The Triangle of Decadence in ethics dumping and unethical research with indigenous peoples

El Triángulo de la Decadencia en el dumping ético y la investigación poco ética con pueblos indígenas

Carlos Alberto Rosas-Jiménez*
McMaster University, Hamilton, Ontario, Canadá

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Abstract

This study documents some elements of unethical research involving Indigenous populations, including lack of informed consent of participants, lack of community involvement for consultation or permission for use of data or biological samples collected, and concerns about cultural sensitivity. The Triangle of Decadence has been proposed as a possible way to promote a change of mentality among researchers that helps to identify the core problems of unethical research. It gives a possible explanation of what triggers ethical dumping, describing the three points as 1) abuse of power, 2) ignorance of ethical research regulations, and 3) economic interests, and in the middle of the triangle is 4) the silence and complicity of third parties that aggravate the situation. Possible solutions to these problems are presented. Finally, we

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* Faculty of Sciences, McMaster University, Hamilton, Ontario, Canadá.
E-mail: rosasjic@mcmaster.ca https://orcid.org/0000-0003-1529-3785
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explain that there is also a risk of selective representation and tokenization of Indigenous communities.

Keywords: ethics dumping, indigenous populations, power, silence, decadence.

1. Introduction

Guidelines for ethical research with human subjects have evolved significantly, informed by numerous international regulations and documents. The Nuremberg Code (1947) and the Declaration of Helsinki (1964) were among the earliest frameworks, emphasizing voluntary consent and prioritizing participant welfare (1, 2). The Belmont Report (1978) further established foundational ethical principles such as respect for persons, beneficence, and justice, which underpin U.S. federal regulations like the 45 CFR 46 Common Rule and the role of Institutional Review Boards (IRBs) in oversight (3,4).

The International Ethical Guidelines for Biomedical Research Involving Human Subjects and the Guidelines for Good Clinical Practice for Trials on Pharmaceutical Products provide comprehensive standards for global research practices, ensuring participant safety and ethical integrity (5,6). The Convention on Human Rights and Biomedicine and its additional protocols emphasize the protection of human dignity and rights in biomedical research, aligning with European regulations such as the Guidelines and Recommendations for European Ethics Committees (7).

National guidelines, such as the General Health Law (LGS) in Mexico through the Regulation of the General Health Law on Health Research (8), the Medical Research Council Guidelines for Good Clinical Practice in Clinical Trials in the UK, the Guidelines for the Conduct of Health Research Involving Human Subjects in Uganda, and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS 2 in Canada, adapt these inter-

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national principles to local contexts, addressing specific ethical issues and regulatory requirements. Recent updates, like Japan's Ethical Guidelines for Medical and Biological Research Involving Human Subjects and India's National Ethical Guidelines for Biomedical and Health-Related Research, reflect ongoing advancements in science and technology, incorporating new ethical considerations such as electromagnetic informed consent and broad consent (9). Collectively, these documents underscore the importance of informed consent, risk-benefit analysis, and the protection of vulnerable populations, forming a robust ethical framework for conducting human subjects research worldwide.

Despite all the international and national regulations and the efforts of many researchers to conduct ethical research on human beings, many abuses have been committed in research on human beings, especially the most vulnerable, including Indigenous communities. Research involving Indigenous peoples has a history of exploitative and harmful practices, a legacy of widespread mistrust of research among Indigenous communities and an understandable caution on the part of Indigenous people to take part in research, as well as an obligation on current non-Indigenous researchers to do ethical research (10).

Colonization is not simply a historical fact, but is still present as an ongoing process of implicit subjugation (11), and one even speaks of a structure, rather than an event (12). The present study emphasizes that unethical behavior has led to the oppression and disrespect of the human dignity of Indigenous peoples. Abuses in research with Indigenous communities have been widely documented (10,13-17).

However, the term ethics dumping has not usually been used to refer to unethical practices in research with Indigenous peoples. We argue that using the term ethics dumping to explore the exploitation of Indigenous communities as research subjects provides a different perspective on neglect as an important ethical challenge and highlights the responsibility of the work and decision-making of people and organizations involved in research ethics. The term ethics dumping also highlights the double morality and hypocrisy of some researchers who may appear to be ethical researchers in their countries but knowing that they cannot do unethical research in the countries where they work, go and do it elsewhere.

