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## Sexual Health in the Asian-American Population of the United States

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### Recommended Citation

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Philadelphia College of Osteopathic Medicine  
Graduate Program in Biomedical Sciences  
School of Health Sciences

**SEXUAL HEALTH IN THE ASIAN-AMERICAN POPULATION  
OF THE UNITED STATES**

A Capstone in Public and Population Health Leadership by Pallavi Sindhu  
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Submitted in Partial Fulfillment of the Requirements for the Degree of Master of  
Science in Biomedical Sciences, Public and Population Health Leadership Concentration

May 2021

## ABSTRACT

Cultural factors, including language barriers and stigma associated with the topic of intercourse, can lead to lapse in sexual education and avoidance of treatment for sexually-transmitted diseases (CDC, 2020). Few studies explore this discrepancy in the immigrant population. For example, Lee, P.-I. et al. (2020) explores the significance of educating the parents of children between the ages of 6-18 years on sexual health topics. The result indicated significantly higher improvement in characteristics, such as, sexual knowledge and development of self-efficacy, in the experimental group as compared to the control one. Based on previous studies analyzed, the researchers believe that this boost in confidence and knowledge will influence a more effective line of communication between the parents and children regarding sexual health topics. Another study by Taylor et al. (2010) evaluated the effectiveness of hepatitis B English as second language (ESL) courses in Asian immigrants in North America. The results indicated that the ESL curriculum improved the knowledge of HBV infections, but had limited effects on the testing levels. Additionally, a study by Zhang et al. (2020) tests the efficacy of school-based Human Papillomavirus (HPV) vaccine education programs. The results indicated that the experimental group of adolescents, who underwent the HPV vaccination lectures, has a higher knowledge about HPV and HPV vaccination and willingness to get vaccinated than the control group (who did not attend the lecture). The aforementioned studies do not indicate any behavioral changes in the participants. Therefore, HPV vaccination programs were also studied for effective behavior-changing interventions that can be mimicked in the area of sexual health. In a study by Farmar et al. (2016), the

researchers explored various interventions, such as, bundling the vaccination with others and increasing the opportunity for vaccination initiation and completion. This paved the way to an increase in their vaccination rate to be higher than the national average. These studies suggest that educational programs for both adults and children, as well as, active-persistence on the side of healthcare providers, could improve sexual health outcomes in the overall Asian immigrant population of the United States.

## **INTRODUCTION**

In 2018, the Center for Disease Control and Prevention (CDC) reported that Asian immigrants only made up 6% of the United States population, but they contributed nearly 2% of the human immunodeficiency virus (HIV) diagnoses in the nation. Such discrepancy exists in Asian American population due to various challenges that not only lead to high risk sexual behaviors and health outcomes, but also postpones treatments for sexually transmitted conditions. Do et al. (2005) reports that Asian and Pacific Islander homosexual men are often first diagnosed with HIV at a later stage of disease progression.

Besides sexually-transmitted diseases, limited testing and presence of cultural stigma can transcend to affect related health issues (such as, screening and treatment for breast and cervical cancer in women). A study by Nghiem et al. (2015) noted that, although Asian American women, except for those of Japanese or Korean origin, have a survival rate higher than white women for cervical cancer, they tend to be diagnosed at a later age. This phenomenon indicates deferred screening. The study noted that they were less likely to utilize screening and treatment services for cervical cancer as compared to

white women. For instance, even though Southeast Asian women have the uppermost rate of cervical cancer in the United States, they also have the lowermost rate for Papanicolaou (Pap) smear testing. This study also shows that the Asian American women studied in this research had higher socioeconomic status than the non-Hispanic white women. Therefore, other factors, such as, socioeconomic status and educational status, could be at play that affect the sexual health of the Asian American immigrant population.

## **BACKGROUND**

One of the major causes of the discrepancies noted in Asian American sexual health and other related issues is the lack of diagnosis. HIV Surveillance Report by the CDC (2019) mentions that there is an estimated 15.0% of Asian Americans who are undiagnosed with HIV infection. This significant proportion of undiagnosed individuals stem from assumptions in the Asian communities that are based on traditional cultural practices. For instance, a study done by Hahm et al. (2009) noticed that Asian and Pacific Islander (API) women had a low proportion of HIV testing (17.2%). The researchers suggested that API women tend to maintain monogamous relationships and; therefore, do not suspect exposure to sexually transmitted infections. This leads to a delay in testing until the women are prompted to do so by pregnancy or onset of symptoms. Without knowing their HIV status, these individuals inadvertently transmit to others and have delayed access to HIV antiretroviral medications to prolong their lives.

