

## Disasters are not preventable if they come from the wrath of God

### Los desastres no son prevenibles si vienen de la ira de Dios

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**RESUMEN** | Investigación realizada con niños que habían tenido experiencias derivadas de los desastres. Objetivo: Comprender el significado que tienen las situaciones de desastre para los niños de un barrio de la ciudad de Medellín, Colombia. Metodología: investigación cualitativa con enfoque etnográfico, utilizando como técnicas para construir la información: entrevistas, diario de campo y la cartografía social. Hallazgos: los desastres para los niños se originan en la manifestación de la ira de Dios en una población vulnerable. La ira de Dios es por los pecados de los hombres y la vulnerabilidad es debido a las condiciones de sus viviendas y del barrio. Consideraciones finales: Los niños conocen los peligros a los cuales están expuestos, sin embargo no pueden prevenir los desastres porque son causados por la ira de Dios. Se deben elaborar programas de prevención que tengan en cuenta la voz de los niños como participantes fundamentales en el cuidado del ambiente.

**PALABRAS CLAVE:** Desastres. Vulnerabilidad ante desastres. Educación en desastres. Niños.

**ABSTRACT** | The research was made with children who have been in a natural disaster. Objective: Understand the meaning of a natural disaster for neighborhood's children in Medellín city. Methodology: Qualitative research with ethnographic approach, using interviews, field diary and social cartography to find de information. Research findings: To children a natural disaster is the appearance of God's anger in a susceptible town. God's anger y produced by human sins and the susceptibility produced by the home and neighborhood conditions. Final considerations: Children know the risk of a natural disaster, but they know these are not preventable because are caused by God's anger. To develop a prevention program that have the children's point of view as the main involvement of the environment care.

**KEYWORDS:** Disasters. Disaster vulnerability. Education in disasters. Child.

## Introduction

Disasters are the consequence of natural and anthropic phenomena that trigger processes which cause physical damage and loss of human lives and capital, at the same time it alters the lives of communities and people, as well as the economic activity of the affected territories (ECLAC, 2014). These situations determine the life, the culture, the customs of the people and consequently, the way of seeing the world. A disaster goes beyond the threat that originates it, has to do with the imbalance of everyday life where risk and social construction, vulnerability, and resilience coexist to these events.

Specifically, children lose the worldview of their environment as a safe and predictable place when they live a disaster. Castillo, Ledo and Toyo (2015). In addition, "It produces important disorders by the rapid pace in which changes occur and the manner in which they are affected; children feel fear, helplessness and isolation and this interferes with their ability to develop a functional balance with the world, altering its sense of security and protection" (Lorita, 2010, p.7).

Likewise, displacement, separation of parents and from networks support, added to the impoverishment of families that were already poor, expose children to an increased risk of diseases related to malnutrition, poor water quality and sanitation. Besides, the cessation of activities in the school, either by the destruction of this or the lack of educators, increases the vulnerability of children, exposing them even more to the danger and physical and emotional trauma by the experienced events. (UNICEF, (2016)

The literature has presented some arguments on how children assume such events and what are their responses to disasters. Studies like the one carried by Zhang et al., (2010), determined that events of natural origin such as earthquakes in where human and material losses are greater, the coping of infants is more complex, generating alterations in their mental and behavioral processes. In contrast, authors such as Cryder, Kilmer, Tedeschi and Calhoun (2006) report that the positive beliefs and competencies instilled in children, significantly changes the way how they perceive and face disasters.

Tanner, Rodríguez and Lazcano (2008) show the potential of the youth groups as agents of change in their communities, and provide a call for active participation of children and young people in risk management to prevent disasters. In addition, they argue that children have developed important communication in risk prevention, which should be used to influence the home, at school and in those community spaces where children have found a participation scenario.

Studies carried out from the point of view of children that allow to achieve the expected changes in the construction of the culture of environmental care, are unknown in our environment. Therefore, this work sought to understand the meaning of the disaster situations for children in a neighborhood in the city of Medellín, Colombia. This research will generate knowledge about children as active participants in the process of risk management and as multipliers of change in social behaviors toward environmental care.

