Employment Projections by Industry (1), 1998-2008 California." May 2001.

⁸ The underground economy includes unlicensed factories which frequently pay less than the minimum wage, violate labor regulations and often do not pay unemployment, social security or other taxes. One particularly egregious example was the infamous El Monte factory, raided in 1995, in which 72 Thai workers were being held in virtual slavery.

⁹ Bonacich, Edna and Richard P. Appelbaum, *Behind The Label, Inequality in the Los Angeles Apparel Industry,* University of California Press, 2000. This carefully researched book provides excellent insights into the factors perpetuating sweatshop conditions in the industry.

of these workers are documented immigrants to the United States.

The garment industry has proven very difficult to unionize in California due to the small size of many of the factories and the fierce opposition of many owners. Few factories are organized and only a fraction of workers have union representation.

Wages. According to the California Employment Development Department (EDD) statistics, the mean annual wage for a garment worker is \$14,350.¹⁰

Violation of minimum wage laws has been a common problem in the industry. Other labor law violations, including cash pay, child labor, overtime pay violations and failure to provide breaks frequently occur.¹¹ Back wages owed due to various illegal practices in the industry are estimated at over \$70 million annually.¹²

Health insurance and other benefits such as sick leave, vacation and holiday pay are rare. Some factories also fail to carry workers compensation insurance, a mandatory benefit.

Health and Safety Conditions in the Industry. Health and safety conditions in the industry are frequently deplorable. A 1994 survey by the California Targeted Industries Partnership Program (TIPP) found that 98% of the firms inspected had health and safety violations.¹³ A follow-up study in 1996 cited 96% of the firms for health and safety problems, including 72% for serious health and safety violations. Citations were issued primarily for failure to have adequate injury and illness prevention programs, for electrical dangers, and

tripping and fire hazards. An assessment of ergonomic risk factors and workstation factors that would contribute to repetitive stress injuries was not included in the protocol used by the investigators.

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Health Problems of Garment Workers. Musculoskeletal disorders (MSDs), particularly of the neck, back, and upper extremities are the most frequently reported work-related health problem among garment workers. Apparel manufacturing has one of the highest reported incidence rates of injuries and illnesses from repetitive motion in the United States.¹⁴

Factory-based studies have consistently found high rates of musculoskeletal pain among these workers. In a 1992 study, Westgaard et al. reported that 95% of the 210 sewing machine operators he interviewed complained of some pain or discomfort at work compared to 46% of office workers.¹⁵

Anderson and Gaardboe matched an age-stratified random sample of 107 sewing machine operators to a control group of hospital workers. Comprehensive physical exams (by examiners blinded to control/subject status), laboratory tests, and in-depth interviews were conducted with both groups. Compared to the control group, significantly elevated rates of neck and shoulder syndromes were found among the sewing machine operators. Diagnoses included cervicobrachial fibromyalgia ($p < 0.001$), rotator cuff syndrome ($p < 0.01$) and cervical syndrome ($p < 0.001$). The data supported a clear dose-response relationship which remained when adjusted for potential confounders.¹⁶

¹⁰ California Employment Development Department, "Occupational Employment and Wage Data 1998, Occupational Employment Statistics (OES) Survey Results." March 2000.

¹¹ Targeted Industries Partnership Program, Annual Report On The Effectiveness Of Bureau Of Field Enforcement, March 2000

¹² Bonacich, op. cit.

¹³ C
Enl **Garment worker sewing. Note awkward**
Pro **finger position while feeding fabric**
through machine. Photo by Jackie Chan.

¹⁴ Bureau of Labor Standards [BLS], *Annual Survey of Occupational Injuries and Illnesses, 1994.*

¹⁵ Westgaard Rh and T. Jansen. 1992. "Individual and Work Related Factors Associated With Symptoms of Musculoskeletal Complaints. Different Risk Factors Among Sewing Machine Operators." *British Journal of Industrial Medicine* 49(3): 154-62.

¹⁶ Andersen Jh and Gaardboe, O. "Musculoskeletal Disorders of the Neck and Upper Limb Among



Persistent pain, as opposed to general symptoms of pain, has been studied by Punnett who found that 42% of 162 garment workers had persistent pain in at least one site.¹⁷ This rate was 1.9 times higher than a comparison group of hospital workers ($p=0.0003$; 95% CI, 1.2-2.9).

In a large-scale Canadian study, Brisson compared an historical cohort of women employed in the garment industry between 1976 and 1985 to a national sample of other workers. Garment workers had a risk ratio of 6.9 (95% CI, 3.1-15.1) for chronic health problems as measured by permanent disability in daily life functions.¹⁸

Risk Factors. Length of employment, repetitive motion, workstation design and the organization of the work process are all factors that contribute to MSDs among garment workers.

Various studies have identified workstation design risk factors. They include inadequate

Sewing Machine Operators: a Clinical Investigation." *American Journal of Industrial Medicine* 24(6), 1993.

Typical factory seating for sewing machine operator. Most sewing tables are 26 in. tall—2 in. above standard height for average-sized European males. Garment workers use adjustable thread cones on the chair legs as makeshift adjustments to increase chair height. Note worker's curved back posture.
Photo by Jackie Chan.

Man DH, and Punnett L. "Disability among workers." *Scandinavian Journal of Work, Environment & Health* 11(6): 417-25, 1985.
Vezina. "Disability among workers. A Comparison of garment workers." *Scandinavian Journal of Work, Environment & Health* 11(6): 23-8, 1989.

seating, improper table heights, poor lighting (which encourages forward bending), awkward placement of the foot or knee pedal, and machinery that is not appropriately sized for the work population. In one study, 53% of sewing machine operators reported reduced work output due to pain related to inclined posture resulting from inadequate seating.¹⁹ Other studies have found statistically significant reductions in symptom prevalence and severity in the shoulder, elbow and forearms due to the introduction of adjustable chairs and other workstation alterations.^{20, 21}

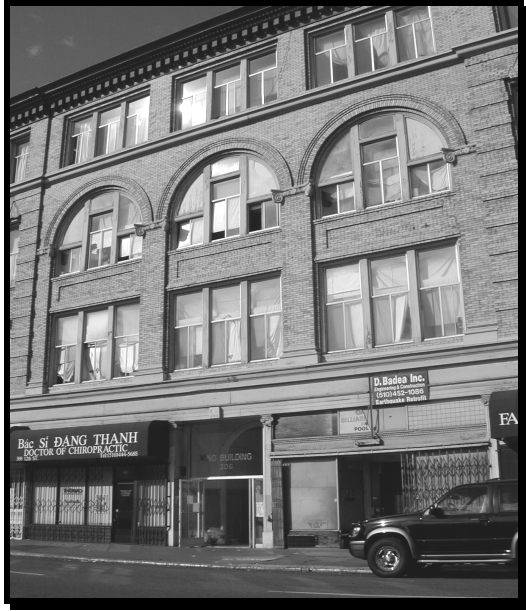
Limitations of the Existing Data. None of the workplace studies we found were conducted in California or with workers employed in the type of small contractor shops common in this state. Only a few studies of garment factories have actually been performed in the United States. Most of the more rigorous studies occurred in Scandinavian countries and were conducted in large factories with standardized procedures and superior working conditions.

