

# Unidentified Bodies in the Mexican Context

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**ABSTRACT:** The discovery of clandestine graves has become a recurrent event during the last ten years in Mexico, and there could be more than roughly 2000 distributed all over the country (Guillen et al. 2018). Mass graves specifically are less well-known, reported, and addressed; they are located in municipal or state cemeteries which house unidentified bodies and of which there is no official census. An estimated 26,000 bodies are considered unidentified (SEGOB 2019a), and every year in Mexico City alone almost 500 bodies are sent to the mass graves in cemeteries. Comprehensive efforts in forensic science are required to mitigate the high percentage of unidentified bodies and coordinate the correct burial and registration of bodies in mass graves. The ongoing humanitarian crisis and the complexity of the context require that investigators look at overlaps between cases of disappeared persons and unidentified bodies, and between searches and identification.

**KEYWORDS:** Forensic anthropology, unidentified bodies, mass grave, Mexico, human rights

## Introduction

Latin America shares a common history: decades of dictatorships marked by systematic violations of human rights, which were included in plans or projects against the establishment of socialism through the implementation of authoritarian regimes in the context of the collapse of liberal democracies (Feierstein 2009; Presidencia de la Nación 2011). Under the National Security Doctrine, Latin America experienced an unprecedented occupation of its territory: torture, sexual violence, and all types of systematic and extrajudicial executions were normalized. In Guatemala it is estimated that approximately 37,000 people died as a result, and in Argentina human rights violations affected the entire population, without regard to sex or age (CONADEP n.d.; Sabino 2016).

Even though in Mexico the origin of the violence did not follow the same guidelines as in the rest of Latin America

(violence was not considered to have been unleashed by military dictatorships), its consequences are the same and have been perpetuated over decades. These conditions continue today to the extent that crimes like human trafficking or slavery form part of a very lucrative business in which state security forces also participate. These crimes are part of the origin of disappearance (López 2019). Between 1960 and 1980 what is known as the “Dirty War” was established, a period defined by persecution, torture and forced disappearances carried out by the state (CNDH 2020; Guevara & Chávez 2018). The cases of disappearance of Lucio Cabañas or Rosendo Radilla, which reached the Inter-American Court of Human Rights in 2001, are only two of the many examples from that period. Under this “war,” most of the disappeared persons were peasant farmers presented as members of guerrilla or leftist groups (Rodríguez 2017). In addition, at the end of the 1960s and beginning of the 1970s, massacres of students, like that carried out on October 2, 1968 in Tlatelolco, or on June 10, 1971, known as the Corpus Christi Massacre or the Hawk Strike, demonstrated the use of indiscriminate state repression and the establishment of disappearance as a normalized method of social punishment.

One of the cruelest phases in the country’s recent history was the War on Drugs (2006–2012), which took place under the presidency of Felipe Calderón Hinojosa. In 2015, a report by Human Rights Watch stated that 22,000 people had disappeared since 2006, their whereabouts remained unknown in April 2014, and no one had been sentenced for the crimes (Human Rights Watch 2015). The country underwent an intense militarization which brought over 2,000 soldiers to some cities including Ciudad Juárez, which during

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Operation Conjunto Chihuahua (2008–2012) left 7,000 people dead and around 1,000 tortured. Officials did not conduct a reliable count of disappearances (Corrales & Padilla 2019). Under President Enrique Peña Nieto, the numbers of homicides, kidnappings, torture, and forced disappearances seem to have increased. Cases like the disappearance of 43 students in Ayotzinapa attracted international attention, and the problems of forced disappearance and clandestine graves began to come to light, after decades (EAAF 2016).

In addition, organized crime moves billions of dollars each year as a result of its involvement in human trafficking, extortion, slavery, and even the purchase of migrants (López 2019). In many cases criminal groups are involved in forced disappearance with the complicity of state workers (CNDH & United Nations 2015; Guevara & Chávez 2018). According to Federico Mastrogianni (2014), organized crime estimates the value of an immigrant to be between \$2,000 and \$5,000 USD. They are “sold” to criminal groups, often by federal or military police or migration agents. More than 150,000 migrants travel across the country every year, following dangerous routes. In 2009, 9,578 migrants were reported kidnapped in just six months, and between April and September 2010, there were more than 11,300 kidnappings of members of this vulnerable group (CNDH & United Nations 2015). One example that moved the country was the appearance of 72 Central and South American migrants massacred at the hands of criminal organization “los Zetas” and piled into an industrial park in San Fernando, Tamaulipas, or the Cadereyta massacre, in which the bodies of 49 migrants were quartered, to sow fear (Nájar 2010; Pérez 2015).