## Methodology

This is an ethnographic qualitative research. Due to the fact that it was intended to understand meanings and actions, from the perspective of the participants, ethnography was used since it allowed to describe and analyze cultural processes within a context-defined as that set of meanings embodied in symbols; which is a fundamental concept of this perspective-. (Geertz, 2003)

The ethnographer, as a researcher, does not start from previous knowledge, therefore It is necessary to begin a process of knowledge, through field work, that is, building knowledge based on the interaction established with the observed group. The researcher goes from the gaze to the sense, as Cáceras (1998) states. According to Boylem (1994), people's behavior can only be understood in the context, which implies the processes of analysis and abstraction more than the physical environment.

The participants were 24 school children between the ages of 7 and 12 from a a Neighborhood of the Municipality of Medellín Colombia, which were present in a situation of disaster regardless of its origin, then it was inquired about experiences lived by them with relation to the event.

An approach was made with the community leaders and parents of children who participate in the research, with the purpose of exposing the objectives, the methodology and techniques, likewise they were informed about their free participation during the process.

Once parental consent was verbally and in writing obtained, it was spoken with children to get their approval and arrange meetings, activities and interviews. The sessions were conducted by researchers, recorded and subsequently transcribed. Recreational activities were prepared according to the ages of the participants.

Six group meetings and eight activities were carried out by approximately two hours per session. The purpose of the first activity was to provide a space for the participants to approach the researcher and the subject of the work through an integration game.

In subsequent sessions, some topics were worked such as the conceptualization of disasters, the identification of threats from their environment based on their experiences and prior knowledge, the origin and consequence of the phenomena that cause the disaster and finally, which actions children do when a natural event occurs.

Likewise, techniques such as the open interview, the field diary and the observation were carried out until get the "saturation of the information" - that is the point at which new properties, dimensions, or new relationships no longer emerged during the analysis.

The observation was made in the neighborhood by making tours with the community, previous approach with the leaders and with the children who participated in the study in order to know the conditions in which they lived.

The social cartography, allowed the approach to the territory and the development of a common interpretation language of the different perceptions of reality. In addition, the collection of experiential information through the construction of maps or hazard maps, integration games, brainstorming and storytelling where children expressed their experiences around the disaster and about what is happening in their community when the threats materialize. The drawings permit to identify the places where hazards are located both in their homes and

in the neighborhood. Also their staging, evidenced the activities that participants performed facing a disastrous event.

Regarding the analysis of the information, this was a continuous process that permitted organize the data obtained during the research and provided a sense of the meanings that emerged from children's experiences and knowledge about disasters. This was made to the extent that the information was collected from the reading of the transcribed interviews, records obtained from the field diary, observations and the construction of the social map. The coding of the information and subsequent categorization, were made manually, with different colors for each one of the categories and the identification of each of the children with names of characters chosen by them. Readings of the interviews about what children expressed in the collection of the information were made several times, then the data was fragmented into units of meaning to obtain codes, then it was grouped to obtain the central category and subcategories. The analysis was done on a par with obtaining the data, taking into account "the emerging nature of the data". (Velasco & Díaz de Rada, 2004).

The information was represented in a concept map with the purpose of having a general approach to the information and subsequently describing the codes, categories and subcategories and how they relate to each other. Once obtained this categorization, the theorizing part was carried out, then the testimonies of the children were included and contrasted with the literature review consulted and the argumentation of some authors on risk management and the participation of children in this social process.

According to Castillo and Vásquez (2003), the rigor criteria is achieved by: credibility and auditability. In the research these aspects were obtained by confirming the findings and their review with the participants and the use of recordings. All activities were recorded to obtain greater fidelity and they collected the data at different times, after that they were transcribed in the quickest possible way to obtain the information and give an account on the experiences lived by children, their point of view was always taken into account, Their own expressions were respected. The results were constantly contrasted with experts, techniques and bibliography,

## Ethical considerations

The ethical guidelines in the research, were based on the respect and recognition of the participants. It was guaranteed the confidentiality of the information obtained; the data was analyzed globally and the information was obtained impersonally by using pseudonyms that the children selected, the interviews were saved in a file of one of the researchers and no names appear in them.