## **Cultural Significance**

Another reason to explore are cultural factors, such as, stigma associated with intercourse-related topics including safe sex practices, birth control, sexual abuse, health of primary and secondary sexual organs, and sexually transmitted diseases. The restrictions for discussion within the family regarding these topics stems from the traditional Asian beliefs. There are often expectations and norms, seen in Asian communities, such as, forbiddance of sexual relations outside of marriage and emphasis on abstinence. The thick veil of modesty adorned on the topic of sex prevents members of the Asian community from communicating among themselves about sexual health. Lee P.-I. et al. (2020) also mentions the potential of culture shock and cross-cultural adjustment, post-immigration to the United States, that also might be a contributing factor in the parents' hesitancy to talk about such topics. They fear that addressing sexual intercourse could be an invitation for their children to explore the more lenient sexual culture of the United States. The study also notes difficulty communicating sexual life practices to their family members and notes observance of disapproval when talking about topics, such as, birth control. This lapse in communication between Asian American children and their parents can lead to differences in sexual health behaviors in comparison to their white peers. For instance, Okazaki (2002) reports in her literature review that Asian American adolescents tend to be more conservative in sexual activities as compared to their white American peers. However, with the assimilation of Asian adolescents to the American culture, they tend to mimic the sexual practices of their white counterparts. Additionally, Lee, C. et al. (2012) did a study on Asian American college females and the results indicate that students who reported their primary sexual

education source as parents tend to be five times more likely to practice abstinence. On the other hand, school-based sexual education source led to an earlier age of sexual activity onset. Sentell et al. (2014), reports that this stigma and fear of disapproval from the community and family members can bring about a delayed entry into hospital care for assimilated Asian American immigrant children, causing devastating health outcomes. Not only do families amongst themselves experience a lapse in communication, but they also have difficulty reaching out to healthcare workers on seeking testing and treatment. Postponed care can lead to an accumulation of more opportunistic infections and higher rates of comorbidities. This results in a poorer prognosis of sexually transmitted illnesses in comparison to the Caucasian American population with the same sexually-transmitted condition. Lastly, this study also notes the lack of culturally-cognizant healthcare practices, that are aware of these sexual health stigmas, and treat Asian American patients accordingly.

### **Related Research**

Available studies regarding the sexual health discrepancies seen in the Asian American immigrant population is very limited. The first study that was reviewed is a clustered randomized trial conducted on the immigrant population in northern Taiwan (Lee, P.-I. et al., 2020). Since parents are considered “first responders” in the topic of sexual health, the study analyzed the impact of an intervention to improve parental sexual education. The goal of this intervention is to modify parents’ interactions with their children to encourage positive sexual health behaviors. The participants included immigrant parents, with children between the ages of 6-18 years, and are literate in Chinese. Once they were recruited, the subjects were broken up into two groups:

experimental and control. In the experimental group, the participants underwent an intervention that included a 150-minute booster session with lectures regarding sexual health topics. To further build on the knowledge, the intervention also employed activities, such as, discussing sexual health issues, watching educational videos, and practicing role-playing scenarios. During the role-playing practice, the parents participated in potential situations they might encounter with their children and learned how to navigate difficult conversations regarding sexual health. On the other hand, the discussions allowed these participants to talk about sexual health issues that they have already confronted with their children to gain more perspective on them. The experimental group also received a booklet to maintain the knowledge gathered from the booster session. Whereas, the control group only received the booklet with no group-based booster session. The booklet was designed by sex education educators and the research team. It was also divided into four units. The first unit, “Love connection,” focuses on communication skills for sex education. Two of the remaining units were broken down into different age groups: one for 6-12 years old and another for 13-18 years old. By breaking down information to target different age groups of children, the research team was able to focus the sexual education on issues found more prominently in that particular developmental stage. For instance, the 13-18 years old unit addresses topics, such as, sexual hazards on the internet and making sexual decisions. The booklets were also available in four languages: Chinese, simplified Chinese, Vietnamese, and Indonesian, to target various immigrant populations living in Taiwan.