Therefore, this study research question was: What are the main factors underlying the ethics dumping in the exploitation of Indigenous peoples? To do so, through a literature search, I give an overview of some elements of unethical research involving Indigenous populations. Second, I give a possible explanation of the triggers of ethics dumping describing the Triangle of Decadence, and its limitations. Third, I claim for cultural sensitivity in research ethics involving human subjects as a possible solution for the problems described. Fourth, I explain the risk of selective representation and tokenization, arguing that too much attention to vulnerable population could be deleterious.

2. Indigenous peoples

According to the World Bank (18), there are approximately 476 million Indigenous people worldwide, i.e., six percent of the world's population, who speak more than 4,000 of the world's 7,000 languages. It was not until 1982 that the United Nations adopted the term "Indigenous" to refer to the unrecognized, stateless peoples who were already active and seeking international recognition.

A modern understanding of this term has been developed on the United Nations Declaration on the Rights of Indigenous Peoples (19) based on: i) Self-identification as Indigenous peoples at the individual level and accepted by the community as their member. ii) Historical continuity with pre-colonial and/or pre-settler societies. iii) Strong link to territory, practices, and economic systems. iv) Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities. For its part, the International Labor Organization (ILO) Convention 169 on Indigenous and Tribal Peoples in Independent Countries provides a definition that can be used to identify at least four dimensions within Indigenous peoples: recognition of identity, common origin, territoriality and the linguistic and cultural dimension, which must be taken into account when establishing operational criteria (20).

Along history, Indigenous peoples worldwide have accumulated a wealth of knowledge spanning various facets of life. They have thrived for centuries, and some communities still embrace ways of life that have persisted for generations. The enduring nature of this accumulated experience, supported by the continued existence of these communities and the preservation of their surrounding environments, serves as a compelling testament to the resilience and enduring strength of their way of life. Despite their consolidated wisdom and resilience capacity, Indigenous Peoples have been oppressed and discriminated against in many countries around the world. Colonization has led to the social oppression of Indigenous peoples and the resulting exclusion of their traditional knowledge.

A lack of humility of people who were part of the colonization process led to marginalize Indigenous peoples for several centuries. Comments such as the following are a clear example of how these peoples were considered and treated during colonization: "Don't think about the Indians, they are like animals. In the sixteen years that I have seen them here, I have not seen them do a rational act (…) If they are animals, how do they sit at the table?" (21). These kinds of comments are good examples of how Indigenous people were treated in Latin America for centuries.

3. Indigenous knowledge

Recently, UNESCO defined Indigenous knowledge as "the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. This knowledge is integral to a cultural complex that also encompasses language, systems of classification, resource use practices, social inter-

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actions, rituals, and spirituality" (22). However, giving a definition is not an easy task. This problem has already been addressed with a historical approach (23), but what is challenging is that there are a number of different terms that are used interchangeably, including Indigenous knowledge, Indigenous technological knowledge, Ethnoecology, Local knowledge, Folk Knowledge, Traditional Knowledge, and Traditional Environmental Knowledge (24). Zidny et al (25) have compiled, citing other authors, the different definitions of Indigenous knowledge separating them in: Indigenous (with capital "I"): Indigenous (with lowercase "i"), Indigenous knowledge (IK), Indigenous Science (IS), Traditional Ecological Knowledge (TEK), and Ethnoscience.

Indigenous knowledge is often characterized as the shared wisdom of local communities in response to a range of environmental and societal influences, enabling them to more effectively adjust to the evolving conditions of their surroundings (26). Other authors have characterized Indigenous knowledge, as unique and traditional (27), local (24,27,28), transmitted orally (24,28), as tacit knowledge and therefore, not easily codifiable; experiential knowledge; and learned through repetition (28); it has an adaptive capacity, social memory and is holistic (24). Even though Indigenous knowledge is often perceived by external observers as being somewhat static, it is not, it is constantly changing (28,29).

