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ADOLESCENCE WITH TATTOOS AND PIERCING, KNOW TO DECIDE

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Abstract: From the study of tattoos and piercings in adolescence, the following questions arise: What information do adolescents have before making a decision to get a tattoo or piercing? What do parents of teenagers know about the subject? Is there a difference between the generation of parents and children with respect to the information they have? This project aims to: assess how much adolescents aged 12 to 17 living in Ciudad de la Costa know about some aspects of tattoos and piercings, especially their risks. This way, the health of adolescents in our environment can be promoted, informing about those contents of the subject in which there is greater ignorance. A web page was designed with a link to access the voluntary surveys, using a Google form for the adolescent and parent populations. So far it has been found that the surveys carried out leave figures that show the great lack of knowledge that adolescents have on this subject. Likewise, favorable results are seen in the surveys carried out on parents residing in Ciudad de la Costa who have children in the age range between 12 and 17 years old but they still lack a lot of information.

Keywords: adolescence, tattoos, piercings

INTRODUCTION

Going deeper into the skin, in the subject biology, at the secondary level of education in Uruguay, the possibility arises of raising awareness and providing more information on this topic. A reading about tattoos and piercings was done. They found out about risks and precautions, materials and types of piercings, regulations (decree No. 193/004), the biology of tattooing or piercing on the skin as an organ, and socio-emotional aspects. Interviews were conducted with several professionals and tattoo artists.

It was considered a very important topic because it is related to health and a decision

that is for life. It must not be taken hastily, you must be safe and know the best conditions.

Due to the amount of knowledge that was learned at that time and the surprise caused by some data related to health, it was decided to conduct a survey of 20 high school classmates. It was found that 55% intended to get a tattoo or piercing. We wonder how informed young people are before getting a tattoo or piercing.

It was observed that it is a current topic. The Uruguayan psychologist Virginia Aguerre De Angelis (2019) expresses that:

“Although the practice includes different age groups, it is found that during adolescence is where it has the greatest impact, but not only as a form of integration but also paradoxically in a search for differentiation. This is influenced by the current context where a notion of the body is developed as a body of production, subject to performance under the era of consumption.”

Although no statistics were found on the Uruguayan population, a global study by Dalia Research in 2018 indicates that 48% of those surveyed in Italy have at least one tattoo, being the country with the highest number of tattooed people. In second place is Sweden 47%, the United States 46%, Australia 43%, Argentina 43% and Spain 42%.

The word tattoo, from the ancient Tahitian language: tatan, means “act of drawing”, a drawing that is made on the body in different ways, which transmits and communicates, an act loaded with meaning for oneself and for the other (Reisfeld, 2005). According to the dictionary of the Royal Spanish Academy, a piercing is a piercing made in a part of the body other than the earlobe, to insert earrings, hoops or other ornaments.

The risks that may arise in its placement are due to skin infections and inflammations, allergies, keloid-type scars (scars growing outwards) and transmission of diseases such as hepatitis B and C and even HIV. According to the W.H.O. (World Health Organization),

hepatitis is considered a public health problem because it claims the lives of 1.3 million people every year. "Hepatitis cases related to the use of injectable drugs, tattoos and piercings have increased in Latin America in recent years," said Graciela Castro (2018), president of the Mexican Association of Hepatology.

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Regarding oral health, a report from the La Plata Faculty of Dentistry by Professor Facundo Caride (2019), director of the gingivodental lesions prevention project, expressed:

"Young people are unaware of the risks that piercings entail for oral and general health. They cause pain, inflammation, infections in the area of the perforation with possible spread to deep regions, allergies to metal, trauma to the gum with its displacement, exposing the tooth root (gingival recession), which can cause an increase in "sensitivity, chronic inflammation that leads to the resorption of the bone that supports the tooth, causing mobility, which can lead to the loss of the piece involved."