Population-based studies of health status frequently do not include adequate information about these workers. Employment data is almost universally lacking on health surveys. Low income, immigrant respondents are frequently undersampled in telephone surveys. Provisions are rarely made for interviewing non-English speaking Asians. Thus there is almost no existing data about the health of this vulnerable population of immigrant workers.

¹⁹ Nag, A., H. Desai, and Nag Pk. "Work Stress of Women in Sewing Machine Operation." *Journal of Human Ergology* 21(1):47-55, 1992.

²⁰ Herbert R, Dropkin J, Sivin D, Doucette J, Kellogg L, Bardin J, Warren N, Kass D, and Zoloth S. "Impact of an Ergonomics Program Featuring Adjustable Chairs on Upper Extremity Musculoskeletal Symptoms Among Garment Workers." *Managing Ergonomics in the 1990's: A Discussion of the Science and Policy Issues*, 1997.

²¹ Li, G., C. M. Haslegrave, and E. N. Corlett. "Factors Affecting Posture for Machine Sewing Tasks: the Need for Changes in Sewing Machine Design." *Applied Ergonomics* 26(1): 35-46, 1995.



This building in Oakland's Chinatown district contained several small sewing factories on the upper floors. Older storefronts and commercial buildings are typical locations. The worst factories have poor ventilation and lighting, boarded windows, blocked aisles, electrical hazards, and rats and other vermin.

Photo by Jackie Chan

The Asian Immigrant Women Workers Clinic

History. The Asian Immigrant Women Workers Clinic (AIWWC) is an outgrowth of AIWA's peer health promoter project begun in 1998.²² This earlier project was aimed at improving the personal and public health status of low-income Asian immigrant workers. The project conducted participatory and collaborative research about health conditions and developed a peer health promoter network to perform outreach and education to other workers.

Among the significant research findings from AIWA's peer health promoter project were the high level of work-related injuries among garment workers and the lack of occupational health care services for these workers. Frequently, workers were not aware of the relationship of workplace factors to their health and attributed their injuries to age or personal

²² This project was funded by a grant from The California Endowment.

factors. Many considered pain a "normal" part of working. Committees of peer health promoters were trained by volunteer health professionals in workplace risk factors, ergonomics, stretching and related topics. Based on this information, they developed focused lessons using simple language and visual props which they taught to other garment workers attending literacy classes and other events.

Worker requests for better occupational health care and more efforts to improve health and safety conditions in their workplaces came directly out of this campaign. In 1999, AIWA approached UCSF with a proposal to develop a specialized occupational health services for these workers. A partnership was formed between AIWA, the UCSF School of Medicine, Division of Occupational and Environmental Medicine and the UCSF School of Nursing, Department of Community Health Systems. Funding for the clinic was obtained through a grant from The California Wellness Foundation.²³ The clinic opened its doors in April 2000.

AIWWC provides screening and basic treatment for musculoskeletal problems and gathers data on the work-related health problems of Asian immigrant women workers in the Oakland metropolitan area. Though other low-wage immigrant women who work in hotels, restaurants, laundries, and assembly jobs are seen at the clinic, the primary focus of the clinic has been on workers in the garment industry. To some extent, AIWWC was modeled after the Union Health Center, a union-affiliated clinic that serves garment workers in New York.²⁴ To our knowledge AIWWC is the only clinic of its kind on the West Coast.

²³ The California Wellness Foundation (TCWF) was created in 1992 as an independent, private foundation. TCWF's mission is to improve the health of the people of California by making grants for health promotion, wellness education and disease prevention programs.

²⁴ Herbert, R., B. Plattus, L. Kellogg, J. Luo, M. Marcus, A. Mascolo, and Landrigan Pj. 1997. "The Union Health Center: a Working Model of Clinical Care Linked to Preventive Occupational Health Services." *American Journal of Industrial Medicine* 31(3):263-73. Unionization is far more common in New York.

In addition to the clinic, AIWA and UCSF are working with the Occupational Health Branch of the California Department of Health Services on a joint project to identify, test, and promote low-cost ergonomic solutions in the garment industry. The Garment Industry Ergonomic Health Project brings together garment workers, factory owners, ergonomists, clinicians, industrial hygienists, and community organizers in this two-year effort.²⁵

Clinical Services. AIWWC takes place twice monthly in the early evening hours so garment workers can attend after work. The clinic is held in a small physical therapy outpatient office in the Asian Resources Building in the heart of Oakland's Chinatown district where many sewing factories are located. The facility includes three exam rooms, a supply area and a small waiting room. Approximately 24 patients are seen monthly. Services and limited supplies (e.g., ibuprofen, splints, and ice packs) are provided free of charge. A simple meal is also served at all clinic sessions and classes since the women often come directly from work and often have not eaten since noon.

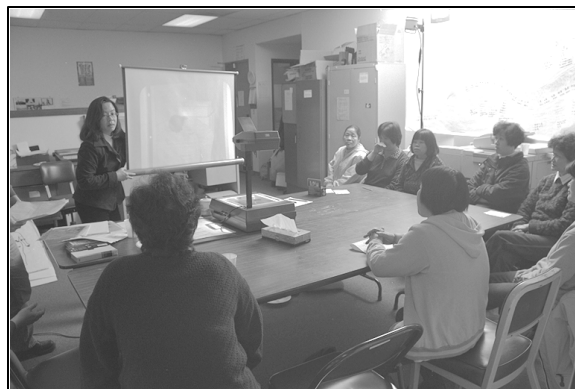
New patients attend a registration night prior to their first visit. They complete a consent form and an intake questionnaire, both of which have been translated into Chinese and approved by the UCSF Committee on Human Research. The clinic coordinator and AIWA peer health promoters are available at these sessions to answer questions and provide individual help as needed. Brief background information is provided about the clinic, garment worker's health issues and other AIWA services. Initial appointments are scheduled at this time.

Healthy Worker Class. In addition to bimonthly clinic sessions, AIWWC also runs a two-part "Healthy Worker" class every month that most patients attend. These classes, taught by UCSF nursing faculty and students and the project industrial hygienist have been expressly designed for sewing machine operators.

The course features an integrated stretching and ergonomics curriculum which is tied to specific risk factors garment workers encounter on a daily basis. The theoretical emphasis of the class is on achieving change through empowerment.

As part of the course, workers complete a "contract" committing themselves to make one improvement at their worksites (e.g., padding the knee pedal or making a lumbar cushion to use for back support) and to perform at least one stretching exercise on a daily basis.

Other Services. Tui Na massage, a popular modality used in China for musculoskeletal problems, is provided to patients who complete the two part Healthy Worker series.



Jackie Chan, project industrial hygienist, describes workplace risk factors to garment workers attending the AIWWC Healthy Worker class. Photo courtesy of UCSF School of Nursing.

A monthly "splint clinic," staffed by a volunteer occupational therapist is also held in conjunction with the regular clinic. On several occasions, volunteer orthopedic specialists have attended the clinic to provide consultations and injections.

