

Technical and scientific police actions relevant to the PNPDEC, in the landslide on the hill of Boa Esperança - Niterói RJ, in 2018

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ABSTRACT

This article is based on the integration of actions between the Technical and Scientific Police units and the public institutions active in incidents of accidents and disasters involving mass displacement, with the objective of listing, according to the procedures implemented in 2018 by the Regional Technical and Scientific Police Post, when at the event of Morro da Boa Esperança in Niterói/RJ, relevant actions for the proposition of a protocol that assists the institutions that work in the Brazilian civil protection and defense. Where the work of the experts and employees of the Regional Technical and Scientific Police Post in attending to the site of the landslide, which occurred in Morro da Boa Esperança, Piratininga, on November 10, 2018, around 5 am, was fundamental. This event served as an experience to verify the effectiveness of all the transformations that were implemented in the Post, in its physical facilities, with new examination techniques, execution of the Strategic Action Plan idealized by the professionals of the Post and use of operational vehicles. The result of the research carried out *in loco* by researchers who participated directly in the event, as well as in the bibliographic and documentary research, together with a case study presented at the Fluminense Federal University – UFF, pointed to topics of actions, which lead to the future elaboration of a planning and elaboration of this national protocol, as a model to be applied by the Civil Police. as partner institutions and constituents of the great area of civil protection and defense in the country.

Keywords: Strategic Planning, Technical Police, Scientific, Civil Protection and Defense.

INTRODUCTION

To work with risk is to deal with cognitive and structural activities, where professionals deal with uncertainty in their goals, conditioned to contexts of incidents seen as accidents or disasters, as occurred in the landslide in Morro da Boa Esperança, Niterói/RJ, in 2018.

It is a fact and much discussed in the academic and even professional world, the lack of synchronism between the activities performed by institutions that respond to major disasters. And it is no different with the actions of the Technical and Scientific Police during the occurrences in which they participate.

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The Technical and Scientific Police provides assistance to occurrences regardless of the existence of victims, as such, the expertise has to be carried out, even if there are no deaths or bodily injuries.

The analysis carried out on the performance of the Technical Police in the disaster that occurred in Morro da Boa Esperança, Niterói/RJ, in 2018, points to the performance of the expert police officers in a participatory way together and in partnership with the city halls, in the care of the exposed population, especially in the case of identification of living and dead people and also in the release of corpses.

PROBLEMATIZATION

How can the Technical and Scientific Police act as an institution of protection and civil defense in the occurrence of accidents and disasters?

OBJECTIVE

List, according to the procedures implemented in 2018 by the Regional Technical and Scientific Police Post, when at the event in Morro da Boa Esperança in Niterói/RJ, relevant actions for the proposition of a protocol, which helps the institutions, which work in the protection and defense of Brazilian civil services.

DEVELOPMENT

INITIAL CONSIDERATIONS

The notion of risk can be defined as the product resulting from the combination of the frequency of occurrence of an event during a given period, multiplied by the magnitude of the damage that such event can cause to individuals, to the general public, to properties, both private and public, and to the environment (PORTO et al., 1998).

Poletto and Koller (2006) conceptualize risk as a dynamic process, going beyond a simple static occurrence, since it encompasses a series of implications in interactions and their specific developments. Consequently, the presence of risk can trigger a succession of cascading events, depending on their characteristics of severity, duration, frequency and/or intensity, affecting an entire society.

Domènech, Supranamiam and Sauri (2010) show that risk-related information plays a role of considerable relevance in the context of society's growing concern about the adoption of adaptive measures to guide its future behaviors.

It can be noted, then, that risk perception and risk situation are not always intrinsically linked, since the latter refers to a dynamic system, characterized by its mutations and composed of an intersection of risk factors (BONZO, CASTRO, DE LELLIS, SAMANIEGO, & TISSERA, 2001).



Coelho (2024) In this context, the research aims to describe the hydrogeological disaster that occurred in Morro da Boa Esperança, Niterói/RJ, in 2018, in addition to proposing improvements in the action plans of the Civil Police of Rio de Janeiro based on the integration of all agencies involved, in the face of risk management.