The risks of tattoos were found in a synthesis by Hugalde (2019) on infections. It is suggested that poorly sterilized equipment can lead to Hepatitis B, C and Tetanus infections. On the other hand, allergic reactions are not serious or frequent but tattoo pigments can appear even years after getting a tattoo. They manifest themselves with very intense itching and redness on the skin. This usually happens

with red, green, yellow and blue inks. The appearance of granulomas may also occur. On some occasions it can occur, since it is a normal reaction of the body to foreign agents creating a cell mass. Another risk is the formation of keloids. In turn, recent studies revealed that nanoparticles and microparticles from tattoo inks can reach the lymph nodes since they contain aluminum, chromium, iron, nickel, chromium, cadmium and mercury. In particular, the information in an article about red ink that has mercury, among other elements, which can cause allergic reactions, black spots and even slight poisoning, stood out.

In relation to studies such as magnetic resonance imaging, there is not much evidence since there have been few cases of people with tattoos who have had these studies done, but cases of burning, inflammation and even burns have been found due to the presence of metals in the inks.

From a legal point of view, in Uruguay, Decree No. 193/004 "Regulation of tattoo centers, piercings and decorative piercings" governs. As the main aspects extracted from this regulation, we point out that all centers that perform tattoos, piercings and decorative piercings must have several obligations to comply with. In relation to instruments, there are also requirements, for example, the use of disposable needles. It is considered essential that all people know the following general rules: only people over 18 years of age will be tattooed, minors between 15 and 17 years old will only be tattooed with prior express authorization from parents or legal guardians. These are restricted from tattooing areas such as the neck, forearms, hands, genitals and parts of the face. The person to be tattooed must have a certificate that the tetanus vaccine is up to date. Other regulations include: the client must take a hygienic bath two hours before undergoing the process, if it is necessary to

remove hair. A trichotomy will be performed to avoid possible infections. The tattoo artist will have to wash his hands with liquid soap before carrying out his work and during it, he will have to wear a mask. No person who shows signs of having alcohol or drugs in their blood may be tattooed. It must be taken into account that only pigments authorized by the Ministry of Public Health (MSP) may be used, and others are prohibited. These may not contain mercury, nor any non-specific product. They cannot be used after 2 (two) years of manufacture.

Another point of the issue that was investigated was in the National Blood Bank about donation. The question was raised: Is it possible to donate blood having been tattooed or with a recent piercing? The first important fact is that you must be 18 years old to be able to be a donor, so the population of adolescents between 12 and 16 years old is excluded from donation. The only exception is 17-year-old teenagers, who if they get a tattoo during that period, must wait a year to donate. For example, if a young person of 17 years and 6 months gets a tattoo, even if they are 18 years old, they will have to wait for twelve months to pass.

The information about the tattoos in the lower back seemed important. Young women, future women who decide to be pregnant and have children, have the possibility of easing their labor with epidural anesthesia. In the case of tattoos in the lower back, some anesthetists do not recommend such anesthesia because they take into account the risk of introducing traces of ink into the epidural space.

WORK HYPOTHESIS

Most adolescents who want to get or get a tattoo or piercing do not know the main health risks and their consequences, they do not have enough information to make a decision.

The following questions were proposed: What information do adolescents have before making a decision to get a tattoo or piercing? What do parents of teenagers know about the subject? Is there a difference between the generation of parents and children with respect to the information they have?

OBJECTIVES

The general objective was set:

- Know the information that adolescents in our environment have and promote their health.

Specific objectives are established:

- Determine the type of information that the adolescents from 12 to 17 years old who reside in the City of the Coast surveyed have on the subject.
- Know and compare the information that the population of parents of adolescents between 12 and 17 years old in the City of the Coast voluntarily surveyed has.
- Inform about tattoos and piercings before making decisions about their bodies.

MATERIALS AND METHODS

A website was designed <https://ituciencia.wixsite.com/tatuajesypiercings> in which outstanding information was included to collaborate with adolescents in decision-making. This site was shaped by the results of the surveys, in order to include information that the respondents do not have correctly. This way young people will be able to raise awareness and reflect on this issue.

This website has a link to carry out the surveys. A survey form was developed in Google Forms that adolescents filled out from their cell phones or computers.

On the other hand, another form was developed, with another link for parents with the same questions to carry out a comparative study with the population of parents.

Although it was not carried out, it is planned in a next stage to address the generation of grandparents of adolescents. The link and the form are created and some test interviews were carried out.

THE SURVEY

In this case, the survey seeks to be descriptive of a particular situation of adolescents and their parents regarding tattoos and piercings. It is done through electronic devices.

