



# The Brazilian Journal of INFECTIOUS DISEASES

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## Letter to the Editor

### Brazilian manicure: a potential dangerous behavior



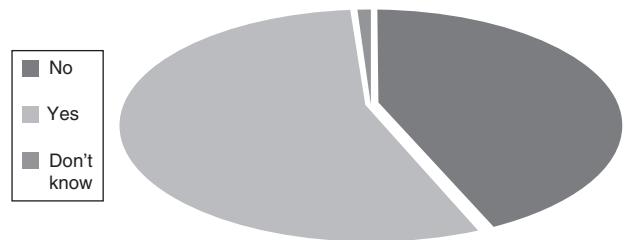
Dear Editor,

Hepatitis C virus (HCV) is a public health issue that affects about 150 million people worldwide. Transmission most commonly occurs through sharing of injection equipment for injecting drug use, transfusion of unscreened blood and blood products, and reuse or inadequate sterilization of medical equipment, such as syringes and needles.<sup>1</sup> Surprisingly, under these circumstances, it is customary and a cultural phenomenon in Brazil to visit beauty salons and remove the cuticles of the nails in the hands and feet.<sup>2</sup> Manicurists have little knowledge about transmission routes and prevention of infectious agents, despite the underlying risk from an invasive procedure which involves handling of biological material.<sup>3</sup>

We conducted an observational study, at the University Hospital of the Federal University in Salvador, Bahia, from 2010 to 2014, including 95 individuals with hepatitis C on a waiting list for liver transplantation, with the objective of determining the proportion of these subjects aware of their status who had shared sharp objects when receiving the service of a manicure, which is considered a risk behavior for infection. Median age was 57.9 years and the majority were men (81%) who were married or in a stable relationship. The subjects knew about their viral status and were asked whether they were using or had used someone else's manicure equipment; 55.3% gave a positive reply (Fig. 1).

This study found that more than half of the participants, at some point in their lives had shared manicure equipment, including after knowing about their viral infection status. This behavior may be due to belief that correct sterilization by beauty salons reduces the risk of transmission. Manicures can generate trauma or microtrauma on the skin surface, incurring an elevated risk of infection when blades or nail scissors are shared, without proper sterilization, with an asymptomatic infected family member who visits a barbershop or beauty salon.<sup>4</sup>

This scenario may be more serious if we consider previous studies conducted in Brazil that showed a low risk perception of contamination and few biosecurity precautions for manicures and pedicures. In a study with 100 professionals in the Southeastern region of Brazil, the majority (54%) related that they did not perform any procedures when in contact with customer's biological material, 80% declared that they did not use gloves, 85% did not know how the transmission



**Fig. 1 – Distribution of shared use of manicure equipment among patients diagnosed with HCV in the municipality of Salvador, 2010–2014.**

occurs, and 95% did not know how to prevent it.<sup>3</sup> Therefore, the low level of knowledge about transmission routes, prevention, biosafety, basic care, and risk perception elevates the risk of viral hepatitis infection.<sup>2</sup>

The hepatitis C virus infection can be minimized by changes in behavior, educational interventions, such as information materials and health education in beauty salons.<sup>5</sup> It is also recommended to use one's own equipment for procedures done in beauty salons in order to prevent contamination. Given the risks to which customers and salon professionals are exposed through the shared use of manicure equipment, there is a need to focus increasing knowledge about modes of transmission of the virus and its prevention. Moreover, public health authorities must ensure oversight of commercial establishments.

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## Conflicts of interest

The authors declare no conflicts of interest.

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