THE IMPORTANCE OF FORENSIC EXPERTISE AT THE SCENE OF ACCIDENTS AND DISASTERS

Expertise is essential and fundamental in criminal proceedings, in which materiality is evidenced and introduced into the legal world as a decisive factor in the sentences handed down by magistrates, serving as a basis for police officers, prosecutors, public defenders, lawyers and all those who are part of this scenario (LOPES JÚNIOR, 2021).

The forensic expert present at the scene of occurrences is the one who initiates the work of the Technical and Scientific Police. It is he who releases the victims for complementary examinations and also the place of the event for actions to search for material goods and documents, reconnaissance of the terrain, containment engineering studies and for reconstruction (REIS, 2006).

The purpose of forensics is to materialize the traces of a crime in an impartial manner, and in a visual way, by means of equipment and/or laboratory analysis (REIS, 2006).

Thus, when conducting an expert examination, several factors influence this activity, based on the Code of Criminal Procedure (CPP - Law No. 11,690, of 2008). In order for expert examinations to be reliable in their statements, the expert expert needs to have a training that is compatible with the fact established (COELHO, 2024).

EXPERT ANALYSIS

Coelho (2024, apud Andrade 2021) states that in Law, it is usually said, colloquially, that the hearings of those involved are the "prostitutes of evidence", an expression used among jurists because it is subjective evidence and, therefore, subject to questioning, and material evidence is essential, which is obtained by expert examinations in the three areas: criminal expertise, medico-legal expertise and papilloscopy.

According to Porto (1969), there are three types of evidence: testimonial, documentary and material, but expertise seeks, through technique and science, expertise to provide material evidence.

The judge will not be bound by the report, and may accept or reject it, in whole or in part (Article 182 of Decree Law No. 3,689, of October 3, 1941, Code of Criminal Procedure – CPP).



Necropsy and reconnaissance for release of corpses

Identification of living or dead people is done through three tests: genetic mapping, analysis of deoxyribonucleic acid (DNA test), dental arch and fingerprints. The first two are performed by forensic experts, and the last is performed by papilloscopists, the latter being the most common due to its practicality and faster response (JOBIM, COSTA, SILVA, 2012).

The identification of living and dead people in accidents and disasters is of fundamental importance to society, because if the person is dead, it becomes easier for them to be released for burial. However, when the person is alive, it is common for documents, money or cards to be lost, leaving them without immediate conditions to identify themselves and maintain themselves financially to meet their immediate needs. Therefore, identification is essential to minimize the difficulties of victims in a disaster (COELHO, 2024).

Some actions of the Technical and Scientific Police are congruent with the guidelines and objectives of the National Policy for Civil Protection and Defense, with legal provision in Law 12,608 of 2012 and Law 14,750 of 2023, which consider environmental factors and social aspects regarding the stimulation and promotion of resilient cities, through the fight against the occupation of environmentally vulnerable and risk regions, seeking, equally, the relocation of the population of these areas, which is observed in BRAZIL (2012 and 2023).

Therefore, it is important to take immediate action by the entire medico-legal expert service, not only the medical examiners, but also the dental experts, autopsy technicians and employees of the Death Sector. Thus, the Technical Police must work in complete harmony in all its sectors, with previously planned and trained actions and functions distributed within the difficulties that may be requested.

Site Preservation and Chain of Custody

Coelho (2024) points out that preservation and chain of custody are essential in the collection of traces, but if certain precautions are not followed in transport, storage or caution can generate doubts and this evidence can be discarded for the simple fact that there may have been manipulation, contamination or interference that may alter the forensic examinations. Therefore, a national model was developed to maintain the chain of custody according to Federal Law No. 13,964, of December 2019 (BASIL, 2019).

In places of accidents and disasters where the Technical Police is required, such as fire, collapse, traffic accident and others, the main objective is to save lives. When it comes to landslides, in addition to saving the lives of people who are at risk, there is a social priority for the removal of corpses, according to Rio de Janeiro (2021). These actions often end up rendering a trace useless or excluding, but, in these events, there are many others that, in the vast majority, allow for more accurate examinations and consequently serve as a basis for the conclusion of expert examinations (COELHO, 2024).