Staffing. The clinic is staffed by UCSF School of Medicine faculty who are board certified in occupational medicine and by UCSF School of Nursing adult nurse practitioner faculty specializing in occupational health nursing. Under faculty supervision, medical residents and graduate nursing students in occupational health programs also provide services at the clinic. Other staff includes a clinic manager, translators, volunteer therapists, and orthopedic specialists

²⁵ This project is funded by a grant from The California Endowment.

and AIWA women leaders who are members of the peer health promoter network.

Outreach. As a result of AIWA's extensive organizing in the community, over 150 garment workers attended the clinic opening celebration and many of these workers signed up for clinic appointments. Outreach is regularly conducted at the AIWA-sponsored workplace literacy classes and by the workers committees through word-of-mouth in the community and at their workplaces. The AIWA youth organization, whose members are mostly children of garment workers, also distributes information about the clinic and signs up many interested workers during their periodic outreach campaigns to the local sewing factories. Additional outreach was conducted through public service announcements on Chinese radio and television, and through word-of-mouth.

The Community-University Partnership.

AIWWC opened with the acceptance and trust of the community. The garment workers refer to it as "our clinic" and AIWA members are very proud of the role they played in bringing the clinic into the community. Without AIWA's many years of organizing in the community, this would not have been possible.

The university's role is equally important. UCSF faculty, students and staff bring the clinical skills, knowledge, research expertise and their strong commitment to occupational health to this

partnership.

Perhaps one of the most impressive successes of this project has been the way in which this diverse collaboration of community organizers, immigrant workers and health professionals have been able to work as a team. Openness, flexibility, and respect for different perspectives have been crucial factors enabling the staff to develop culturally appropriate clinical and education services and to provide practical information and research support for the community's efforts to improve working conditions. Formal and informal meetings are common among the clinicians, organizers and peer health promoters to discuss procedures and techniques for providing health education information in an effective manner. Focus groups and follow-up phone interviews with patients have also been conducted to identify ways in which clinic services can be improved.

Data. The intake form used by AIWWC includes a basic health history, more detailed information about musculoskeletal problems, some preliminary data about working conditions, and limited demographic information.

The name and location of their employers are specifically not asked on this form. Fear of reprisals or of being blacklisted in the industry if they complain about health or other problems is common among these workers. Being required to provide this information would have created



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another barrier that would have inhibited them from seeking needed care.

Standard medical records were kept for each patient. Diagnoses were coded by the clinicians and input on a standardized form after each patient visit. Data were entered into a Microsoft Access database and analyzed using SPSS, Version 10 for Windows.

Limitations of the Data. These data represent the first 100 garment workers who attended the AIWWC, and thus they do not constitute a random sample of garment workers in the San Francisco Bay Area. It is likely that they represent a less healthy population than would be found with a general sample of all workers in the industry. The working conditions described also may be biased due to the overrepresentation of certain workplaces in the sample.

... What made photographing at the AIWA clinic more difficult was capturing the incredible feeling of partnership and cooperation that moved me so much.

Surely it is difficult to be in such a small space, sometimes without a modicum of privacy. The place is noisy, and the waiting area barely able to contain the women waiting for appointments. It feels a lot like a dental clinic I photographed extensively in Cuba, where whole families or classes of school children gathered around the dental chair while the patient was being treated Health was a community affair, and everyone was involved. Without romanticizing difficult working conditions, there is a lot to be said for the intimacy of such medicine.

[At AIWWC], there are always at least three people in an examining space: the practitioner, the patient and the translator, and often another consultant or sometimes a student practitioner. The patients seem comfortable and are treated with great care and respect. The caregivers consult constantly, not behind doors, hidden away with their esoteric knowledge, but in full view. Language is not always easy to translate, but the [young women] who handle the job are professional while at the same time that they are helpful and loving 'daughters.' And the food...what better way to welcome people and care for them than to have food available. It is rare in North America that I feel health care to be so loving, competent, and, well, healthy.

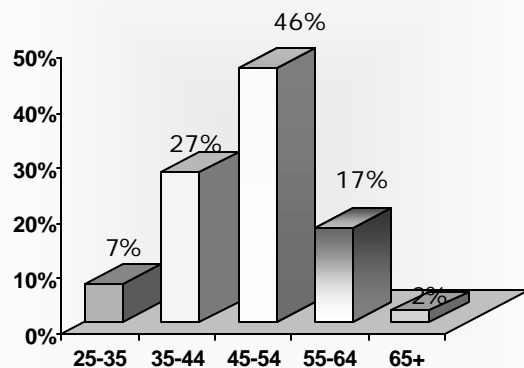
Kathy Sloane, August 2000

Findings

DEMOGRAPHICS

Age. The majority of patients seen at AIWWC are middle-aged women. Their ages range from 29 to 66 years, with the most numerous group being 45-54 year olds (See Figure 1.) The mean age for the group is 48.7 years.

Figure 1. Ages of AIWWC Patients



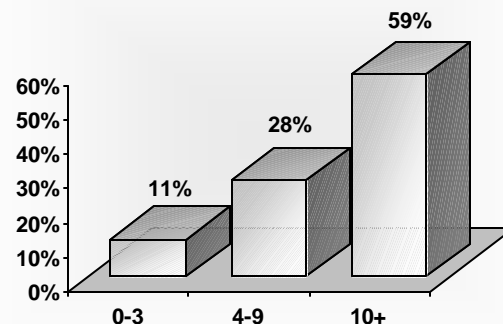
Family Status. Most are married (86%) and live with a spouse. Despite the relatively older age of these women, half have one or more children under the age of 19. Of these, 17% report that some of their children are living in China. Though there may be a variety of reasons for this including immigration rules and personal choice, in some cases these parents are separated from their children out of economic necessity. Our data show that this group of women is the lowest-paid and works the most hours. While there was no significant difference in age or length of time living in the United States, the women with children living overseas earn an average of \$5.60 per hour, less than minimum wage, and significantly less than the rest of the group ($p < .002$). Half of these women also work more than 60 hours per week. Without childcare support and working long

hours to survive, separation from their children may be the only viable option for the survival of their families.

Geographic Location. Garment workers and their families reside primarily in Oakland. Only 35% live in the traditional Chinatown or New Chinatown neighborhoods. The rest reside in other Oakland neighborhoods (33%), the City of Alameda (12%), San Leandro (8%) and various other East Bay communities (9%).

U.S. Residency. All of the AIWWC patients are immigrants to the United States. As shown in Figure 2, 59% have lived here 10 or more years. Another 28% have lived here between 4 to 9 years. Only 11% percent have been in this country three years or less.

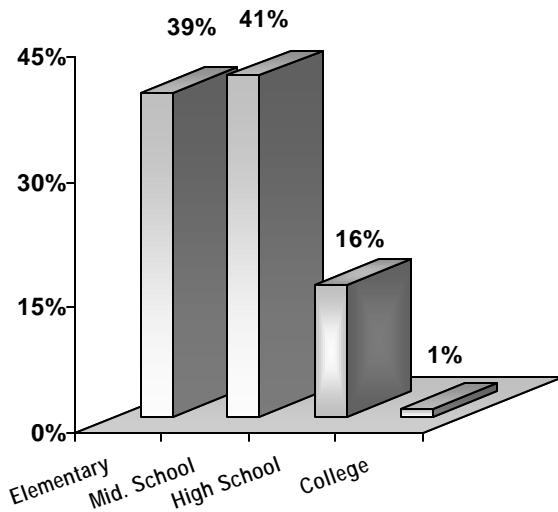
Figure 2. Years of Residency in the United States



Education. Education levels vary. As Figure 3 on the next page indicates, 80% of the women have attended elementary or middle school. An additional 16% attended some high school. Only one reported college level studies. For most, this education took place in Hong Kong and other provinces in China.