Indigenous knowledge is also relational (30-32). Therefore, if we want to preserve Indigenous knowledge, we should promote the sharing of this knowledge with others and rebuild the relationship between Indigenous peoples and the immigrant societies in which they are embedded (33). Knowledge is generally recorded in some way, either orally or in some written form, text, image, or artistic expression. Storytelling has been considered a very important tool for preserving and sharing Indigenous knowledge about natural ecosystems and people (34). With a great potential, storytelling can guide efforts aimed at revitalizing biocultural heritage (35).

The use of Indigenous knowledge spans many fields including law, governance, medicine, philosophy and education (36). Recog-

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nizing this wisdom, UNESCO has developed an initiative called LINKS (Local and Indigenous Knowledge Systems program) to promote local and Indigenous knowledge and its integration into global climate science and policy processes, working at local, national and global levels, empowering Indigenous peoples, fostering transdisciplinary engagement with scientists and policy makers, and piloting novel methodologies to advance understanding of climate change impacts, adaptation and mitigation (22). Not only do these ways of knowing enlightens decision-making about essential dimensions of daily life for Indigenous communities, but also have important components of the world's cultural diversity, and contribute to the achievement of Agenda 2030 and the Paris Agreement (22).

4. Unethical research involving vulnerable populations

One of the most scandalous cases of unethical research involving human subjects was that of Pfizer, which conducted an illegal trial of an unregistered drug using 100 Nigerian children with meningitis testing its antibiotic trovafloxacin (Trovan) against ceftriaxone during a meningitis epidemic in 1996 (37). Nigeria's Kano state sued Pfeizer for US$2 billion in damages for testing the meningitis drug Trovan, which state authorities said killed 11 children and left dozens disabled (38).

Furthermore, a systematic review of 56 research publications aiming to summarize the literature about methods for seeking consent for research with Indigenous populations found that few of them described specific communication methods for obtaining informed consent for Indigenous research, and even fewer studies that assessed participants' understanding of or preferences for the process (39). However, since informed consent emphasizes the autonomy of the person, institutional research ethics boards could marginalize Indigenous approaches to ethical research conduct, where community has a very important place, disempowering the Indigenous communities (40).

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Another ethical issue has been data ownership in academic research with Indigenous peoples. For instance, a study with the Havasupai Indians of Arizona, USA, the Havasupai Nation gave consent to researchers to investigate the potential for genetic links to high rates of diabetes in their community, but without consultation or permission, the researchers published DNA results on mental health, inbreeding, and ancestral origins of the tribe (41). This is one of many examples of how Indigenous communities have been concerned about how researchers have used their data without their consent. These cases are exacerbated when research involves the collection of biological samples, as the need for biological sampling protocols in Indigenous communities remains, despite specific guidelines for Indigenous research (42).

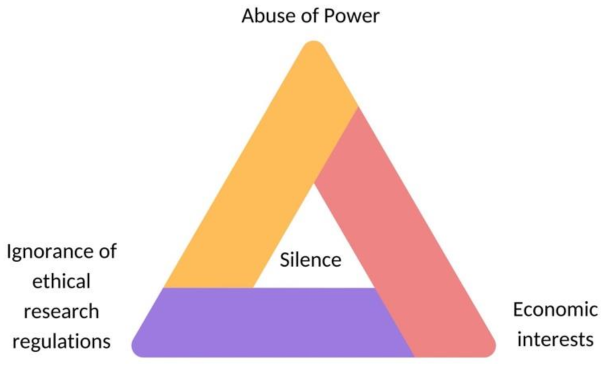
One example of the studies conducted to analyze perceptions of Indigenous people about the handling of genetic material and other biological samples was conducted in Ecuador with the Waorani Indigenous community Ecuador (15). Based on the triangulation of the three sources of information, literature review, survey, and interviews, the researchers found that clinical research has been performed on the Waorani Indigenous people, but they were not fully informed about the aim of most of the studies or the fate of the biological samples (15).

As mentioned above, the European Commission was right to introduce this term because it emphasizes that researchers know that they are not allowed to engage in a certain behavior in research in their own country or in the European Union, but they go and do it in another country, usually a low-income country with vulnerable populations. The desire to build a more just society, in which social justice contributes to respect for the human dignity of all its members, could help change this situation.