METHODOLOGY

The methodology used in the writing of the research of this article is based on a qualitative research based on the work of Coelho (2024), who searched through a case study of the disaster, which occurred in Morro da Boa Esperança, in 2018, located in Niterói/RJ, where an empirical investigation was carried out that examined the forensic practice in the context of crisis involving several institutions.

In addition, in conducting the research, a qualitative and descriptive approach was adopted, since it is intended to "describe the complexity of a specific problem, analyze the interaction of specific variables, understand and classify the dynamic processes experienced by social groups" (OLIVEIRA, 1999).

Qualitative research seeks a thorough understanding of the meanings and situational characteristics presented by the interviewees. In turn, Minayo (1999) emphasizes that qualitative research focuses on the question of meaning and intentionality inherent to actions, relationships and social structures, considering both their emergence and their evolution as human constructions of meaning.

In order to fulfill the established objectives, a documentary research and an *on-site research were conducted* with the Civil Police of the State of Rio de Janeiro, aiming to characterize it historically and situate it in space and time. And, considering the entire structure of the Regional Technical and Scientific Police Post – Niterói/RJ, as well as its application during the geological disaster that occurred in Morro da Boa Esperança, Piratininga, Niterói, on November 10, 2018, according to Coelho (2024).

RESULTS AND DISCUSSION

MORRO DA BOA ESPERANÇA, NITERÓI/RJ

It is clarified that the reported data are based on the reports contained in the site examination report (Report No. SPC 9.543/2018 of Procedure 081-03836/2018), as described in Coelho (2024).

The occurrence of the disaster

On November 10, 2018, around 5 a.m., the Fire Department was called (O DIA, 2018) to a landslide associated with block rolling, with fatal victims, in the community of Morro da Boa Esperança, Piratininga, Niterói/RJ, with access through Carlos Chagas Street, at coordinates 22°56'20" S and 43°03'12" W (**Figure 1**).

Figure 1: Aerial View of Morro da Boa Esperança. Source: Google Maps, accessed on 01/20/2022.



Source: Adapted from Rabbit (2024)

The Military Police of the State of Rio de Janeiro and the Military Fire Department of the State of Rio de Janeiro arrived at the scene for first assistance: the Military Police of the State of Rio de Janeiro, to isolate the site (**Figure 2**); and the Military Fire Department of the State of Rio de Janeiro, to assess the situation, make the necessary restraints and, after these actions, then start the procedures for the rescue.

Figure 2: Photograph of the access to the venue. Source: Authored by the authors.



Source: Adapted from Coelho (2024).

The Military Police, in turn, reported the fact to the police station in the area, the 81st Police Precinct, which contacted the police duty of the Regional Technical and Scientific Police Post – Niterói/RJ. Then the police authority and the forensic expert on duty went to the scene.

When they arrived, they found the seriousness of the situation (**Figure 3**) and the forensic expert initiated the procedures for care in places of great repercussion with a high level of complexity for this type of event and the number of deaths well above the routine of this post.

Figure 3: Images of the access to the community and the location to be surveyed. Source: Google Earth, 2022.



Source: Adapted from Rabbit (2024)

DISCUSSION

The procedures observed for the performance of the Civil Police Expertise of Rio de Janeiro in case of a major accident or disaster, based on the action carried out in Morro da Boa Esperança, in Niterói, RJ, were observed with the performance of several actors, who acted in a participatory way and together, leading to a result that pointed to a sequence of actions, which are described, as follows, according to Coelho (2024).

Sequence of action:

- Receipt of site expertise request.
- Triage in the request to know the size of the order;
- After detecting the event, check if it is a case of landslide with collapse and if there are fatalities and homeless people, and then immediately report it to the head of the local forensics.
- The head of the local forensic examination, as soon as he learns of the fact, shall inform the director of the post or institute.
- The director concerned shall immediately report to the director of the General Department of



Technical and Scientific Police.