Language Skills. Approximately 95% of the patients attending the clinic speak Cantonese as their primary language. Some are bilingual,

Figure 3. Education Levels of AIWWC Patients



speaking Mandarin as well. Non-Cantonese speakers most frequently spoke only Mandarin or Toisanese, a dialect from southern China. Unlike some other immigrant and low-wage worker populations, most of these women are literate in their native language. This makes possible the use of simple handouts and other written materials in the clinic and Healthy Worker classes.

English language skills are extremely limited. Although many patients understand simple English phrases, only one patient spoke sufficient English to be seen without a translator. The lack of English skills is not surprising among garment workers. Learning sufficient English is one of the major challenges these women face if they want to find jobs outside the industry.

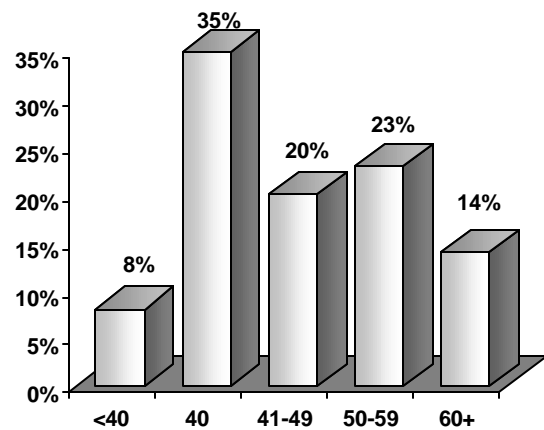
JOB STATUS

Occupation. The majority of patients are sewing machine operators (93%). Based on clinician interviews, most sew clothing. Only a

small proportion assemble nongarment items (e.g., sleeping bags, mattress covers.) The remaining 7% are packers, pressers or perform other duties in a sewing factory.

Working Hours. Patients attending the clinic report that they work an average of 48 hours per week. The median number of days worked per week is 6. As shown in Figure 4, only 8% work less than 40 hours a week. A large proportion – 37%--regularly works 50 hours or more per week.

Figure 4. Garment Workers Reported Hours Worked Per Week



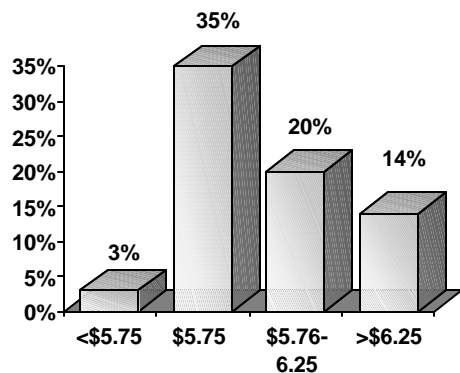
Years in the Industry. Clinic patients report tenure of up to 20 years at their current jobs. The mean number of reported years at this job is 5.6 years. The total number of years spent working in the industry ranged from less than 1 to 36. The mean total years working in the industry is 13 years.

Wages. Most of the workers (78%) report that they are paid by the hour rather than by the piece for their labor. The mean wage reported is \$6.32 an hour.

Figure 5. Garment Workers Reported Hourly Wage

Half report wages of \$5.75 an hour or less and 75% report making \$6.25 an hour or less. Since

the minimum wage in California changed from \$5.75 to \$6.25 an hour during the study period, it is not possible to assess how many of these



workers are currently being paid below the minimum level. Three percent of the workers reported wages below \$5.75 an hour, an amount clearly in violation of minimum wage laws even prior to the January, 2001 increase.

Particular care must be taken in interpreting the wage data. The history of the garment industry is one of extensive wage and hour violations. Based on the information provided to us by workers in focus groups and individual interviews, it is likely that such violations continue to occur.

For example, hourly wages are often tied to production standards. In some factories, workers are paid for 8 hours of work but may have to work extra (unpaid) hours to achieve the production requirements for that day. This failure to pay time and a half rates for overtime is perhaps the most frequent problem.²⁶

Workers told us they commonly tell labor inspectors who visit their workplaces that they are paid minimum wages and overtime even when they make considerably less. Many fear reprisals by their employers or are concerned that their factory will be put out of business and they will lose their only source of income if they tell the truth.

26 . California Division of Labor Standards Enforcement "Fourth Annual TIPP Report, 92-93" and "Second Annual TIPP Report, 94" Documents, San Francisco, CA.

Wage Comparisons. Figure 6 provides a comparison of garment worker wages with various income benchmarks. The US poverty level for a family of four equals approximately \$8.50 an hour. This is 25% higher than the mean hourly wage for the garment workers in the sample and nearly one-third more than the median hourly wage for these workers. Even adjusting for the longer hours they work, these women still earn less than the poverty level. As mentioned above, sewing machine operators in California earn an average of \$14,350 annually, which is 19% less than the US poverty guidelines of \$17,650 for a family of four.

Figure 6. Garment Workers Wages Compared to Standard Wage Benchmarks

{ EMBED MSGraph.Chart.8 \s } Most critics consider the Federal poverty guidelines unreasonably low in comparison with the actual minimal costs of survival, particularly in urban areas.²⁷ To adjust for this a "living wage" (as it is commonly called) was adopted by the Oakland City Council in 1998. Clinic patients earn less than two-thirds of the current \$9.95 living wage for Oakland. Needless to say, their incomes are far below the mean wages of \$17.54 for all Oakland residents.

Benefits. Most garment workers do not receive benefits such as retirement, health insurance, sick leave or vacation pay. Only 12% of clinic patients are paid sick leave benefits on their jobs. Slightly more--22%--receive health insurance from their jobs. Larger factories (60+ employees) are more than twice as likely to provide health insurance than smaller factories. Factory size does not make a difference in terms of paid sick leave.

27 ACORN Living Wage Resource Center, "Setting a Living Wage Level," 2001.
<http://www.livingwagecampaign.org>

Figure 7. Sick Leave and Health Insurance Benefits for Garment Workers, Private Industry and Public Employees

{ EMBED MSGraph.Chart.8 \s }

Benefit rates are substantially lower for these workers compared to national rates for private industry employees. As shown in Figure 7, 53% of fulltime US. private industry employees receive paid sick leave and 70% receive health insurance benefits.²⁸ Rates for public sector employees are even higher.

Job Duties. Factories in the Bay Area use the bundle method of sewing production. Sewing rooms are generally arranged in tightly spaced rows of machines. Fabric is precut and distributed to the workers in separately tied bundles by part (e.g., sleeve, collar, pocket, etc). Each worker is usually responsible for performing one assembly operation on a garment, such as sewing on a sleeve or a collar or attaching a pocket to the body of the garment. When completed, the entire bundle of partially completed garments is repackaged and passed on to the next worker. The work is extremely repetitive and performed at high speed.

