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Envisioning a Partnership between Nail Technicians and Hand Surgeons for Community Surveillance of Intimate Partner Violence

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ABSTRACT

Intimate partner violence (IPV) is a public health crisis, exacerbated by the COVID-19 pandemic. Among musculoskeletal injuries, finger fractures are the most common injuries in IPV, though the vast majority of cases go unrecognized in medical settings. Like physicians, nail technicians are trained, state-licensed professionals with intimate, direct, and longitudinal contact with patients. We propose that nail technicians are ideal allies in community settings for recognizing IPV hand injuries. We review the current landscape and outline a partnership

model between hand surgeons and nail salons in tackling IPV within more accessible, safer spaces.

Keywords: intimate partner violence, hand surgeons, physicians, nail technicians

COMMON, DEVASTATING, AND RARELY-DETECTED

Intimate partner violence (IPV) is the physical, sexual, and/or psychological abuse or aggression by current or former intimate partners. IPV is a leading cause of non-fatal injury to women globally [1]. In the United States (US), the CDC National Intimate Partner and Sexual Violence Survey estimates that 1 in 3 women and 1 in 4 men have experienced physical violence by an intimate partner, 1 in 4 women and 1 in 10 men have been victims of severe IPV and/or stalking during their lifetime, and 1 in 5 female victims and 1 in 20 male victims need medical care due to injuries [2]. Alarmingly, incidence of IPV in the US has increased by 42% from 2016 to 2018 [3].

IPV has been exacerbated by the present coronavirus disease 2019 (COVID-19) pandemic [4,5]. The pandemic has widened economic disparities, intensified safety concerns, increased social isolation, and further restricted access to services, resources, and options for survivors [6]. Risk factors for IPV involve both community and societal dynamics. Poverty and associated living conditions, low socioeconomic capital, gender inequality, and poor health infrastructure all create and perpetuate barriers to IPV prevention and intervention. As a result, women as well as gender, racial, and ethnic minorities—especially those with intersectional identities—are disproportionately affected [7]. More than half of transgender and gender non-conforming people report experiencing IPV [8]. Black individuals also have similarly high lifetime rates of IPV (45% of Black women, 40% of Black men) [9]. Many immigrant survivors of IPV hesitate accessing legal services due to language barriers, fear of retaliation by their abusers, or risk of deportation and separation from their children [10].

Health consequences of IPV are far-reaching and comprise both immediate and chronic morbidities of all body systems. Musculoskeletal injuries are some of the most common IPV-related injuries [11], with upper extremity fractures being the second most prevalent fracture site after the head and neck [12]. Recent studies have identified finger, shoulder, medial hand, and isolated ulnar fractures as potential markers of IPV, most frequently finger fractures [13–15].

Unfortunately, IPV continues to be underrecognized, underreported, and under-addressed by healthcare professionals. Only about 2.5-15% of all IPV cases are ever identified [16], and of those cases involving injury, only 34% receive medical care [17]. In a retrospective study of a semi-rural US Midwestern county, 72% of female domestic violence victims were never identified as victims of abuse, despite visiting emergency departments several times after their documented incidents [18]. Among those identified, only 33% were asked whether they had a safe place to return to, and only 25% were referred to IPV services. Other studies report similar trends. Nearly half of women killed by intimate partners had visited emergency departments within the 2 years prior to their deaths [19]. In other cohorts of IPV victims presenting to the emergency department, only 5.8-17% were correctly attributed to IPV, and IPV screening was performed only 25-30.3% of the time [15,20]. Clearly, even when IPV victims present for medical care, most are unlikely to be identified or receive intervention. There is a dire need for alternative methods of catching those who slip through the cracks of the medical system.

NAIL TECHNICIANS AND COSMETOLOGY

The nail industry is a thriving business in the US, regularly serving millions of people, ranging from high-end luxury services to affordable salons for low- and middle-income clients. In 2018, more than 8.4 billion dollars were spent on manicures, pedicures, and nail-grooming [21]. On social media, nail art is widespread and in the top five most tagged items on Pinterest and Instagram [22]. Due to this popularity and high-demand, employment in the industry is projected to rise by 13% over the next decade in mom-and-pop shops, large nail salon chains, and mobile or app-based nail services [22].

More broadly, cosmetology is the art and science of beautifying the nails, hair, and skin. It includes hairstyling, nail technology, cosmetics, and aesthetics [23]. Nail technology is a subset of cosmetology that specializes in caring for nails and skin of the hands and feet. Nail technicians are trained to perform manicures and pedicures, which involve removing and applying nail polish, cleaning and filing nails, trimming cuticles, applying lotion, reducing calluses and rough skin, massaging and moisturizing hands/arms/feet, and polishing or buffing nails. Nail technicians also educate and counsel clients about nail and skin treatments for the hands and feet, and recommend services and products. This multistep, intimate process is rich with opportunity for conversations about personal, private topics in a comfortable atmosphere of safety.