It consists of seven statements and one question. Each statement has three options and only one is correct. Addresses legal aspects, risks or consequences and conditions of the tattoo procedure. Finally, the survey ends with a question: what do you think is the reason that teenagers have for getting a tattoo or piercing? Three possible answers are proposed and a fourth category of "other" for those who do not identify with the answers presented.

This way, we believe that it brings us closer to the knowledge we have on the subject, in various aspects linked directly or indirectly to health.

To carry out the adolescent surveys, the link was disseminated to students inside and outside the high school. For this reason, during the weekend the project students made personal contact with family and friends. Seeing that the number of surveys carried out in the link and visits to the website was increasing, it was decided to carry out the survey personally, hoping that the adolescent surveyed would finish it both on his cell

phone and on that of the project members. For this situation, the IT-HUÉ School and Lyceum and a public place, the Costa Urbana Shopping, were approached.

SCHEDULE

It begins in the month of May, 2019. First, a bibliographic and web search was carried out, as well as interviews with professionals and tattoo artists. At the end of May, a small survey is carried out to determine the execution of the project.

During June we deepened the learning carried out and continued receiving information from the people who knew our work, therefore a hypothesis was proposed to achieve new knowledge of the reality that surrounds us.

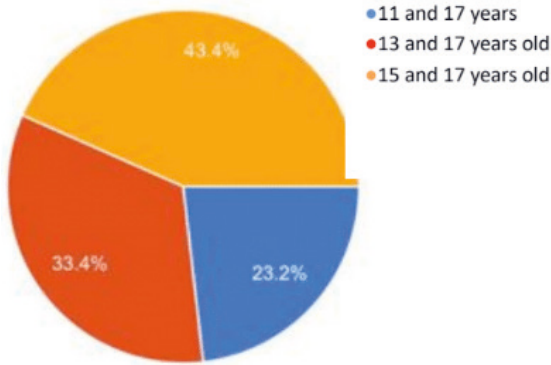
In the month of July we learned about the tasks of a Science Club and shared experiences with those who have already participated. The website is set up.

In the month of August, final surveys begin to be carried out among adolescents and parents. We attended the Science Fair congress organized by Scientific Culture of the Ministry of Education and Culture of Uruguay. The preparation of results and conclusions began. This report was written and the poster was designed for participation in the departmental and then national Science Fair.

RESULTS

The results were overwhelming in the adolescent population since only one of the questions asked was answered correctly by 51%. The majority of adolescents surveyed demonstrate that they have little knowledge about tattoos and piercings. Based on the results obtained, we see that the majority can make mistakes, which can endanger their health. Doubts about whether they can get tattoos, where on their bodies, and the

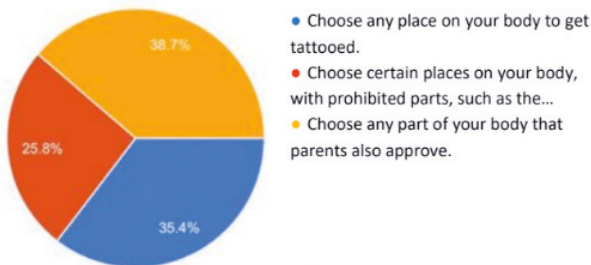
regulations on establishments and tattoo artists can cause unnecessary damage due to misinformation.



Graph N 1. Answers to the question, Minors may be tattooed with express authorization from parents or legal guardians between:

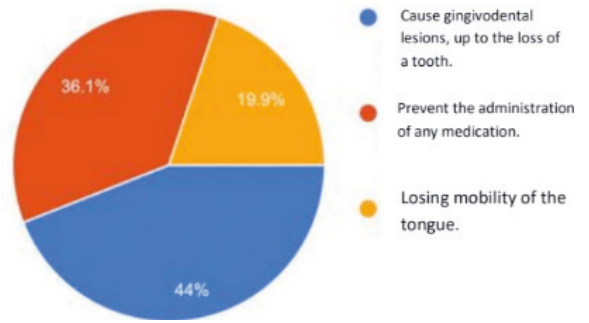
The correct option was answered in 43.4% of the cases, as seen in graph 1. It stands out how 23.2% of those surveyed believe that even in school, at 11 years old they can be tattooed.