Informed consent was obtained verbally and in writing from the legal representative of the participating children as established in article 16 of Resolution 8430 of 1993 of the Ministry of Health of Colombia. An authorization was requested for the recording of the interviews, everyone gladly accepted it, without restricting their decision to withdraw at any time. No direct or indirect pressure was used to bind to the research.

The investigation did not require intervention or experimental procedures which did not involve risks for the participants. The researchers had no conflict of interests and it was approved by the Education Committee of the School of Military Engineers.

## Findings

For children adults commit sins that cause God's wrath, it manifests through natural phenomena that cause disasters to the population in a neighborhood located in a vulnerable area, causing severe damage to homes, families and surroundings. These situations cannot be prevented because it is not possible to intervene in the adult behavior.

### Description of the neighborhood

The neighborhood is a suburban settlement populated by displaced families in the region from different subregions of the department of Antioquia. The houses are built with adobe and wood, zinc roofs and recyclable materials, it has only one access road and network of services such as drinking water and energy is only available for lower area of the settlement; the upper part must supply the service network with water from community aqueduct that is based on two streams, this is done through hoses from the community tank or from the same source,

likewise the sewage system is founded by the open sky technique.

The hillside floor where the neighborhood is located is brittle, with geological natural faults which makes it an area with variable characteristics such as mitigable risk zones, areas of recoverable and non-recoverable risk. The ground presents clayey conditions, arid and rocky conditions unfit for cultivation. However, the people who inhabit this area grow plátano and vegetables, as well as corn and manioc for their own livelihood and for the exchange with their neighbors. (Giraldo, 2012: p.7)

When urbanizing high and peripheral slopes and areas closer to the ravine, especially in the eastern, north-eastern and north-western ends of the city, the disasters associated with landslide floods became more recurrent. (Quintana, 2011).

"Behind the house there is a ravine and it has already collapsed and with the water it may be fall down"  
(Duke, 7 years old)

### Cause of disasters

For children, disasters cause damage. They define disasters as an event that destroys their houses and that can cause the death of the family -composed of mother and brothers-.

*"It's something that can damage many things, a catastrophe where people die"*  
(Maluma, 12 years old)

The disaster is associated with God as being supreme that becomes angry when sins are committed, therefore it must be paid. For children, this wrath of God manifests itself with earthquakes, winds and rain, that produce a lot of damage by showing up in their neighborhood which they recognize as a vulnerable area. In the face of events sent by God, prevention and mitigation activities cannot be carried out to protect and protect themselves or their families because children can not impede the sins of adults.

### Manifestations of God's wrath

The earthquake as a manifestation of the wrath of God generates a movement of earth that affects the columns, the floor, the walls and the roads. Once the structure, the ground and the stones are

detached it makes the houses fall down due to the characteristics of the buildings that are considered weak and unstable, some of them are deteriorated, especially on the floor. Also the land that sustains them, is sometimes removed by adults because everything it is handmade.

*"It is very dangerous because the sticks are rotten and the earth is collapsing"*  
(Vale, 8 years old)

*"The danger is that one column of the house is fatter than the other and how they dug and the other one is thin, the rods are visible because it is chopped and there are some holes"*  
(James Rodríguez, 10 years old)

The winds generate forces so strong that they tear off the roofs, built mostly of zinc, cans, clay tiles and plastic and because they are weak, they displace the houses, leaving them uncovered and the people and their belongings exposed to the damage caused by the falling pieces of material.

*"it takes away the tiles when it vents a lot and my little sister sleeps right there"* (Frozen, 7 years old)

The rain is the most frequent manifestation of the wrath of God, initially it is announced by sounds, then the rain that first drags with the mud that covers the streets is unleashed where the population circulates, then with the stones that have been used to support some constructions. Finally it takes what it finds in its path, it enters the houses and floods them. The land of the ravines located in the back of the houses moistens it, generating detachment of the land and the stones that fall on the roofs and walls, destroying the house.