Becoming a nail technician does not require a degree, however a certificate from cosmetology school, completion of a nail technician program, and state licensure are required to practice. Nail technician programs are typically 4-12 months long depending on state requirements. They cover anatomy and physiology of the hand and foot, structure and growth of nails, nail disorders and diseases, chemistry of nail products and technology, infection control, and hygiene. Obtaining state licensure often mandates a minimum number of clock hours and passing written and practical exams. In some states, maintaining licensure necessitates renewal every 1-2 years and continuing education classes.

LESSONS FROM HAIR SALON-MEDICAL PARTNERSHIPS

Hairstylists or hairdressers, on the other hand, specialize in cutting and styling hair. Recently, hair salons have been the setting of successful public health campaigns such as breast cancer screening; melanoma detection; education on chronic kidney disease, hypertension, diabetes; and smoking cessation—especially in underserved communities [24–27]. The sharp eye of hairdressers has also inspired new research questions. For instance, after hairdressers in the UK noticed clients with new allergies to hair products following COVID-19 infection, scientists at the Imperial College London began investigating how the virus could be affecting the immune system [28]. These examples serve as a working framework for innovative interprofessional collaboration addressing public health crises.

Much like nail salons, hair salons are located in all types of communities across the US, and are frequented by all walks of life—often regularly. In recent surveys of Connecticut hair salons, lifetime prevalence of IPV among clients was 20-34.2% [29,30]. For hair salons serving the Korean immigrant community of New York City, 53% of stylists reported their clients disclosed physical and sexual abuse by their partners in the past year, while 85% and 75% of stylists reported being told about emotional abuse and economic abuse, respectively [31]. In another study of African American beauty salons in Kentucky offering different combinations of hair, nail, and spa services, 82% of stylists shared that they talked about domestic violence with clients [32]. Based on these data, reports of IPV prevalence from hair salons more accurately reflect the prevalence in the overall US population compared to reports from the medical setting, indicating salons are more optimal settings for IPV intervention and/or salon workers are much better screeners of IPV than medical professionals—by a factor of 2 to 10.

Hairstylists have also demonstrated strong enthusiasm for delivering information about IPV to clients, however many admit feeling unprepared due to lack of knowledge and resources [31,32]. Some IPV training programs have been developed to enlist the support of hairstylists. In Australia, a workshop trained hairdressers on how to communicate with clients regarding mental health issues and IPV [33]. A pre- and post-questionnaire measured increased self-confidence and skill in talking to clients about IPV and referring clients for additional support.

Given the natural role of hairdressers as safe confidantes and informed listeners, several states have already taken steps toward requiring hair salon workers to receive training on IPV response. In 2017, Illinois, California, Tennessee, and Arkansas began to pass bills requiring salon professionals to undergo training in domestic abuse prevention as part of their licensing. National organizations like CUT IT OUT have also developed programs on how to spot signs of IPV in the salon workplace, initiate and hold conversations with clients, and appropriately refer victims. Hairstylists are taught to recognize general evidence of IPV including behavioral changes and physical injuries like bruises and cuts.

NAIL SALONS: OPTIMAL SETTINGS FOR IPV SCREENING

Nail technicians should be next. While previous research and initiatives have explored hair salons as strategic points-of-entry for those at risk for IPV, none have tapped into the unique potential of nail salons for identifying high-yield signs of IPV such as upper extremity injuries—particularly of the hands and fingers. To our knowledge, there have been no prior investigations looking at how specifically nail salons could transform the way IPV is recognized, intercepted, and ultimately prevented.

Nail salons are unique in their care for the hands, fingers, skin, and nails—regions vulnerable to IPV-related injuries. Many clients often establish strong bonds and comradery with their nail technicians through regular appointments and follow-up. The nail salon is one of few places where people, especially women and individuals from vulnerable populations, go to relax, get pampered, and find affirmation—and where victims may be without their abuser. These trusted sites cater to the unique needs of the community they serve, and might do most justice for exactly those who are often failed by existing resources. Nail salons have the potential to deliver messages to diverse populations who may not be touched through traditional health outreach efforts.

ENVISIONING THE NAIL TECHNICIAN–HAND SURGEON TEAM

Compared to hair salons, there have been few documented efforts modeling collaborations between nail salons and medical professions. One academic article discussed how nail technology can play a supportive role in the palliative treatment of nail disorders in conjunction with medical and surgical treatment [34]. In current clinical practice, the concept of medical pedicures has recently been developed in podiatry salons to provide wound care for patients with diabetes, arthritis, and athletic injuries. These examples set a precedent for future partnerships between nail technicians and physicians.