5. The Triangle of Decadence in ethics dumping

Abuse of power, ignorance of ethical research regulations, and economic interests form a triangle of ethical challenges in research, with silence at its center. Although it contains 4 elements, as shown in Figure 1, the triangle shape was chosen because it best represents the interaction between the 3 main elements, but it also allows the addition of the central element, silence or complicity, which allows the other 3 elements to occur more easily. First, abuse of power is prevalent in relationships with inherent imbalances, such as those between researchers and participants, which can lead to ethical violations, particularly in vulnerable populations (43,44). Second, ignorance of ethical research norms is another critical issue; many researchers may not fully understand or adhere to these regulations, often due to inadequate education in research ethics or fear of repercussions such as job loss or ridicule if they admit their ignorance (45,46). Third, economic interests also play a significant role, as financial incentives from donors, institutions, and researchers themselves can drive unethical research practices, prioritizing economic gain over ethical considerations (47,48). Forth, silence, the hidden factor, perpetuates unethical practices; witnesses to unethical actions often remain silent due to indifference, fear, or complicity, thereby enabling the continuation of these practices (49). This silence can be particularly damaging in research involving human participants, where the stakes are high, and the potential for harm is significant.

Figure 1. The Triangle of Decadence ©



Source: own elaboration.

The four points of the triangle can be evidenced based on the CRISPR baby scandal in China (50,51). Following the description of Liao *et al.* (52) for this particular case, the following can be said about ethical dumping:

The case. Dr. Jiankui He, using funds obtained by himself, illegally used CRISPR technology to edit the genes of fertilized eggs, obtaining the first three gene-edited babies in the world.

Abuse of power. Dr. Jiankui He had many discussions with the American scientists before the experiment began, and finally a decision was made. When Craig Mello, who was Dr. Jiankui He's company's technical advisor, heard about this, he said: "I'm happy for you, but I'd rather not be involved in this". Although Mr. Mello ultimately did not participate in the experiment, he stated that he was happy for Dr. He, which in a way is an endorsement of Mr. Mello's power as the 2006 Nobel Laureate in Physiology or Medicine to give the green light to the experiment.

Ignorance of ethical research regulations. In this case, Dr. Jiankui He either intentionally or unintentionally completely ignored and deliberately violated the National Health Commission of China (NHC) regulation on embryo research not mentioning other international regulations.

Economic interests. In this case, it is not clear what economic interests were at stake, but achieving the world's first three genetically edited babies is a scientific breakthrough that brings not only international fame to the researcher who achieves it, but also economic rewards.

Silence. There is silence on the part of the American scientists who were consulted by Dr. He and knew what he was going to do. Although they should have been fully aware of the international consensus and guidelines on embryonic research, they said nothing and somehow allowed the whole incident to happen. Moreover, when Dr. He explained the experiment to the participating couples, his Ph.D. supervisor, Professor Michael Deem of Rice University in the United States, was present. In addition, Dr. He's postdoctoral advisor, Stephen Quake, was aware of this but didn't intervene. A thorough explanation about silence, complicity and whistleblowing can be found in Chen *et al.*, (53) who explain that there is a degree of complicity in Dr. He Jiankui's experiment by members of the circle of trust and the role of the international scientific community in contributing to this complicity.

I have called it the Triangle of Decadence of ethics dumping because each of the four points is not as harmful as when the four elements are present together. Decadence presupposes reaching and passing the peak of development and implies a turn downward with a consequent loss in vitality or energy (54). It is the combination of these four elements that can be very harmful to research subjects, but especially to vulnerable populations.

Limitations of the Triangle. First, the triangle has three points, but four points are presented. Second, the proposal of the Triangle of Decadence is something that could sound repetitive. Third, it might be simplistic and not develop ethical principles in depth. Fourth, it could be too abstract and difficult to put into practice in real life. Fifth, it could be too direct and make people feel uncomfortable. However, a counter-argument could be made to each of these points: 1. That there are three main points, but the severity of these three points is increased when silence prevails especially in institutions or among people who could hide the unethical actions and that is why silence is at the center. 2. That we learn through repetition. 3. That simple things like this triangle are easier to understand and put into practice. 4. That the triangle points to very specific factors. Finally, 5. That people with inappropriate behavior will not change unless they feel uncomfortable about it.