Based on worker reports and our observations at worksites, the steps involved in assembling the piece prior to the actual stitching often involve awkward postures and hand movements. Bulky, slippery, or other types of fabrics can be difficult to manipulate. Reaching for new pieces and removing finished work from the sewing table often requires excessive bending or twisting.

Workplace Complaints. Ninety-four percent of the patients report one or more problems with their workstations. The most common are nonadjustable chairs (90%), followed by working in an uncomfortable position or bending or twisting a lot (67%) and problems breathing due to fabric dust (48%). Stress is another factor in the workplace. In addition to working at high speeds for long hours, 36% of the workers

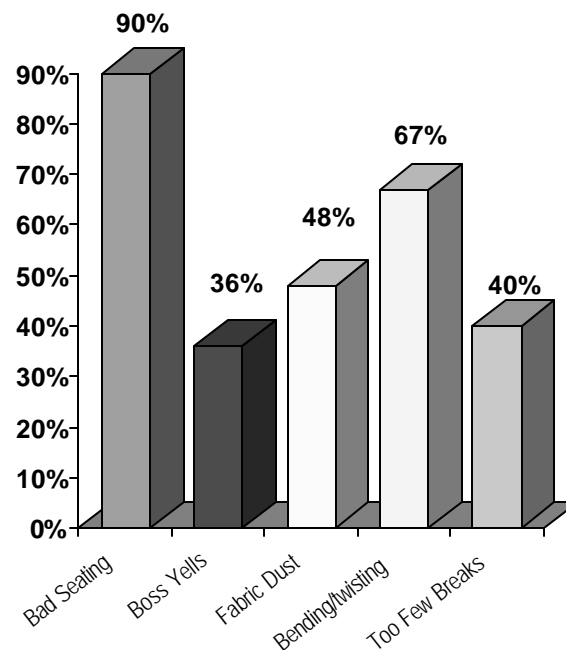
²⁸ Bureau of Labor Statistics, Employee Benefit Survey Technical Note, "Table B-1. Percent of employees participating in selected benefits, full- and part-time, private and public sectors, 1996-98," *Compensation and Working Conditions*, Winter, 2000

report that their bosses yell at them or their

Figure 8. AIWWC Patients Workplace Complaints

coworkers at least once or twice a week. Ten percent report that this happens daily and two percent report constant yelling. Inadequate lighting is a problem for 9% of these workers. Seven percent report that the height of their worktables is uncomfortable.

These workplace complaints are consistent with the high rates of health and safety violations found by TIPP inspectors. They are also supported by team member visits to garment factories where, among other problems, we



witnessed workers sitting on folding chairs, bar stools, backless wooden benches, kitchen chairs, boxes, and other inadequate seating. Insufficient lighting, poor ventilation, blocked aisles and overcrowding were common problems. Despite these factors, 65% rate their workplaces as at least somewhat good. Based on focus groups and interviews with the workers, these ratings are likely to be a better indicator of stoicism and limited expectations than of objective conditions in their workplaces.

Rest Breaks. Employees in manufacturing are entitled to one 10-minute break per 4-hour work period. Nearly 40% of the workers in our sample receive fewer breaks or breaks of shorter duration than required by law. Fifteen percent report that they do not receive any breaks at all. Fourteen percent get only one break per day and 10% said their breaks are only 5 minutes long. Two percent also report that they are not allowed to leave their workstations to use the bathroom as needed.

Health Complaints

Health Status. Patients were asked to rate their overall health on a scale of Excellent, Good, Fair or Poor. Their responses were dramatically different from the responses given by California women on the statewide 1999 Behavior Risk Factor Surveillance Survey (BRFSS).²⁹

Only 2.2% of the 91 garment workers who were able to answer this question rate their health as “Excellent” compared to 26.2% for all California women. Overall, 66% of AIWWC respondents report “poor” or “fair” general health. Nearly four times as many rate their health as “poor” or “fair” compared to the general population of California women (16.8%).

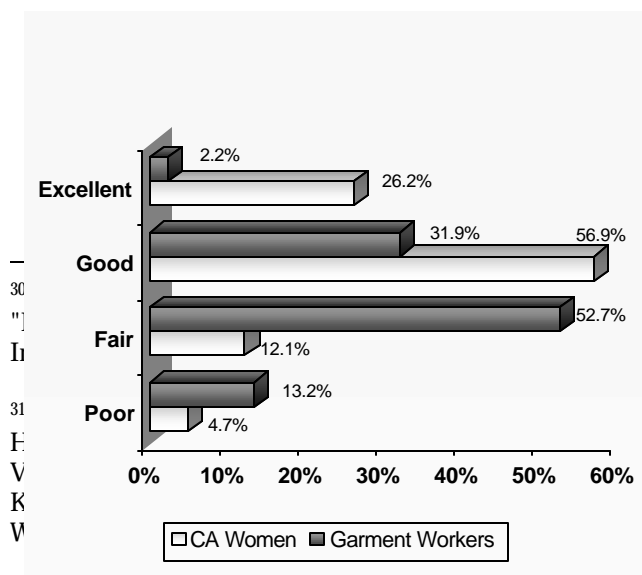
While this finding is biased by the fact that clinic respondents were seeking care for health problems, other data support the finding that low income and immigrant women have poorer health than the general population. For example, data from a community-based study of immigrant Chinese women in Oakland conducted by AIWA found that 44.5 % of respondents rated their health as “fair” or

“poor.”³⁰ Many of these women are employed in the garment industry. Similar findings were reported in a Los Angeles study of Korean immigrant workers, 45% of whom reported poor health status.³¹ This finding is also consistent with population-based data for low-income respondents statewide. According to the 1999 California BRFSS, 32.5% of persons with annual incomes under \$15,000 report “poor” or “fair” health status compared to only 4.2% for persons with incomes over \$50,000 per year.

Health History. Clinic patients are asked to complete a standard health history and to identify current symptoms when they register for their first appointment. The most frequent complaint is musculoskeletal pain (99%) followed by headaches (39%), problems with eyesight (38%), allergies (26%) and painful, swollen legs (21%). While data are lacking to make precise comparisons, headaches and allergies tend to be common complaints in the

Table 1. Self-Reported Health History And Complaints (Selected Comparisons Of AIWWC Patients to the General Population.)

Health Complaint	AIWWC Patients	General Population
Musculoskeletal Pain	99%	n/a
Hypertension ^a	15%	23.9%
High Cholesterol ^b	12%	30%



²⁹Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System Online Prevalence Data, 1995-1999.](#)

Diabetes ³¹	1%	5.6%
Asthma	1%	7.1%
Smoking ³¹	0%	22.6%
Arthritis ³⁵	21%	7.3%
Eyesight ³⁴	38%	2.1%
Trouble Sleeping ³⁶	18%	8.3%
Depression ³⁶	8%	3.8%

general population. Other health complaints show a different pattern among garment workers. AIWWC patients report much lower levels of hypertension, high cholesterol and diabetes than do respondents to the BRFSS.³² Asthma rates are also substantially lower than the self-reported rate for the general population.³³ Some of this disparity may be related to dietary practices or other ethnically related differences in health status. A likely factor however, is lack of screening. Asian and Pacific Islanders have historically low screening rates for blood pressure and blood cholesterol.³⁴ Increasing these rates is a priority Healthy People 2010 goal for the nation.