*"What scares me about my house is that it rains and the ground becomes wet and falls"*  
(Ben 10, 8 years old)

In the rainy periods due to the high rainfall, the ravines increase their flow and as in the neighborhood there are difficulties in handling waste material that often end up in the streams, then the water is dammed which generates floods in the neighborhood.

*"The ravine remains full of garbage and it is flooded. Once the water entered the house"*  
(Maluma, 12 years old)

## Discussion

Risk management is a social and cultural construction based on the experiences of the communities, the risks that already exist and those that may affect them in the future. It is not only the identification and study of threats, vulnerability and risk reduction; it also implies the participation of the community in decision-making and activities that can be done as a group to prevent them.

Children, as participants in the risk management process, build their own meanings about disasters based on experiences and imaginary. For them, disasters are caused by the wrath of God as a result of the sins of the adult; this meaning increases their vulnerability by limiting the actions according to their capabilities to prevent and reduce risk factors.

Under these conditions and based on the premise that the children participating in this study have basic knowledge related to disasters, one would expect they had in mind the measures and actions that allow to avoid the materialization of the dangers or those aimed at reducing the effects on the community, housing, services and the environment. However, the concept that they have of God and its relationship with the manifestation of disasters does not allow them to communicate and raise awareness among families and the community about risks and disasters. God is the one who decides how and when the phenomena that cause disasters arrive and how they manifest, that is He is who Decides with his will, when it is possible to take actions and when not.

### God's wrath

Disasters are circumstances of daily life with which man lives since its origin; the consequences derived from these events have been measured in human and material losses in the short and medium term. However, for its repercussions on every level and the impact on the historical process of the communities, should be considered as multicausal, complex and continuous social phenomena, analyzed from several perspectives and holistically intervened.

One of these looks, conceives the origin of disasters as a punishment from God, this conception is recorded in the biblical writings as in Genesis (1: 26-27), where it is stated that God made human beings in his image and gave them dominion over the natural

world, separated them from the rest of creation as unique and as representative of God and had to reign over nature as He had projected. In Romans, (5:12 and 8:20), they report that once sin and evil entered the world, everything changed. Humans and nature are now under the burden of sin and evil (vers 22). Bauman (2007) also states that the evil was born with the act of sin itself and that it was returned to the sinners in the form of punishment.

Caballero (2007) states that this conception is motivated by bad actions or sins that allows us to think that the evil is worthy of collective punishment. According to Rodríguez (2008), "disasters called as natural, must be expected in a world of sin and evil. These are not the exception to the rule, but the rule itself. The unusual thing is that there are no more of them. The "Discontinuous" presence of natural disasters tells us that God is still in control, sustaining and preserving nature." (p.3) Catalán (2009), contemplates that "all the evils that affect man are part of a system, that everything happens for the good and at God's disposal." In an investigation made in the Island of Granada and after the passage of Hurricane Ivan, remarks how the children, according to their experiences and their perception of the disaster, point to God as one of the first factors, even as an explanation of the reason of why hurricanes occurred. They expressed that a hurricane is a phenomenon of nature, but It is God who sends them to earth. (Lorita 2010, p.15)

In this sense, when the meaning given to the origin of disasters is seen from a divine view and not as an imbalance of the nature-human system, other kinds of explanations emerge that limit actions to intervene, prevent and mitigate disasters. According to Romero and Maskrey (1993), these new justifications promote the people feelings of pain, passive waiting and resignation that makes repairing more difficult after a disaster and increases the perception of vulnerability.

This is how vulnerability is a global problem in which social, cultural, political, and environmental aspects are involved and interact with the environment, natural resources, people and their needs, consequently it affects their well-being, security, quality of life and projection towards the future. In that regard, vulnerability and its effects will

depend on the destruction that a threat can cause, on the preparedness to respond when the danger materializes and the capabilities of the population and nature to return to their previous living conditions or improve them.

Buriticá (2013) describes vulnerability as the result of unmet needs of modern society, that are associated with the prevailing development model which is materialized in the environmental construct. The degree of physical and functional vulnerability of a population, will depend on the degree of satisfaction or dissatisfaction of social needs, associated to the dimensions of development and that could be expressed as a sum of factors in which one or the other may have greater weight or relevance.