6. Cracking the Triangle of Decadence

I suggest that this triangle can be cracked in many ways. It is imperative to promote and encourage researchers to take full responsibility for their research (55-57). Sometimes researchers have been blamed for conducting unethical research, but are editors and peer reviewers also accomplices in unethical actions (58,59), not blocking the publication of that research? This could be called negligence, indifference, silence or complicity.

One direct measure to combat ethics dumping in countries where human subjects research is conducted is to promote, create, and support local research ethics committees that could verify the appropriateness and authenticity of partnerships with the community being studied (60,61) to respond not only to the local needs, for example of Indigenous communities and especially the elders, but also of Indigenous researchers (62).

To answer why, for example, China is often susceptible to ethics dumping, Liao *et al.* (52) argue that there are five main reasons, which aligns to those proposed here in the Triangle of Decadence, such as the fact that some researchers exhibit a lack of ethical awareness. Liao *et al.* (52) also propose five recommendations to overcome ethics dumping, including providing special protective and supportive measures for subjects of ethics dumping incidents.

In their book "Lost Paradises and the Ethics of Research and Publication", Salzano and Hurtado (63) claim for more ethical research denouncing the case of anthropologist Napoleon Chagnon and geneticist James Neel accused of causing or exacerbating a measles epidemic during a 1968 field season among the Yanomami tribe of South America, conducting experiments on the population without informed consent, continuing to collect data while individuals were dying, and causing harm to the population they were studying.

Some researchers have taught about strategies for culturally safe research (64), which means that researchers act with respect, build a trustful relationship with the community and take care of the whole process of research from study design through publication of the results (65). "Research with Native Americans, often conducted by non-Native researchers, has had little to no inclusion of cultural knowledge, methodologies, and priorities, contributing to mistrust and disinterest in research that could provide solutions to old and

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new problems" (64). Other researchers have joined forces to create space for Indigenous sovereignty. This is in response to the lack of self-governance and the colonial legacy (66). That is why Fournier *et al.* (62) advocate for decolonizing Indigenous research ethics using Indigenous knowledges.

Nevertheless, knowing principles is not always enough (67). Good intentions are also not enough. It is important that good intentions do not compound injustice borne from centuries of colonialism, neglect, and alienation (64). This means that there is an urgent need to find solutions at the root level. In this line of reflection, some authors mention attitudes that go parallel to community engagement and dialogue and have introduced the term reconciliation. There is a strong need to reconcile historical injustices. (68). Non Indigenous researchers need to have their research encounters not just with ethical rigor, but in a sincere manner and spirit of reconciliation (69), understanding reconciliation as a self-conscious dialogue that necessarily confronts the histories of the colonial encounter, racism, sexism and the dominant discourses of Aboriginality.

A new era has come in terms of community-based Indigenous research ethics protocols (70). Canada has, for example, introduced the OCAP principles of ownership, access, control, access and possession of data and information related to Indigenous communities (71). Moreover, it has been stated that research with Indigenous peoples should be rooted on the CARE principles of collective benefit, authority to control, responsibility and ethics for Indigenous data governance (72).

The community-based approach has been developed in many disciplines to protect research subjects and involve the community in the whole process of research. In that sense, participatory research is understood as a form of social justice (73). Other type of solutions are simple tools such as a Toolkit for Ethical and Culturally Sensitive Research (74).

Some activism has played a role in defending Indigenous rights with the slogan "Nothing about us without us". These words have

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their origins in political movements dating back to Poland in the 1500s (75). Since then, it's been used for various causes such as democracy, disability, and respect of Indigenous people. As a general claim, Indigenous people are tired of being excluded from decisions that affect them and demand inclusion and that is why there are several research papers including Indigenous people and this slogan (76-79). Research with minorities necessarily includes research by minorities, thus restating the societal challenge to increase the number of minority researchers, clinicians, and other health professionals (65). Another initiative to value Indigenous knowledge is The Two-Eyed label, which refers to learning to see with one eye the strengths of Indigenous knowledge and ways of knowing, and with the other eye the strengths of Western knowledge and ways of knowing (80).