Lack of access to care may also be reflected in the high rate of problems with eyesight reported by the garment workers. Though not precisely comparable, the reported rate of 38% among AIWWC patients is substantially higher than the 2.1% of US residents who report problems seeing or reading newsprint.³⁵

In contrast, 21% of AIWWC patients report that they have arthritis. This is nearly three times the rate of that reported by the general population

on a national survey.³⁶ One explanation for this may be misdiagnosis of work-related complaints.

Trouble sleeping and depression were other complaints AIWWC patients reported at more than twice the rate for women in the general population³⁷

A positive finding was that none of the clinic patients are current smokers. This compares to 22.6% of the California population who currently smoke as reported on the BRFSS.

Working in Pain. All but one of the women seen in the clinic reported musculoskeletal pain. Of these, 94% reported that they experienced pain severe enough to interfere with performance of one or more of their daily activities.

Figure 10 shows the percentage of women reporting limitations by type of activity. Pain interferes with job performance for 82% of the respondents. Fifty-six percent report that pain makes it difficult for them to sleep at night, while 53% report difficulty-doing housework. Nearly one-third of the respondents report difficulty bathing or dressing while 24% have problems opening jars because of pain. Forty percent report some difficulty with three or more of these activities. Approximately 5% reported "a lot of difficulty" with most of these activities.

³² See above

³³MMWR. Forecasted State-Specific Estimates of Self-Reported Asthma Prevalence --United States, 1998 December 04, 1998 / 47(47);1022-1025

³²National Institutes of Health, National Heart, Lung, and Blood Institute, Asian American And Pacific Islander Workshops Summary Report On Cardiovascular Health. NIH Publication No. 00-3793; March 2000

³⁵ MMWR. Prevalence of Disabilities and Associated Health Conditions Among Adults --- United States, 1999. February 23, 2001 / 50(07);120-5

³⁶ MMWR. Prevalence and Impact of Arthritis By Race and Ethnicity -- United States, 1989-1991. May 10, 1996; 45(18);373-378

³⁷ MMWR. Health-Related Quality of Life and Activity Limitation -- Eight States, 1995. February 27, 1998; 47(07); 134-140

Nearly half of the garment workers report that they made some adjustments at their workplaces to compensate for their pain and reduced functioning. The largest group (30%) attempted

Another 11% report having Medi-Cal for themselves or their children.

The level of health insurance among this population is extremely low. Even with all of the

A Worker's Testimony

I have been sewing for nine years, since I came to America from Hong Kong in 1991. We work 10 hours a day, six to seven days a week in my factory. We commonly suffer from overwork injuries such as backaches because we are constantly hunched forward, our foot pressing the pedal and hands passing clothes through the needle on the sewing machine. I get no break time, adding to the strain on my body. We do not have health insurance in our sewing factory. Since we do not get health care, we just endure the pain and hope that it will eventually go away. Sometimes the aching pain shoots through the joints in my hands and feet, making simple motions like picking up a glass of water difficult. The aches seem to get worse when I slowly go to bed at night. But I do not know where to turn to for help.

Garment Worker Yin Wu Lee
April 12, 2000

Activity	A little trouble	A lot of trouble
Doing Job	71%	11%
Bathing/Dressing	24%	7%
Sleeping	40%	16%
Housework	46%	8%
Opening Jars	17%	8%

Bathing/Dressing

to improve their workstations, while 11% changed the way they did their work and 9% made changes in the number of hours they worked.

Nearly three-quarters also report that they are taking some form of Western or Chinese medicine. Though the questionnaire did not identify the type of medicine or purpose for which it was being used, clinical interviews indicate that it is most frequently for the purpose of pain reduction. Chinese herbal formulas and salves are the most common remedies used.

ACCESS TO HEALTH CARE.

Health Insurance. In addition to the 22% of patients who have health insurance through their job, 6% have health insurance coverage through their husbands' jobs. Kaiser is the most frequently reported type of private insurance.

above sources combined, at least 61% do not have any form of health insurance. Based on a recent Alameda County uninsurance survey, this compares unfavorably to the overall uninsurance rate of 16% for all adults (aged 19-64) and 14% and 14% of Chinese adults in the county.³⁸ Comparable statewide rates are 25% for Asian Americans and all residents aged 19-64.³⁹

Recent Health Care. Only 57% have ever seen a health care practitioner specifically about their musculoskeletal problems. Sixty-eight percent saw a health care provider at least once during the previous year for any reason. This is a higher proportion than that of the general California population (59.9%).⁴⁰ Since the clinic patients were suffering from painful musculoskeletal problems, the higher number of visits is not surprising.

Usual Sources of Care. Most patients (56%) use county or community health clinics for their

38 Ponce, N., Conner, T., Barrera, BP., Suh, D., Advancing Uninsured Health Insurance Coverage in Alameda County: Results of the County of Alameda Uninsured Survey, September 2001

39 U.S. Bureau of the Census, March 2000 Current Population Survey, <http://www.bls.census.gov/cps/>

40 Behavioral Risk Factor Surveillance System Online Prevalence Data, 1995-1999, op. cit.

primary health care. The most frequently cited provider was Asian Health Services. Ten percent of patients report care at both community health clinics and the county health center. Since the county health center is a referral site for specialty care services for the community clinics, this finding is expectable. Private providers see 19% of the patients. Another 11% of the patients go to Kaiser Permanente for their primary care. Fourteen percent do not have a regular provider.

Table 2. Percentages of patients who had a health care visit during the last year

Provider Site	#	Visit in Last Year
Private Providers	19	95%
Public Clinics	56	73%
Kaiser Permanente	11	64%
No Provider	14	14%

The difference in utilization by provider site is shown in Table 2. Patients with private providers are the most likely group to have received medical care during the previous year (95%). This number may include practitioners of Chinese medicine as well as Western medicine. Over 90% of the patients with private providers have some form of health insurance. Seventy-three percent of the patients who used county or community health clinic services saw a provider during the previous year. Kaiser Permanente patients were somewhat less likely to have visited a primary care provider (64%). Predictably, those with no provider are the least likely to have received care in the last year. Fifty percent of these patients cite cost as a barrier.

Cost as a Barrier to Care. Approximately 40% of AIWWC patients cite cost as a barrier to care. Over three-fourths of these respondents did not have health insurance.

Table 3. Percent of patients reporting cost as a barrier by insurance status.

Patients Reporting Cost as a Barrier to Care By Insurance Type		
Provider Site	No.	Pct.
Kaiser Permanente	11	18%
Medi-Cal	8	25%
Private Insurance	27	26%

No Insurance	65	40%
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As shown in Table 3, Kaiser Permanente patients are the least likely to cite cost as a barrier to care (18%). Approximately one-fourth of patients with Medi-Cal or private insurance reported that cost was a barrier for them. Deductibles, high co-payments and coverage limitations may prevent adequate access to care for some of these patients. The rates were substantially higher for uninsured patients, 40% of whom said cost was a barrier for them.