Core Values

Modeled after the aforementioned health promotion campaigns in hair salons, an alliance between nail technicians and hand surgeons would be driven by the philosophy of providing the highest level of care for patients, beyond the capabilities of either individual profession alone. Above all, the principle of starting and maintaining an open conversation between nail technicians and hand surgeons will ensure that the partnership is mutually beneficial while keeping the health and wellbeing of patients as the priority.

Forming the Alliance

We envision formal affiliations established between nail salons and orthopaedic, plastic, and/or hand surgery academic departments, medical groups, or single practitioners. Electives can be integrated into residency programs to encourage advocacy and sustainable community engagement among trainees, who may serve as ambassadors in mediating communication and logistics. Applying for official start-up grants and funding sources and developing incentives for faculty participation can mobilize greater institutional support and buy-in. Even simply raising awareness within our professional societies and encouraging sponsorship of existing organizations such as CUT IT OUT may be a good start. Involving other stakeholders like salon state licensure boards (e.g., Board of Registration of Cosmetology and Barbering in Massachusetts) can lead to policy reform. While regulatory bodies may differ among states, initiating contact may help to build rapport with networks of nail salons and nail technicians who are certified within the state. This may pave the way for distributing and incorporating IPV informational materials into the nail technician licensing and continuing education process, making IPV training a requirement more widely. Efforts on the ground could look

like going into the community and directly hosting workshops with local beauty schools, salons, students, professionals, and other nail service platforms.

Launching the Partnership

The scope of these partnerships can target multiple aspects of IPV: screening, intervention, and research. By exchanging wisdom, committees comprising hand surgeons and nail technicians could collaborate in bidirectional generation and administration of trainings. Hand surgeons are encouraged to discuss clinical vignettes using their physical exam maneuvers and knowledge of injury mechanisms, while nail technicians are invited to share their perspectives from being at the frontlines of at-risk populations and from their unique practice of caring for the hands and fingers. Most importantly, fostering skills for navigating these conversations in a gentle and supportive way will be constructive for both professions in building longitudinal, trusting relationships with patients.

Initiatives advancing IPV screening could draw from specific hand and upper extremity injuries as indicators of IPV. By viewing the salon as an extension of the clinic, innovative screening tools employing the latest understandings of musculoskeletal manifestations of IPV specifically tailored for the nail salon setting—for example, assessment of isolated ulnar or finger fractures—could then be created. When equipped with the proper training to recognize and intervene on signs of abuse, nail technicians can serve as auxiliary clinicians and empower victims to seek help. Given that only 1 in 5 female IPV victims in the ED end up disclosing the violence—meaning that 4 in 5 are missed in the acute medical setting—nail salons are well-suited to fill that gap [35].

Once individuals who are actively experiencing—or at risk for—IPV are identified, they can then be connected to established resources. Building this referral network could be especially transformative for many patients who struggle with access to healthcare. The nail technician-hand surgeon pipeline may be one of their only points of entry into gaining treatment for their injuries and finding the critical support needed to break out of the vicious cycle of abuse. This responding team of providers can eventually be expanded to encompass other medical specialties who assist with other aspects of IPV care such as primary care, wound care, physical therapy, psychiatry, and social work. Altogether, these collective insights lay the foundation for a sustained, mutual referral network for salon-identified victims of IPV, which may also streamline broader community resources and services.

Future Research Directions

Boundless potential for academic and scholarly work exists in this nascent area, paving the way for future interdisciplinary efforts combatting IPV. Qualitative and quantitative observations from the nail salon world are valuable and could inform IPV research. Likewise, as research and clinical care continue to evolve and additional markers of IPV are discovered in the medical community, these can strategically be applied back into the salon space. We applaud continued investigations into characterizing the musculoskeletal profile of IPV sequelae, such as retrospective studies on radiographic findings specific and sensitive for IPV-related injuries. Conducting further epidemiological studies can also be helpful in elucidating the landscape of IPV prevalence and identifying gaps and disparities from a population level. Once interventions are implemented, validating any newly developed screening tools, assessing impact through quality improvement studies, and continually monitoring progress through patient-reported outcome measures will help to guide existing initiatives and provide new directions. Dedicated, intentional analyses at each stage will help to nurture continued growth to best respond to the evolving needs of the target population.

CONCLUSION

IPV is a silent epidemic, with musculoskeletal upper extremity injuries of the fingers and hands among the most common manifestations of physical abuse. There is currently an unmet need in IPV recognition and intervention, especially with rising IPV rates during the COVID-19 pandemic. Nail technology and hand surgery are two professions who come into close, significant contact with potential victims of IPV and may have synergistic efforts. By sharing their expertise, proactively developing new collaborations, and centering nail salons as access points and safety nets, hand surgeons have the power to boost their impact and become leaders in reaching vulnerable, otherwise overlooked communities in the well-trafficked spaces where they may live, work, socialize, and/or unwind on a regular basis.

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