As a result, Mexico appears in the list of the most dangerous countries in the world, with a homicide count that provokes comparisons to Syria in the news media (Gallegos 2017; World Atlas 2019). The numbers point to 390 clandestine graves found between 2009 and 2014, with 1,418 bodies and 5,786 human remains. The states of Guerrero, Jalisco, Chihuahua, Coahuila and Tamaulipas have the highest numbers of graves (IBERO & CMDPDH 2018). Since President Andrés Manuel López Obrador took power and the implementation of the Official Graves Registry began, 81 sites have been located with 222 clandestine graves and 337 bodies found (Government of Mexico 2019a), although according to independent reports there could be more than 2,000 graves of this kind in the country ([adondevanlosdesaparecidos.org](http://adondevanlosdesaparecidos.org) 2018).

In addition to the issue of clandestine graves, there are 74,214 people whose relatives do not know where they are. Of that number, 37,506 appear in the National Registry of Missing and Disappeared Persons, while the remaining 36,708 correspond to bodies of people that have not been identified. After their examination in forensic medical services the bodies are sent to mass graves in municipal or state cemeteries throughout the country, of which there are no official counts (Martínez 2019).

The forensic crisis in Mexico is explained by its complex nature, in which disappeared and unidentified persons and clandestine and mass graves coexist. International bodies and independent teams attest to the fact that inattention for more than ten years has made the problem worse, to which is added the urgency of giving answers to relatives of victims through the creation of truly independent public policies and the strengthening of institutions (Sotomayor 2019; Souza & Franco 2019). The purpose of this review article is to provide information on the current situation of unidentified bodies by explaining the investigations that have been carried out, published figures, the collapse of forensic medical services, and the absence of strategies for managing the burial of bodies in mass graves. The current situation in Mexico requires coordinated and comprehensive forensic involvement, which takes stock of the multifaceted complexity of the problem.

### Unidentified Bodies (NN)

NN individuals (derived from the Latin *nomes necio*, “unknown name”) refer to persons who remain unidentified following their examination in the forensic medical service. It is necessary to distinguish between unidentified individuals and unclaimed identified individuals. The unclaimed individuals are those persons identified after their legal medical necropsy but who have not been claimed by family members. The National Information System of Missing and Deceased Persons (SINPEF, for its initials in Spanish) adopts the term “unidentified deceased person” (PFsI) and “unclaimed deceased person” (PFnR). The SINPEF registry is composed of three different databases, and we highlight two (CNDH 2018) that contribute to the recount of bodies of disappeared or unidentified individuals in the country:

- Lost, disappeared, or missing persons (SINDE), with 32,236 registered.
- Deceased, unidentified persons (SINFANI), with 16,361 registered.

The Interior Secretary (SEGOB) admits that it does not have official figures but rather estimations, calculating a total sum of 26,000 unidentified bodies (Arleta 2019). These estimates refer to an active process, and in most of the country the management of corpses exceeds the capacity of forensic institutions, with an estimated six bodies being sent to a mass grave daily (Michel 2013). Bodies of anonymous individuals, the poor, missing, abandoned elderly persons, migrants and murder victims comprise the population of unidentified or unclaimed bodies. In Mexico City (CDMX), of the approximately 5,000 corpses that are received each year, 1 of every 10 cannot be identified (Miranda 2019). From January 2014

to November 2018 the mass grave of the country's capital received a total of 2,852 bodies of which only 30 were able to be identified and later claimed. According to the Forensic Sciences Institute (INCIFO) of the Superior Court of Justice, in the CDMX, every year since 2013 an average of 470 bodies end up as unidentified, meaning almost 40 per month (Hernández 2017).

In other states of the republic the figures are higher, like in Chihuahua, which sent close to 3,770 bodies to mass graves from 2007 to 2018, or Nuevo León, which buried 1,428 bodies from 2010 to 2017 (Martínez 2019). Miguel Alemán, a border town in the state of Tamaulipas, despite having only 27,000 inhabitants (SEDESOL 2010), was the epicenter of a wave of unprecedented violence that affected four neighboring municipalities during the period 2010–2016. (Guerrero, Mier, Camargo and Díaz Ordaz). More than four thousand people died during that period (Ruiz & León 2016), with more than half of them buried as unidentified deceased persons (PFsI) in municipal cemeteries in different towns.