This is consistent with what was found in this research, by relating vulnerability to the dissatisfaction of basic needs. The children who are part of this subnormal settlement located in high-risk zones, must survive in precarious conditions, with poor public services, in overwhelming poverty, technically poorly constructed housing and with difficult access to health and education.

Children recognize that they live in a high-risk area, that the threats to which are exposed would destroy their homes, cause death to their family and that alters the neighborhood dynamics. However, their vulnerability increases by expressing that they cannot act because disasters are a punishment from God that manifests itself to pay off sins that the adult commits and that everyone must pay for it.

This demonstrates the little support from the institutions that work in the risk management in the city; also, the actions and strategies they use to managing knowledge are not effective because they don't listen to the population and much less to children about the meanings that disasters have for them, the reasons that produce it and what actions must be taken to prevent or mitigate them. If population is listened, their previous experiences and knowledge are taken into account, risk management in vulnerable communities will be more conscious as long as they are considered as active Participants in their protection, becoming leaders in their social transformation and environmental care.

## Final considerations

Children define disasters as manifestations of God's wrath for sins that the adult commits.

The meaning that children have about disasters and their origin does not allow them carry out prevention and awareness activities on risks and disasters. God is the one who decides how and when the dangers manifest and before this you can not do nothing.

Children know the dangers to which they are exposed, recognize the measures of mitigation that adults execute; however, such measures do not decrease the vulnerability, but aggravates situations of risk .

The field work allowed an approach with the children and the possibility of present their vision. This work is the voice of the participants related to that they feel and therefore it is possible to make recommendations to develop programs of risk management. Performing more research from children perspective would contribute to improve the conditions of the planet and to benefit the quality of life.

It is necessary to develop educational programs about the identification of the factors of risk caused by disasters, which allow deconstructing divine attributions and build meanings that promote prevention and how to act in case .

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## Author contributions

Anduquia PA participated in the design, preparation, collection of information, interpretation and writing of results and discussion. Development of scientific article

Forero C participated in the design, preparation, collection of information, information, and writing of results and discussion. Development of scientific article

## Competing interests

No financial, legal or political competing interests with third parties (government, commercial, private foundation, etc.) were disclosed for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc.).

## Bibliography

- Bauman, Z. (2007). *Miedo líquido. La sociedad contemporánea y sus temores*. Barcelona: Paidós.
- Buriticá, H. A. P., Peñaloza, A. H., Herrera, F. E. (2013). *Territorios resilientes. Guía para el conocimiento y la reducción del riesgo de desastre en los municipios Colombianos*. Bogotá: Federación Colombiana de Municipios.
- Caballero, J. H. (2007). La percepción de los desastres: algunos elementos desde la cultura. *Gestión y Ambiente*, 10(2), 109-115. Recuperado de <http://www.redalyc.org/articulo.oa?id=169419816009>
- Cáceras, J. G. (1998). Etnografía: El oficio de la mirada y el sentido. In J. G. Cáceras. *Técnicas de Investigación en Sociedad Cultura y Comunicación*. México D.F: Ed Adison, Wesley, Longman.
- Castillo, E. Vásquez, M. L. (2003). El rigor metodológico en la investigación cualitativa. *Revista Colombia Médica*, 34(3), 164-167. Recuperado de: <http://www.redalyc.org/pdf/283/28334309.pdf>
- Catalán, R. P. (2009). Voltaire: "Una reflexión filosófico-literaria sobre el terremoto de Lisboa de 1755. *Revista de Filología Románica*, 26, 187-204. Recuperado de <http://revistas.ucm.es/index.php/RFRM/article/view/RFRM0909110187A/9225>
- CEPAL (2014). *Manual para la evaluación de desastres*. Recuperado de [https://repositorio.cepal.org/bitstream/handle/11362/35894/1/S2013806\\_es.pdf](https://repositorio.cepal.org/bitstream/handle/11362/35894/1/S2013806_es.pdf)
- Cryder, C. H., Kilmer, R. P., Tedeschi, R. G., & Calhoun, L. G. (2006). An exploratory study of posttraumatic growth in children following a natural disaster. *American Journal of Orthopsychiatry*, 76(1), 65-69. Recuperado de <https://psycnet.apa.org/fulltext/2006-03377-010.html>. doi: [10.1037/0002-9432.76.1.65](https://doi.org/10.1037/0002-9432.76.1.65)
- Geertz, C. (2003). *La interpretación de las culturas*. Barcelona: Editorial Gedisa.
- Giraldo, A. O. (2012). *Caracterización Comuna 3 Manrique de la Ciudad de Medellín*. Recuperado de [https://www.kavilando.org/images/stories/documentos/CARACTERIZACION\\_COMUNA3\\_MANRIQUE\\_O\\_G.pdf](https://www.kavilando.org/images/stories/documentos/CARACTERIZACION_COMUNA3_MANRIQUE_O_G.pdf)