To interpret the effects of the study, data was collected using questionnaires to assess each group’s knowledge of sexual health topics, attitude toward parental sexual

education, development of self-efficacy, and practice of parental sexual education. This data was gathered before the intervention and afterwards. In the results, the researchers noted that, when compared to the control group, the experimental group had more improvement in the scores from the pretest. However, this particular study has various limitations. Since the participants originated from only two cities in Northern Taiwan, the generalizability of the study is reduced. Also, some participants withdrew from the study and this led to unequal numbers of participants in the control versus the experimental group. The reason for the absentee participants was that most came from low income households and attending the 2.5-hour session was not a priority. While the researchers made it a once-only session for easier and more convenient delivery of information, the researchers did initially address a multisession format to be more fruitful. Also, the study only tested the parents' perceptions before and after the intervention, not the impact it had on the behaviors of their children. Lastly, the researchers note that the intervention was aimed at improving the communication skills of the parents, as sexual education has been previously proven to do so. However, the study is limited in the direct measurement of this improvement in communication skills. Rather, it measured the confidence level and attitude of the participants in communicating puberty and sexual behavioral issues with their children.

Another study that was analyzed was conducted by Taylor et al. in 2010. This particular research explores the impact of language barriers on sexual education, especially for preventative sexually-transmitted disease (STD) testing procedures. Hepatitis B virus (HBV) is an endemic in many Asian countries and is usually transmitted vertically from mother to child at the time of birth. Consequently, North

American Asian immigrant communities have high rates of Hepatitis B virus infection. Asian Americans account for about 60% of the chronic hepatitis B cases currently in the United States (Chen & Dang, 2015). The Centers for Disease Control and Prevention recommends routine testing in Asian immigrant communities since it can also transmit horizontally with close contact and sexual intercourse. Currently, hepatitis B testing rates are low in most Asian American populations (Taylor et al., 2010). This is alarming since undetected and untreated HBV can progress to hepatocellular carcinoma (HCC), a highly fatal form of liver cancer. To target this issue, Taylor et al. (2006) recommends routine testing, vaccinations, and education of HBV routes of transmission. In this study, the researchers explore the utilization of English as a second language (ESL) course to improve HBV education and encourage regular testing. The participants were recruited from programs that provide ESL education to adult, immigrant students and they were then divided into experimental and control groups. In the experimental group, the subjects underwent 3 hours of HBV ESL classes, while the control group underwent 3 hours of physical activity education. Both classes were instructed by ESL teachers who were trained in the respective curriculum of the control and the experimental groups. The session also included other activities, such as, watching a video depicting an Asian immigrant discussing HBV with their physician and guest speakers who spoke in Cantonese, Farsi, Korean, Mandarin, and Punjabi. Additionally, supplemental study materials and questionnaires were also translated in Asian languages to assist learning.

Prior to the intervention, the participants reported if they have undergone HBV testing in a survey. Those who have not been tested (218 of the participants) were given a follow up survey 6 months later to assess both testing status and HBV-related knowledge.

Those who reported testing within the 6 months were asked to provide HBV testing records from their healthcare provider at the follow-up. The results of the study showed that 6% of the experimental group had verified HBV testing in comparison to the 0% in the control group. Additionally, the experimental group possessed significantly more knowledge regarding Hepatitis B infections, such as, its spread through sexual intercourse, than the control group. This study also has various limitations. For instance, the participants in this study had relatively high education levels and this study might not be generalizable to Asian American immigrant populations with lower educational levels. Additionally, the study did not test the baseline knowledge of Hepatitis B, in both the experimental and control groups, prior to the interventional ESL classes. Therefore, it is possible that the experimental group had a baseline knowledge higher than the control group. Lastly, the results of the study only had a limited impact on HBV testing levels in comparison to the improvements noted in HBV-related knowledge.

## **DISCUSSION**

The studies by Lee, P.-I. et al. (2020) and Taylor et al. (2010) explore the impact of sexual health education on the knowledge base in Asian American immigrant population. They utilized various interventional methods, including ESL courses and activity-based learning, and they both demonstrated to be effective. However, the aforementioned studies focused on improvement in sexual health knowledge and not behavioral changes. Therefore, modalities need to be also assessed on its impact on changes in sexual health activity, including safe sex practices, routine vaccinations against sexually-transmitted diseases, regular testing, and preventative healthcare visits.