Regarding the second question, it is only answered correctly by barely a quarter of adolescents (graph 2), that is, the majority do not know that the regulations take care of special parts of their body. It is prohibited to tattoo on the neck, forearms, genitals, among other places, whether or not they have the authorization of parents or guardians.



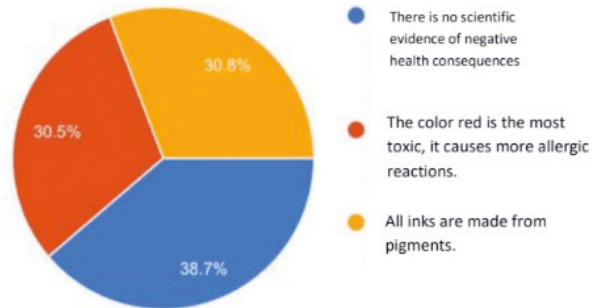
Graph 2. Results of the consultation: "With express authorization from parents or legal guardians, adolescents may".

Regarding oral health, the answer was correct in 44% of the cases (graph 3). The answer is that it can cause gingivodental lesions up to the loss of a tooth.



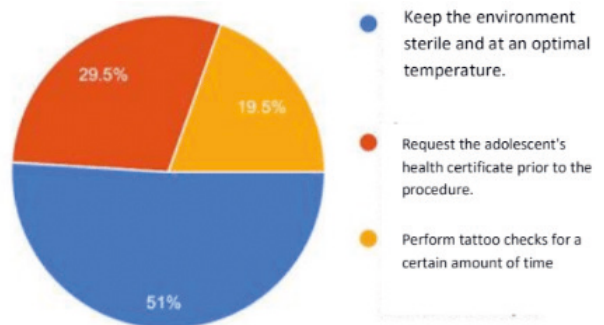
Graph 3. "Perioral and oral piercings (in the gum, tongue, lips)."

The following proposal was answered less correctly than the previous one because only 30.5% know that the color red is the most toxic and that it causes more allergic reactions (graph 4).



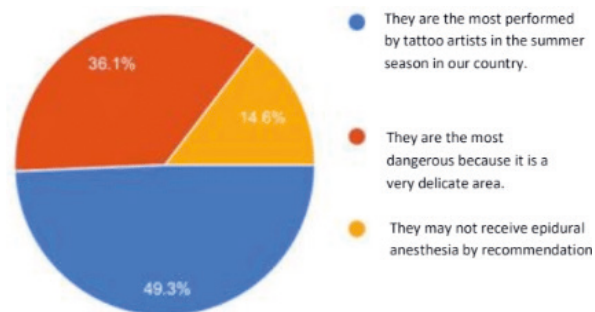
Graph 4. Responses related to "Regarding the inks used in tattoos."

In the question about the conditions under which the tattoo is performed, 51% of correct answers were reached (graph 5). This being, as mentioned, the only issue that seems to be clear.



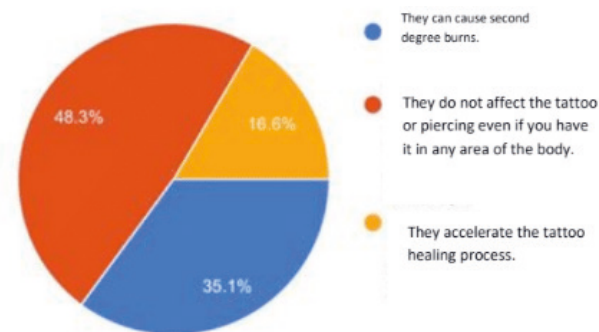
Graph 5. Results for the query "Do you think tattoo artists must"

When evaluating a pregnancy situation, adolescents respond correctly in 14.6% of cases (graph 6). It will be interesting in a subsequent study to know the gender of the adolescents who answered correctly. The correct answer is therefore “they may not receive epidural anesthesia due to the recommendation of the anesthetists during pregnancy”



Graph 6. Results in relation to: “Tattoos in the lower back in women”

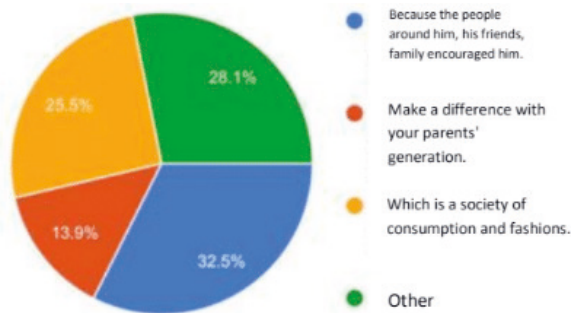
When the topic of medical studies, such as MRIs, is approached, the correct answer is that it can cause second-degree burns. 35.1% answered correctly (graph 7).



