TATTOOS AND THEIR EFFECTS ON THE CELLS OF THE HUMAN BODY

Nai Abraham, Burlaka I.S., Naboka O.I., Filiptsova O.V. Scientific Supervisor: prof. Filiptsova O.V. The National University of Pharmacy, Kharkiv, Ukraine Abraham.nai123@gmail.com

Introduction: Tattooing has long been practised in various societies all around the world and is becoming increasingly common and widespread in the West.

In the primitive times, tattoos were used for identifying slaves and sometimes indicating their next destinations.

Today, lots of celebrities and a couple of the world's influential people have tattoos.

Aim: Assessment of the toxicity of tattoo inks has been the subject of little research and ink manufacturers are not obliged to disclose the exact composition of their products so this has encouraged me to create the awareness of the effects of tattoos through this research.

Materials and Methods: This study examines tattoo ink particles in two fundamental skin components at the nanometre level.

The use of atomic force microscopy and light microscopy to examine cross-sections of tattooed skin, exploring the collagen fibril networks in the dermis that contain ink nanoparticles. Fibroblasts in diluted tattoo ink to explore both the immediate impact of ink pigment on cell viability and also to observe the interaction between particles and the cells.

Results and Discussion: According to my findings as years pass by, skin can be itchy, red, inflamed and sensitive, with a high risk of infection and also yellow and some red pigments from tattoo ink contain cadmium sulphide, which causes an allergic reaction (dermatitis) when exposed to the sun.

Tattoo dyes causes an itchy rash at the tattoo site sometimes bumps called granulomas form around tattoo ink. Tattooing also lead to keloids and also in some countries One can contract various bloodborne diseases which includes hepatitis B and C tetanus and among others.

Conclusion: In conclusion, some tattoos are so beautiful but not all that glitters is gold thus this scientific work would create the awareness on the side effects of tattoo on the cells of the human body which would gradually eradicate tattooing.