To review these types of interventions, a study on Human Papillomavirus (HPV) vaccination program was evaluated for changes in vaccination rates. Farmer et al. (2016) showcased the effectiveness of a HPV vaccination program in an urban health system (Denver Health) serving more than 17,000 adolescents. In comparison to other vaccinations received by the adolescent population, HPV vaccination rates have been trailing behind. Researchers noted concerns for parental influence as the cause of this gap in rates. For instance, parents often reject this vaccination for their children due to incorrect assumptions that their child is not sexually active or fear that the child will initiate sexual activity once they receive this vaccination. These assumptions are similar to the preconceived cultural notions that the Asian American immigrant parents hold about their children's sexual activities or lack thereof. Therefore, the HPV vaccination programs can be utilized to create other programs to break down these cultural barriers and improve sexual health in the Asian American immigrant population. Denver Health utilized various strategies to improve the vaccination rate in their health system including "bundling" of vaccinations, as in combining HPV vaccination with other routine vaccinations offered to the adolescents. They also employed persistent offering of the vaccine at visits and having the medical assistants administer it before the provider enters the examination room. These various tactics were completed on a study population of 11,463 subjects with an average age of 14.77 years. The results indicated vaccination rates, for greater or equal to one dose of HPV vaccination, of 89.8% in females and 89.3% in males, as compared to national rates of 57.3% and 34.6%, respectively. Three doses of HPV vaccination (the recommended amount by the age of 13 years) is found to be 66.0% in females and 52.5% in males versus the national rates of 37.6% and 13.9%,

respectively. One of the advantages of this particular study is the low costs associated with the methods utilized. Simply changing the tactics employed during the clinical visits led to significant changes in vaccination rates. Additionally, it shed light on the role of the healthcare providers in improving sexual health behaviors. However, an important limitation of the study is insufficient generalizability to the target population of Asian American immigrant population. Majority of the subjects in this particular study were female, Hispanic, non-English speaking, and came from low income families. The researchers hypothesized that more discussions will be needed with patients who are English-speaking and come from higher income families. The target population, Asian American immigrants, have a higher median annual household income than all of the United States households (Budiman, 2021). Additionally, 72% of all Asian Americans are “proficient” in English, which includes 95% for United States-born Asian Americans and 57% of foreign-born Asian Americans. Therefore, it can be assumed that more rigorous tactics should be used by the healthcare providers to produce similar changes.

One of the advantages of the aforementioned study is the accessibility to the target population of adolescents. Most children around pubescent age go to their healthcare providers for routine checkups. However, for children with limited or lack of accessibility to frequent and consistent healthcare, another location that could be used for promoting healthy sexual health behaviors is school. A study by Zhang et al. (2020) explores such school-based educational intervention on middle-school aged children in mainland China. The study was conducted in one urban middle school and one rural middle school for each of the seven geographic regions chosen. In each school, one class of 13-year-old adolescents were chosen for the experimental group and another class for

the control group. Both experimental and control groups received a baseline survey at the commencement of the study. This questionnaire included the individual's socio-demographic characteristics, current knowledge of HPV and HPV related diseases (cervical cancer), and their willingness to get the HPV vaccination. In the experimental group, the students underwent a 45-minute lecture instructed by the schools' health education teacher on HPV and HPV vaccination. Instead, the control group did not receive the HPV education lecture. Both groups were then asked to complete a post-education questionnaire. The questionnaire was repeated a year later for both the control and intervention classes. The post-education and one-year questionnaires included more direct testing of the students' HPV knowledge. For example, it included questions regarding the route of transmission as well as the most appropriate age to get vaccinated. It also included questions assessing the students' preferences toward the HPV vaccination after the lecture.

A total of 5,024 adolescents, between the ages of 13 to 14 years, were studied from 14 different schools in mainland China. In the baseline survey, only 15.7% of the adolescents indicated awareness of HPV vaccines. This low level of awareness is also found in parents of adolescent children in mainland China. Additionally, previous research regarding HPV vaccination in other developing countries, including India, also indicated low levels of knowledge about this vaccination. Whereas, countries, like the United States, have a comparatively higher level of awareness (about 50-90%). Therefore, it can be assumed that immigrants, from these developing Asian countries, come to the United States with a lack of knowledge and awareness about HPV

vaccinations. This calls for the importance of sexual health education, especially regarding preventative vaccinations, for both immigrants and their children.