There will continue to be more initiatives to promote ethical research, as well as new regulations, slogans, street marches, and activism to protect the rights of vulnerable people in research, including Indigenous people, and it is positive that this is happening. A direct measure to combat the triangle of decadence in countries where human subjects research is conducted is the promotion, creation, and support of local research ethics committees that could review the appropriateness and authenticity of partnerships with the community being studied.

7. When too much attention is deleterious: The risk of selective representation and tokenization

Selective representation. Policies by governments of countries that place special emphasis on respect for Indigenous communities are undoubtedly necessary because the most vulnerable people in our society, including Indigenous peoples, deserve respect for their human dignity, their ancestry, and their land. This is unquestionable and undeniable because of their original presence in the lands of the countries from which they are originally from. However, there are other

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communities that are also particularly vulnerable and some of them have not received the same attention from government policies. Those most at risk include people who identify as 2SLGBTQIA+, seniors, racial minorities, cultural minorities, military combat veterans, people with below average intelligence, people with hearing, visual, and other physical disabilities, people with serious and persistent mental illness, people with cognitive impairments, people on the autism spectrum, people with disfigurements, people living in severe poverty, and the homeless.

There is a risk of selective representation in research narratives that could reinforce stereotypes and undermine the diversity and complexity of vulnerable populations, which could be deleterious to other marginalized vulnerable people in society who also deserve to have their human dignity respected. Deleterious applies to what has an often unsuspected harmful effect (54). In this case, the struggle for the rights of Indigenous peoples should also be carried out carefully and wisely, because there are unforeseen consequences that could contribute to these people not being tokenized or even manipulated.

Tokenization. Tokenization is an act that involves the use of a minority group member to further the project of a majority group actor, they can be used in a wholly instrumental or transactional fashion and even exploited (81, 82). One popular example of tokenism is that of Indigenous people when performing the Māori ceremonial welcome or the traditional Aboriginal welcome at sporting events, which could be just a tick-box invitation to perform a haka pōwhiri, reinforcing Indigenous people as ceremonial performers only (83). When personal or institutional interests are involved, the risk of using other people in a utilitarian way is very high.

Policies that protect exclusively Indigenous peoples might contribute to increasing the risk of tokenization of Indigenous communities in research ethics. This tokenization could play into the hands of the country's government or other powerful institutions, which could tokenize Indigenous communities by arguing that they are promoting ethical research, but only for their own public image, not

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for the benefit of the vulnerable population. In the case of research ethics committees, the requirements for ethical research, for example with Indigenous communities, could be reduced to a box-ticking exercise.

8. Conclusion

This study presented the main underlying factors in ethics dumping involving Indigenous peoples. Some elements of unethical research involving Indigenous populations include the lack of informed consent of participants, and the involvement of the community for consultation or permission on how to use the data or biological samples collected. I proposed the Triangle of Decadence as a possible way to promote a change of mentality among researchers that helps to identify the core problems of unethical research. It gives a possible explanation what triggers ethics dumping, describing that the three points of the triangle are the abuse of power, ignorance of ethical research regulations, and economic interests, and in the center is the silence and complicity of third parties that aggravate the situation. Research ethics committees could incorporate the Triangle of Decadence as a measure of corruption and establish indicators to evaluate in a simple way whether research is being conducted ethically, but most importantly, that it is not harmful to research subjects.

Possible solutions to these problems are to promote and encourage researchers to take full responsibility for their research, but also that editors can stop unethical research whenever possible. Furthermore, to respond not only to the local needs, governments and academic institutions should promote the creation and support to local research ethics committees that could establish partnerships with the local communities and with local researchers. With more cultural sensitivity from the part of foreign researchers, local people would not be treated as guinea pigs, but as research subjects with human dignity, and this can radically change with the promotion of community-based participatory research.

The risk of selective representation and tokenization is something that governments and research ethics committees should be aware of, because too much attention to vulnerable populations can be harmful because they can be manipulated or used for the interests of external or even internal members of the vulnerable population. There are many rules for ethical research at the national and international level, what we need is a change of mentality among researchers, and the Triangle of Decadence can help people focus on what needs to be changed.

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None to declare.

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