Prior Workers' Compensation Claims. Seven percent of AIWWC patients had filed claims for workers compensation at some point in the past. Of these, two-thirds of the cases involved acute injuries for which the worker was taken to the emergency room or needed to seek immediate care. Three cases involved injuries that were current at the time of the visit to AIWWC. These workers were visiting the clinic for second opinions about their injuries or for help with their workers compensation claim.

All of the workers interviewed reported significant difficulties using the workers compensation system. Four had been fired or forced out of their jobs as a result of filing workers compensation claims. Lack of information, lack of assistance in using the system, language barriers, and poor access to medical services were among the other problems they reported. Many of the workers with previous cases believed they had been forced to "sign away" future medical assistance and benefits. The workers with current cases were confused about the status of their case and what benefits they were entitled to receive.

Language as a Barrier to Care. Language is the most frequently reported barrier to care. Forty-six percent report that being unable to speak English and having trouble making an appointment make it difficult for them to get health care.

Other Barriers to Care. Other barriers to care are less frequently reported. Eleven percent report workplace-related barriers (i.e., couldn't get time off from work or were afraid of job loss

if their boss thought they had a health problem.) Eight percent cite transportation as a problem. Seven percent don't know where to go to get health care. Only 4% cite fear or dislike of doctors as a reason for avoiding health care.

Clinical Findings

Diagnoses. All but one of the patients examined in the clinic had one or more medical diagnoses that met the clinical criteria for a work-related injury (i.e., a condition caused by or made worse by work.) In all, there were 184 diagnoses for these 99 patients or a mean of 1.85 diagnoses per patient. Twenty patients had 3 or more diagnoses.

Forty-eight percent of the patients were diagnosed with back strain or pain, 33% with neck strains and 23% with shoulder strain or pain. The 15% with elbow pain were diagnosed with lateral (12%) or medial (3%) epicondylitis. Carpal tunnel syndrome was found in 7% of the cases. Other nerve entrapments (including radiculopathy, thoracic outlet, ulnar nerve and radial tunnel entrapments) were diagnosed in 11% of the patients. Eighteen percent were found to have tenosynovitis of the digits, most frequently DeQuervain's syndrome (11%). Other conditions (8%) included ganglion cyst, dermatitis, and headache.

Table 4. Asian Immigrant Women Workers Clinic. Clinical Findings--Garment Workers

Other Conditions. In addition to the musculoskeletal findings, elevated blood pressure and respiratory complaints were common. Lack of primary preventive care was also a problem. Of particular note was the fact that, despite their age, few of these workers wore eyeglasses. Some women were also not up-to-date on recommended screening procedures (e.g., breast cancer and gynecological exams).

Based on clinical examinations, we did not find a high rate of arthritis among these patients. This is in marked contrast to the fact that slightly over one-fifth believed they had this condition. It is likely that, in some cases, this was due to

<i>Diagnosis</i>	<i>Percent of Cases</i>	<i>N=99</i>
<i>Sprains/Strains</i>		
<i>Neck</i>	33%	
<i>Back</i>	48%	
<i>Shoulder</i>	23%	
<i>Elbow</i>	15%	
<i>Wrist</i>	9%	
<i>Knee</i>	9%	
<i>Multisite</i>	5%	
<i>Carpal Tunnel Syndrome</i>	7%	
<i>Other Nerve Entrapment</i>	9%	
<i>Tenosynovitis (digits)</i>	18%	
<i>Other</i>	8%	

misdiagnosis by clinicians untrained in recognizing occupational injuries.

Risk Factors. Workplace risk factors associated with these musculoskeletal injuries were identified through clinician interviews and visits to several sewing factories to observe and photograph the work process for further study.

Table 5 contains a list of the most frequently described/observed risk factors. Sustained neck flexion and shoulder elevation are postural factors that appear to be related to lighting and the height and positioning of the workstation. Lower extremity risk factors (e.g., ankle flexion and knee and hip abduction) may also be due to equipment feature such as the position and stiffness of the knee and foot pedals.

Table5. Potential Risk Factors For Musculoskeletal Injuries Among Garment Workers

Observed Risk Factors

- ***Sustained Neck Flexion***
- ***Pinch Grasp***
- ***Ulnar/Radial Deviation Of Wrist***
- ***Wrist Extension***
- ***Sustained Elbow Flexion***
- ***Shoulders Above 90 Degree Horizontal Plane***
- ***Ankle Flexion (Foot Pedal)***
- ***Knee/Hip abduction (Knee pedal)***
- ***Lifting***
- ***Bending***
- ***Twisting***
- ***Reaching***
- ***Prolonged Sitting***

Other risk factors associated with the elbow, wrists, hands and fingers are more likely a factor of the work process itself. Reaching for fabric pieces, positioning them to be sewn, and removing the completed garment parts from the work table often requires bending and awkward hand and arm movements. Prolonged sitting is another common risk factor, especially for workers who fail to take breaks and work long hours at the same machine all day.

Treatment. Standard protocols were used for treating these musculoskeletal complaints. Over-the-counter nonsteroidal anti-inflammatory drugs, ice packs and, as appropriate, splints and braces were provided free of charge at the clinic. Patients were also referred to the clinic's Healthy Worker classes where they learned appropriate stretching exercises, risk factors for injuries, and simple changes they could make in their workstations or procedures to reduce injury.

A volunteer hand therapist was available once a month to provide custom splints, fittings and individualized instruction. Volunteer orthopedic specialists also examined a small number of the patients and administered injections as indicated to relieve pain and inflammation.



Referrals for Follow-up Tests and Further Treatment. Referrals were made to Fairmont Hospital (the county facility) for nerve conduction studies in six cases. Though these services were readily available, all but one patient refused these tests. Since the facility is located approximately 13 miles from downtown Oakland, transportation was a problem in some cases. The most frequently voiced concern was that they would be charged for the test—despite repeated assurance that county services were available free for very low income people and others were charged on a sliding scale basis.

Referrals also were made to primary care providers for follow-up on primary care problems or for x-rays when needed. While compliance with these recommendations was not specifically tracked, it appeared to be somewhat limited.

In two cases, patients were referred to the Rotacare Clinic in San Leandro, a free physical therapy clinic run by Kaiser as part of a graduate training program for physical therapists.

Referral to Workers Compensation. Nearly all--99%--of the garment workers treated in the clinic have injuries that would have been covered by workers compensation. Many would benefit greatly from a period of reduced or no job duties to enable their injuries to heal and from additional treatment (e.g., physical therapy). Almost all require ergonomic improvements in their workplaces to prevent further injury.

Clinic Coordinator Livian Cheng helps new patients register. *Photo by Maria Morales.*

With the exception of the three patients who had active claims when they came to the clinic, none of the garment workers have been willing to file for workers compensation benefits. Resistance to this idea was frequently intense. Workers cited fear of job loss and of being blacklisted in the industry as the main reasons for their reluctance. Despite ongoing pain and the potential risk of permanent disability, their level of fear was such that none of these women were willing to apply for the benefits due them.

supervisor and, ultimately, the factory owner about the need for good seating. Their arguments were persuasive--the owner purchased adjustable chairs for all the workers.

Making Changes in the Workplace.