While the baseline survey did indicate low level of HPV vaccination awareness, it did show that about 67% were willing to get vaccinated. However, the researchers claim that this percentage will increase significantly with vaccination programs, as it did in developed nations. For the post-intervention results, the data shows that about 92% of the adolescents are willing to receive an HPV vaccination. They also had improvements in the students' knowledge of the human papillomavirus in the experimental group. For instance, nearly 89% correctly identified that the vaccination is the most effective method to prevent an HPV infection, genital warts, and cervical cancer. Lastly, the one-year survey did have a significant decrease in HPV-related knowledge. For instance, in the post-intervention survey, 85.8% correctly stated that sexual behavior is the transmission route for the virus. However, this figure dropped to 62.6% in the one-year questionnaire for the experimental group. However, in the control group, the percentage dropped to 47.2%. Based on the results, it would be effective to reiterate the information regarding HPV and other sexually transmitted diseases on a yearly basis to maintain awareness and knowledge. The researchers also suggest the implementation of HPV topics into existing wellness education classes at school. However, the study does present some limitations. For instance, the results cannot be generalized to out-of-school youths. Additionally, the personal life survey questions (such as, those regarding sexual activity) can have effects of self-report bias. Lastly, the researchers did not consider the influence of other teachers and parents in the children's knowledge, awareness, and attitude towards HPV and HPV vaccination.

## **RECOMMENDATIONS FOR FUTURE STUDIES**

A multifaceted approach is important to tackle sexual health discrepancies of Asian American immigrants. Based on the results of the interventions assessed in these studies, one consideration for future research is to analyze clinical and school-based tactics in combination with sexual education. These combined interventions will be administered to the parents and the adolescent patients of Asian American background. Sexual education conducted by Lee, P.-I. et al. (2020) and Taylor et al. (2010) showed improvement in knowledge. Whereas, vaccination programs in clinical and educational settings was effective in Farmar et al. (2016) and Zhang et al. (2020), respectively. Therefore, applying the interventions simultaneously on both the parents and the adolescents might produce the knowledge and behavioral changes needed to compact the issues noted in Asian Americans' current sexual health status. A comprehensive, multidimensional study would target the Asian immigrant parents at a community center or after parent-teacher conferences and provide them educational material on sexual health and sexually transmitted diseases. They will also be coached on having difficult conversations with their children and have them undergo activities with other parents (including role-playing and discussions) similar to the intervention mentioned in Lee, P.-I. et al. (2020). This intervention could be organized by both educators and healthcare workers. The presence of healthcare workers can be a source of information for parents who have additional questions on testing and vaccinations. On the other hand, the children will undergo similar intervention, including education and activities tailored to their age. This will be conducted during their health education classes on a yearly basis.

Additionally, the program should work closely with their healthcare providers to promote routine testing and vaccinations. The providers should also be encouraged to answer the children's questions and have open discussions during their health visits. Additionally, it is important to consider other factors, such as, language barriers noted in Taylor et al. (2010), while designing these particular interventions. For example, it would be beneficial to include interpreters while the participants communicate with the healthcare workers and educators involved in the study. It would also be beneficial to provide educational materials and lectures in their native languages for additional learning. Lastly, cultural mediators should also be involved in these interventions so they can synthesize the interventions to address a particular stigma or adjust the course based on various regional belief systems.

An alternative study would be to consider the use of telemedicine in preventative care and testing for sexual health conditions. Cultural stigma prevents many Asian Americans from visiting clinics in the fear of being judged by their community members. Additionally, hesitancy to talk about sexual topics leads to lapse in communication with their providers. Therefore, telemedicine could be utilized as an alternative to avoid their apprehension to seek care. Talking to providers in the comfort of their home may add an extra layer of confidentiality that will bring these individuals some comfort in pursuing sexual health care. Therefore, this form of intervention should also be considered in future studies and be evaluated for effectiveness in improving sexual health knowledge and behaviors in Asian American immigrants.

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