

HIV/AIDS and Tattoos: A Deadly Link

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Abstract

Tattoos are a common thing in today's society and seem to be increasing in popularity with younger generations. In the past they seemed reserved for criminals, drug addicts and other people living on the fringe of society and having a negative connotation. However today's society show a different view of tattoos shifting toward a view of self-expression or even just a love of art, using tattoos to tell stories, remind them of significant life events or people and for various other reasons? With wider acceptance of tattoos and the amount of people getting tattoos and wanting tattoos increasing significantly there is a potential health risk involved with the process, especially when receiving tattoos in an unprofessional setting. The process of getting and performing a tattoo involves needles and blood both which are ways for HIV to be transmitted although seen mostly when talking about injection drug use and transmission through sexual intercourse.

Keywords: HIV; AIDS; Tattoos

People choosing to get tattoos and the acceptance of tattoos in various career choices as well as in society have increased recently and look to become even more acceptable in the future. No single explanation accounts for the increasing popularity of tattoos, however researchers find that people use tattoos to express who they are, what they have lived through and how they see themselves in relation to others and to their social worlds. Most people get tattoos when they are young and are considered to be an outcome of self-expression and self-identity. About 15% of the population has at least 1 tattoo. That number rises to 28% for adults under the age of 25. According to US News and World Report, tattooing was the sixth fastest-growing retail business in 1997 [1]. Since that time the industry has seen extreme growth and a large increase in the number of people choosing to get tattoos. This raises a question to the standards and practices tattooing businesses must abide by and how strictly they can be regulated with such a large number of business in existence and new tattooing businesses being created regularly. With this in mind could there be a potential link between tattooing and HIV/Aids?

The link between tattooing and HIV is possible although not specifically proven. HIV can be transmitted by needle stick injury, making tattoos a potential means of HIV transmission. To date, there are no proven cases of HIV transmission through tattooing. The only known possible case was reported in 1988 concerning 2 men who received tattoos in prison with unsterilized needles that had been used to tattoo other inmates. Tattooing has been suggested as a potential mode of transmission in other cases in Vietnam and Jamaica, but these remain impossible to prove [2].

Sexual intercourse is the primary mode of transmission for HIV therefore most HIV prevention tactics tend to focus on safer sex practice and less on the risk of other potentially harmful situations such as tattooing and body piercing where transmission is possible. Tattooing has been recognized as a potential risk factor for the transmission of HIV, as well as other diseases. Due to an increase in popularity with tattoos and tattooing lack of information regarding the risk associated represent a serious potential health risk [3]. The growing popularity, desire of people wanting to get tattoos and the costs associated with using professionals when deciding to get a tattoo can lead to people using unsafe tattooing practices. The sharing of needles or needle substitutes and other supplies such as inks or ink substitutes can pose a serious risk to contracting HIV. The use of homemade machines used to perform

tattoos is mostly associated with jails and prisons where studies have to been done to show the transmission of HIV and other infections with unsafe unsterile tattoo practices. However, the increase in popularity has also cause people to make these types of homemade machines for themselves and with access to real tattooing machines through the internet and other resources, but with no training on safe use and practices when operating these machines the risk for contracting HIV becomes more widespread than just the practices associated with jails and prisons which is where much of the research regarding the link between tattoos and HIV seems to be focused.

The most common problems seen when tattoos are done outside of a professional setting are the absence or reuse of gloves along with inadequate hand hygiene, lack of skin antiseptics, no disinfecting and covering of surfaces or equipment, skin lesions on the tattoo artists hands, homemade tattooing equipment, inappropriate/inadequate aftercare (usually due to artists lack of training and teaching client proper care techniques), dropped rags used to wipe blood from skin, ink stored in nonsterile containers and tattoo artists inability to recognize when a customer is not well and in need of urgent medical assessment. As tattoo machines and equipment come into contact with blood and other bodily fluids that can carry viral and microbial infections such as hepatitis B and C and potentially HIV which may be transmitted if the equipment is used on more than 1 person, but not properly cleaned and sterilized. Shared needles and contaminated inks can result in blood-borne transmission among people getting tattoos although professional tattoo establishments take extensive measures to ensure that this does not happen to clients it can always be a risk especially when there are so many tattoos shops that need to be regulated [2].

With the continued rise in popularity in tattooing, due in part to normalization by television shows such as Ink Masters and Bad Ink,

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concern has risen about the potential health risks accompanying receiving a tattoo. Risks associated with receiving a tattoo include allergic reactions to dyes, skin infection, and blood borne diseases such as hepatitis B and C, as well as HIV. The risk of contracting hepatitis B or C through tattooing is well established [4], but HIV's link to tattooing is more tenuous. The Center for Disease Control and Prevention (CDC) reports that there are no documented cases in the US of HIV acquisition via tattooing but does caution that it is possible for a tattoo needle that has been exposed to infected blood has the potential to transfer the infection to an uninfected person [5]. The US regulates the tattoo industry, but countries with less stringent regulation, such as India and Jamaica, have reported potential cases of HIV transmitted via tattooing [6,7]. A growing concern in the US is the proliferation of "tattoo parties" where individuals, typically young adults, gather and receive tattoos in potentially unsanitary conditions. Sharing ink bottles and needles between tattoo recipients may be common at these events and may raise the risks associated with tattoos.