Graph 7. Responses to the statement: “In relation to medical studies such as MRIs in people with tattoos or piercings.”

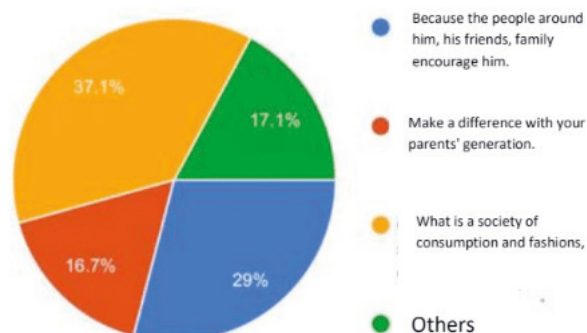
The next question was more open. The answer answered by the largest number is “because the people around them, their friends and family, encouraged it” (graph 8). Regarding the reason, this greater number of responses, 37.1%, differs from the generation of parents where the majority 32.5% because they believe that it is because it is a society of

consumption and fashions (graph 9).



Graph 8. Results of the question: “What do you think is the reason that adolescents have for getting a tattoo or piercing?”

Below are some expressions from parents of teenagers. According to the surveys carried out, the parents who were surveyed are slightly more informed than the adolescents themselves about piercings and tattoos, but they still lack a lot of information. The questions that had the most wrong answers from adults were those related to the areas of the body that can legally be tattooed on minors, and regarding toxic inks, and medical procedures for people with tattoos or piercings.



Graph 9. Responses from parents of adolescents to the question: “What do you think is the reason that adolescents have for getting a tattoo or piercing?”

In short, these results allow us to establish that the proposed hypothesis is, in general, correct. The majority of adolescents surveyed do not have sufficient information. On the

other hand, it was not possible to assess whether the adolescents surveyed already have at least one tattoo or piercing, whether they intend to get one or not. What does seem to be clear is that young people between 12 and 17 years old in the population surveyed do not have the appropriate knowledge to make a decision today, whether about a new tattoo or piercing or getting the first one in their life.

In reference to the objectives, they have been met. There is data on the information that adolescents in the sample from the City of the Coast have. Through data processing we know that the young people only answered correctly the question about the conditions of the place, that is, we approached the type of information and to fulfill the objective of informing, the website was created.

DISCUSSION

Although a very complex topic is presented, we began to reflect on the results. In the responses, it is seen that the adolescents interviewed in Ciudad de la Costa have very poor knowledge about some aspects investigated. Beyond the result, which in the end is only an algorithm, on the knowledge of a small and conditional number of adolescents, these numbers lead us to think that due to the lack of knowledge that some have, many people could suffer adverse effects. By not knowing this information, due to carelessness, the tattoo is overlooked and a very serious health result can be achieved.

It is thought that these results could be explained since young people do not have these topics to learn in the educational system. On the other hand, we have confirmed that there is no survey on the adolescent's health card, and none of the 24 members of the group of student surveyors were asked by any doctor when they attended the medical check-up. On the other hand, it was very difficult to get

information from our country to put together the issue. It is assumed that the same difficulty arises for a teenager who wants to get a tattoo or piercing.

It could be considered that if adults, family representatives such as parents and grandparents knew about the issue, they could inform young people and support them in making decisions. The knowledge that parents have seems to influence in part, that is, they have more information but it seems to be insufficient for guidance and information to adolescents. During the investigation, a mother and her 13-year-old teenage daughter were found to have both tattooed their forearms (Fig. 1). This shows the lack of knowledge of age and the area of the body that can be tattooed.



Figure 1 Tattoos on forearms of mother and teenage daughter

It was also reflected on the large number of famous actors, singers, footballers who show their surprising tattoos, the aesthetic and artistic value but it is not proportional to the information or dissemination of care and precautions that must be taken.

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