Similar concerns were voiced when we encouraged the workers to make simple changes at their workstations or in their work procedures. Few participants in the Healthy Worker classes were willing to talk directly to their supervisors about making recommended workplace changes. As part of the class they were given free pieces of sturdy foam and taught how to make customized lumbar support cushions for their chairs. They were also offered lightweight foam tubes that could be used to pad the sharp edges on the sewing table and reduce injuries to the wrist and forearms. Many workers were reluctant to try these innovations out in their workplaces. They expressed concern that their bosses would be angry with them for making even these small no-cost changes.

Workers tended to be far more willing to do the stretching exercises since this was something they could do on their own. A few reported that they began doing the exercises during breaks and taught them to coworkers at their worksites. To encourage this, classes were revised to include a focus on empowerment including discussions of how to overcome barriers, videotaped testimonials who started exercising at work and the introduction of the written personal commitment contract for change.

In a few worksites this led to further discussions and some workstation changes. Most notably, one worker told her coworkers about the ergonomic information she had learned in the class and how better equipment could reduce injury. The group as a whole met with the

Conclusions

» **Most garment workers spend long hours working for low pay and no benefits.**

Data from the AIWWC show that garment workers in Oakland work an average of 48 hours a week for minimum level wages. Thirty-seven percent work 50 or more hours per week. The average mean hourly earnings of \$6.32 an hour are 25% less than the poverty level for a family of four and only two-thirds of the amount the Oakland City Council has identified as a living wage for this metropolitan area. Only 22% of patients had health insurance benefits and only 12% reported paid sick leave on their jobs. These findings are consistent with California Employment Development Department and US Department of Labor data on the industry in California.

» **Working conditions in garment factories are frequently substandard.**

Approximately 94% of patients reported one or more problems with their workstations including inadequate seating (90%), awkward bending and twisting (67%), breathing problems due to fabric dust (48%), less than adequate rest breaks (40%), and being yelled at by their bosses (36%). While our survey was not intended to be a comprehensive examination of conditions in the factories, these findings are consistent with the high level of serious OSHA health and safety violations cited in the TIPP inspections of the state's garment factories.

» **Garment workers are being injured on the job and are at substantial risk of permanent disability from their injuries.**

There were a high proportion of musculoskeletal disorders among the workers seen at the AIWWC. Ninety-nine percent of the patients visiting the clinic had one or more diagnosed work-related conditions. Ninety-four percent experienced pain severe enough to interfere with one or more of their daily activities. Depression and sleeplessness were reported at twice the rate

of the general population—a not unlikely finding among women who spend their days working in pain.

These findings are consistent with the high rates of MSDs in the garment industry reported in population-based studies in the literature. Without adequate treatment and, most importantly, changes in the workplace conditions which cause these injuries, many workers are at risk of sustaining permanent disabilities.

» **The overall health status of garment workers is far worse than that of the general population.**

Self-reported health status has been shown to be a good indicator of actual health status. A total of 66% of the garment workers in this study reported “poor” or “fair” health. This is three to four times higher than the rate for women in California. While this finding is somewhat higher due to the fact that these women are clinic patients, it is consistent with other data that show that low income women and women of color have poorer health than the general population.

» **Garment workers have inadequate access to occupational health care, specialty treatment services and general preventive health care.**

Nearly one-third of these women had never been seen by a health care provider for their ongoing musculoskeletal problems. Only a small fraction had been treated by clinicians trained in recognizing and treating occupational health problems.

Community health clinics and county medical services where most of these women seek care generally do not have practitioners with training in diagnosing and treating occupational injuries and illness. Physical therapy and other specialty referral services for low income patients are either lacking or woefully overburdened in Alameda county—as is the case in many other California counties.

One particularly relevant finding was the fact that 38% complained of vision problems compared to only 2.1% of the general population. Since good vision is a critical factor in preventing workplace injuries for these workers, lack of access to eye care services directly contributes to their injury rates.

» Garment workers are effectively prevented from using the Workers Compensation system.

Ninety-seven percent of the workers seen in the clinic were eligible to file for workers compensation for their injuries, but refused to do so primarily because they fear reprisals on the job. Based on follow-up interviews with workers who had previously filed claims, these fears are well founded.

In addition to employer barriers, garment workers face powerful language and cultural barriers preventing them from gaining adequate help from this system. To our knowledge, Workers Compensation offices have no materials available in Chinese and extremely limited number of translators or claims assistants who could advise these workers in their own language. The complexity of the system is such that--without costly and mostly unavailable legal assistance--it is unlikely that many of these women would be able to pursue claims successfully. Most simply give up in frustration.

As a consequence, underreporting of injuries in the garment industry is undoubtedly common. There is little or no incentive for industry to correct problem conditions and prevent future injuries. Government surveillance is lacking at best and enforcement efforts, though well intentioned, are limited. Thus the daily suffering that these workers experience goes unnoticed and unchanged.

Because of the gravity of this problem, AIWA is conducting a further investigation of the barriers

garment workers face in accessing the workers compensation benefits to which they are entitled.

These issues will be more fully discussed in a future report.

» These injuries are preventable. Garment workers do not have to spend their days working in pain.

Technology is not the problem. In many cases there are simple solutions to preventing the common MSDs these workers experience. The Garment Industry Ergonomic Health Project is in the process of developing and testing practical solutions that can be easily implemented in the type of small garment factory typical in California. However, these improvements are unlikely to be made without direct funding support to the small, financially marginally businesses in this industry.

Effective outreach and education for factory owners and workers and consistent, effective community-based enforcement of health standards are also crucial to prevent injuries among these vulnerable workers.

Recommendations

The responsibility for improving health and safety conditions for garment workers rests with the industry itself. The following recommendations are intended to facilitate this process by promoting local outreach and enforcement, identifying and removing barriers to occupational health care and injury reporting, and modeling alternative methods of providing effective preventive and clinical care for these and other low wage workers.

- » Fund a study to systematically identify the significant barriers garment workers and other low wage immigrant workers encounter in using the Workers Compensation and OSHA reporting systems in California.
- » Fund a demonstration clinic for low wage workers (modeled after the Asian Immigrant Women Workers Clinic in Oakland) that does not require

employer notification to obtain occupational health care.

- ▶▶ Provide training in recognizing and treating occupational health issues for primary care clinicians who serve low wage workers.
- ▶▶ Identify low-wage occupations where insufficient information exists on the causes and prevention of occupational injury and illness and develop a mechanism for funding research on these topics.
- ▶▶ Enact changes in the California Department of Industrial Relations garment manufacturer's licensing requirements to include minimal ergonomic standards (e.g., seating) to protect worker health.
- ▶▶ Translate all pertinent workers compensation and worker health and safety materials provided by the California Department of Industrial Relations into the major languages spoken in California.
- ▶▶ Crosscheck garment industry licensing databases to ensure that all employers carry workers compensation insurance
- ▶▶ Provide effective information, outreach and support services in appropriate languages to assist low-wage workers in obtaining workers compensation and other benefits.
- ▶▶ Include basic workplace health factors on the garment industry licensing examination.
- ▶▶ Develop a model of pro-active, community-based prevention education and outreach to businesses that employ low wage workers.
- ▶▶ Include ergonomic and other risk factors on the checklist for enforcement of health and safety standards.