In a study conducted on 860 adolescent offenders 29% had at least 1 tattoo. From that percentage 21% of those tattoos had been administered unprofessionally and 2% claimed to have knowingly shared needles when getting a tattoo [8]. This study was done in 2001 and the increase in the number of people getting tattoos and the number of people giving tattoos has significantly increased since then. There are over 4,000 tattoo shops in The United States with an estimated 30,000-100,000 tattoo artists taking into consideration only those working professionally in shops and not those doing tattoos unprofessionally. Contracting HIV from tattoos is possible, although mostly studied in individuals within the prison system where safety and health standards are ignored and the prevalence of HIV and AIDs is much higher. Transmission could occur when performed with contaminated materials or if the individual giving the tattoo is a carrier this could also be possible, although other disease such as hepatitis B and C are more commonly found than the transmission of HIV through unsafe tattoo practices [9].

Another study conducted on 642 prisoners showed 449 of them had received tattoos. Of those 41% had received a tattoo in a correctional facility either adult or juvenile. Of the participants in the study 27% reported knowingly using the same needle as someone else and 42% reported someone had used the same ink or ink substitute. A study on female prisoners showed similar results. When getting tattooed eighty-two (66%) of 133 female prisoners surveyed had at least one tattoo. Of these 82 prisoners, 26 (32%) reported receiving a tattoo in adult prison and 7 (8%) had a tattoo in juvenile detention. Four women in adult prison and all 7 prisoners who received a tattoo in juvenile detention said these were their first tattoos. Fourteen (48.3%) of 29 women who were tattooed in the 12 months prior to the interview acquired them in prison; 2 of these 14 women had also been given a tattoo by a friend. Of these 14, 4 (29%) reported someone using the needle before them and 1 (7%) was unsure if this had occurred. Nine women (60%) claimed someone had used the ink before them and 2 (13%) were uncertain [10]. Although this study is conducted on an incarcerated population where unsafe tattoo practices are the only option and the presence of HIV and other infections of that nature are more prominent the amount of people engaging in these unsafe practices are still very high. No extensive research has been done as far as populations outside of this, but more than likely the amount of adolescents willing to get tattoos knowingly with improper techniques and sterilization is also high. Prison populations hold disproportionately high amounts of infectious disease and because of these inappropriate tattoo techniques there is a higher risk and more serious consequences for tattoos received and given within the prison system. Some research suggests that one way

to better combat this is to repeal tattoo policy in the prison system in place of professional standards reducing the cost of healthcare costs associated with unsafe practices [11].

Centers for Disease Control in the United States of America data collection has no documented cases of HIV transmission through tattooing or body piercing although Hepatitis B and C have been transmitted through some of the practices. However, tattooing in the USA has been a closely regulated art, which is not the case in other countries around the world. One incident studied in Jamaica by a worker studying HIV with pregnant infected women revealed the neighborhood tattoo artist was murdered for spreading HIV in the community. It was further recognized that there were two HIV-positive women who had tattoos from the same artist and they both lived on the same street. This disclosure of a tattoo artist possibly spreading HIV in a Jamaican community gave rise to serious concern especially with the increasing incidence of HIV/AIDS within society. This led to an informal investigation where an HIV-positive client stated that four friends and she received tattoos using the same needle on each person after wiping it with alcohol. There are also known tattoo artists who carry out their trade through home visits. It appears that most clients' choice of a tattoo setting and artist was based on financial reasons rather than professionalism of the tattoo artist. There were also two other HIV-infected married women in long term monogamous relationships with their husbands who both remained HIV-negative six months later when retested. The only risk factor for HIV infection in these women was they both reported receiving tattoos on the same day from the same tattoo artist in Jamaica [6].

Though tattooing has been practiced by various cultures for centuries, this art form has undergone dramatic changes the past few decades. Today, tattoos appeal to diverse populations and mainstream culture, they are much less stigmatized and more acceptable in society and in professional settings. The proliferation of tattooing prompts concern for safety and awareness of hazardous conditions. Transmission of infectious diseases, such as hepatitis B and C and HIV can occur when proper sterilization and safety procedures are not followed [12]. Reported cases of HIV transmission through tattoos remain to be proven, however are absolutely possible and must be taken as a serious potential risk, especially when engaging in unsafe tattoo practices. Although people have not reportedly contracted HIV through receiving or giving tattoos there seems to be a link between the two. Research tends to focus on prison populations where HIV and unsafe tattoo practices are much more common. People receive tattoos knowing they are using unsafe practices and should be aware of the risks involved and the risks associated with these choices should be known and assessed.

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