- If the fact is in an area where there is a Regional Technical and Scientific Police Post, the director of this unit must activate the Major Events Emergency Plan and make contact with all the heads of the services involved, giving the general alert of readiness.
- Since the fact is in a capital area, where the institutes operate separately, the director of the Institute of Criminalistics must request the Director General of the General Department of Technical and Scientific Police to activate the Emergency Plan for Major Events, putting on standby the Institute of Forensic Medicine, the Institute of Papilloscopic Identification and the Institute of Identification of Forensic Genetics.
- The director of the post or institute, as the case may be, must immediately go to the site and, upon arriving there, report to the command of the search and rescue area, which may be the Civil Defense or the Fire Department, to inform the presence of the site forensic team so that, during the searches and the finding of corpses, Perform perinecropsy examination, releasing them even for necropsy examinations.
- The director must provide a support point for the work of criminal forensics, and may make use of standardized vehicles for such events, such as buses and vans, if there is no suitable place.
- The director should arrange for other forensic experts to assist in the perinecropsy examination, if the demand is great, and leave another forensic expert to attend to the requests of the on-call forensic examination of the sites.
- If there are no conditions to transport the corpses quickly to the institutes of forensic medicine or if these institutes do not have the physical conditions to meet the demand, the director must arrange for the temporary installation near the place of the event so that they can be autopsied, verifying the need for a refrigerated truck.
- If the demand is great, the Director General of the General Department of Technical and Scientific Police should provide, together with the area unit and from other regions, professionals to be involved, such as: forensic experts, autopsy technicians, autopsy assistants and papilloscopists, formulating a schedule due to the demand presented to expedite the services.
- The Director, in order to speed up the release of corpses, should contact those responsible for the municipalities: for the supply of a cadaveric urn; with those responsible for the burial place of the victims, for those who cannot afford the expenses; with those responsible for the Secretariat of Social Action to expedite, together with the registry offices, the release of the death certificate and the transfer of their relatives.
- Due to the problem that hinders the release of corpses to relatives of victims who died and who



were also participants in this event, losing all their documents, there must be a protocol for the directors to release a provisional document with their decadal identification (as long as it is from the state where the event occurred), which will serve for the procedures of releasing the corpses and removing new documents. If the documents are from other states, there should be another protocol between the identification institutes to solve the problem as soon as possible, minimizing the suffering of the people involved.

- After the release of all the corpses, the director must order the head of the special forensics to compose a team of specialists and contact the police authority to, as soon as the site is cleared by the State Civil Defense or Fire Department, interdict the site and, as soon as possible, carry out field expertise to determine the cause of the event.
- After the field survey to prepare the expert report, the director must determine the team designated for its preparation to summon professionals specialized in each area involved and, in the absence of professionals qualified for this purpose, use professionals of proven knowledge or from public universities.

CONCLUSIONS

Based on the actions taken in the events and their consequences, it is then possible to point to data for the elaboration of an action protocol for the Civil Police Secretariats to use, as a basis, in cases like the disaster studied.

Thus, some procedures and actions were listed, such as paradigms, implemented by the Regional Technical and Scientific Police Post, in the Morro da Boa Esperança disaster in Niterói/RJ, in 2018.

This, because a Regional Technical and Scientific Police Post is a very complex unit in terms of its area of operation. To manage it, several management tools were used that facilitated the understanding because it is a service that involves multidisciplinary knowledge.

These tools were used in a partial way, adapted to the structure of a Technical and Scientific Police, with applicabilities successfully tested in the performance of the expertise in the landslide of Morro da Boa Esperança, Niterói/RJ.

It was found, then, that it is necessary for each unit of the Technical Police to have a well-defined strategic planning to act in cases of need, considering that the events, due to the unexpected occurrence of incidents, are they accidents or disasters.

And the field laboratory, now used in the research, was the disaster in Morro da Boa Esperança, Niterói/RJ, for the idealization of this strategic planning, even if situational, involving multidisciplinary



teams in the management, in the preparation of complex reports, according to the materiality raised, which also served as a basis for the establishment of police investigations.

Finally, it was found that the management of a Technical and Scientific Police unit should be based on a very detailed strategic planning, as it is a place of service not only to Justice and the judicial police, but also and mainly, to society. Thus, it is suggested the creation and elaboration of a national protocol aimed at the performance of the Technical Police as an institution of protection and civil defense in Brazil.



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