- Ledo I. C., González, H. L., Calderin, Y. T. (2015). Repercusión de los desastres en la salud mental de niños/as y adolescentes. *Norte de salud mental*, 13(53), 26-34. Recuperado de <https://dialnet.unirioja.es/servlet/articulo?codigo=5265701>
- Lorita, J. (2010). Exploración de las percepciones infantiles ante desastres naturales (huracanes): estudio de niños en Granada. *Revista Trabajo Social*, (78), 7-16. Recuperado de <https://repositorio.uc.cl/handle/11534/6535>
- Quintana, C. A. S. (2011). La naturaleza social de los desastres asociados a inundaciones y deslizamientos en Medellín (1930-1990). *Historia Crítica*, (43), 198-223. Recuperado de <http://www.scielo.org.co/pdf/rhc/n43/n43a11.pdf>
- Resolucion n° 8430, de 4 de Octubre de 1993*. Por la cual se establecen las normas científicas, técnicas y administrativas para la investigación en salud. Recuperado de <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/DIJ/RESOLUCION-8430-DE-1993.PDF>
- Rodríguez, A. M. (2008). *Dios y la Naturaleza*. Recuperado de <https://pt.scribd.com/document/287979528/AM-Rodriguez-dios-y-La-Naturaleza>
- Romero, G., & Maskrey, A. (1993). Como entender los desastres. In A. Maskrey (Ed.), *Los desastres no son naturales* (pp. 1-9). Colombia: La Red.
- Tanner, T., Rodríguez, G., & Lazcano, J. (2008). Los niños y niñas y la gestión de riesgos: Un rol clave en la prevención de desastres. *Medio Ambiente y Urbanización*, 69(1), 117-133. Recuperado de [https://www.preventionweb.net/files/7859\\_s9.pdf](https://www.preventionweb.net/files/7859_s9.pdf)
- UNICEF (2016). *Reducción del riesgo de desastres centrada en la niñez: contribuir al desarrollo resiliente*. Recuperado de <https://www.unicef.org/lac/informes/reducci%C3%B3n-del-riesgo-de-desastres-centrada-en-la-ni%C3%B1ez>
- Vásquez, P. A. A., & Pulido, C. F. (2018). Significado del desastre para los niños de la comunidad de la Honda Medellín. *Atas CIAIQ2018 - Investigação Qualitativa em Ciências Sociais*, Fortaleza, CE, Brasil. Recuperado de <https://proceedings.ciaiq.org/index.php/ciaiq2018/article/view/1715/1668>
- Velasco, H., & Rada, A. G. (2004). *La lógica de la investigación etnográfica. Un modelo de trabajo para etnógrafos de escuela* (4 ed). Madrid: Trotta.
- Zhang, Y., Kong, F., Wang, L., Chen, H., Gao, X., Tan, X., ... Liu, Y. (2010). Mental health and coping styles of children and adolescent survivors one year after the 2008 Chinese earthquake. *Children and Youth Services Review*, 32(10), 1403-1409. doi: [10.1016/j.childyouth.2010.06.009](https://doi.org/10.1016/j.childyouth.2010.06.009)