But many of the bodies that are categorized as unidentified are not related to experiences of violent death. In the capital there are 4,354 people who live in the street, according to the census carried out in 2017 by the Institute for Assistance and Social Integration (IASIS), where hypothermia is documented as one of the most frequent causes of death (Ladata 2017). The Institute of Assistance and Social Integration offers social assistance services in ten centers, but discrimination against street residents plagues them until their deaths. Article 347 of the General Health Law (1984) stipulates that corpses unclaimed within 72 hours after death and those whose identities are unknown will be considered unknown persons. The same procedures are followed until final burial in a mass grave in the absence of identification and/or reclamation of the body (Mendoza 2013; Redacción Chilango 2018).

The high percentages of NN bodies can be explained by insufficient resources, the lack of centralization of all available information, and the methodological gaps in national protocols (PGR 2012, 2015a, 2015b). In 2014, the Criminal Investigation Agency (AIC) of the Attorney General's Office (PGR) and its General Expert Services Organization released the "Diagnostic of the Infrastructure and Operativity of Forensic Services" in which officials evaluated the precarity of state Forensic Medical Services. This diagnostic demonstrates the lack of specialized personnel and infrastructure, as well as the absence of standardization in working with unidentified or unclaimed bodies, and the lack of management and control of burials in mass graves. The state medical forensic services operate with a total of just 442 doctors and only 648 experts specialized in the identification of bodies. Of the 32 federative entities, in 18 forensic genetics is employed, in 22 fingerprints are taken, and in only 7 forensic anthropology is taken into account (Herrera 2018). It is

estimated that around 5,900 forensic specialists operate in the country, and an insufficient number of forensic anthropologists and archaeologists, of whom there are just 60 in the whole country (Redacción El Imparcial 2019).

The exhaustive analysis of the biological profile, the targeted individual profile, and the study of the materials associated with the body comprise the principal elements of analysis in the process of human identification. These elements and key steps appear in the section on the treatment of corpses and human remains in order to obtain postmortem information in the national protocol (PGR 2015b). In the case of unidentified bodies or those that have been tentatively identified, the doctor should ensure that a basic file is available, which contains information on various elements: the external and internal description of the corpse, description of clothing, photographs, postmortem fingerprint chart, dental examination, reserve samples, and a record of the corpse's final destination. But as many reported cases in recent years show, the most essential processes that guarantee the identification of bodies are omitted (Milenio 2016; Villa 2016; Zamundo 2016).

## Removal of Body and Burial in Mass Grave

In Mexico's current context, the elevated NN body counts, lack of resources, and saturation of spaces justify the use of burials to protect these bodies so that perhaps they can be identified subsequently after recognition and reclamation by family members. The term "mass grave" applies generally to the place in which the mass burial of unidentified bodies takes place, with legal approval and humanitarian or sanitary objectives. These burials are associated with events like famines, epidemics, natural disasters or armed conflicts (Fortuna & Nociarova 2019; Thieren & Guitteau 2000). Other proposed definitions suggest that a mass grave should contain a minimum of six individual bodies buried in a disorganized way (Skinner 1987), or a minimum of two bodies in physical contact with one another (Mant 1987). In contrast, Schmitt (2001) argues that not only should it contain a minimum of two bodies, but that these bodies should share the manner of death. It is important to emphasize the distinction between mass grave and clandestine grave; the latter involves illegal burials that hold remains of persons executed extrajudicially (Jesse & Skinner 2005).

In Mexico, the bodies which after their forensic examination fall into the category of NN can follow different paths before their burial in a mass grave. In CDMX, some of these bodies are sent directly to the mass grave located in the Civil Cemetery of Dolores, and others are kept in cryogenic chambers until the request comes from the ministerial authority. However, most are sent to educational institutions "on temporary loan" for teaching and research purposes (Guazo &

Hernández 2015). Agreements between the Superior Court of Justice and the INCIFO (Forensic Sciences Institute) with different institutions like the Military Medical School or medical faculties in different universities, among them the National Autonomous University of Mexico (UNAM) or the National Polytechnic Institute (IPN) (PGJDF 2013). For instance, the Faculty of Medicine at UNAM receives around 150 NN bodies every year which remain there on temporary loan for 12 months and seven days, to be removed subsequently and buried in a mass grave.

The largest cemetery in CDMX, the Civil Cemetery of Dolores, houses in its 240 hectares the buried remains of famous people and the only mass grave in the city (Figures 1 and 2). The mass grave has a surface of 8,000 square meters and contains 300 graves, where each month they bury between 60 and 80 new NN bodies (El Universal 2016). Since approximately 2000, officials have maintained a registry of the corpses that enter the mass grave. These identification records are held by INCIFO. The Regulations of Federal District Cemeteries (1984) establish that the body of an unknown person may only be sent to a mass grave if it is linked to an individual certificate number and/or investigation file, and it must comply with the requirements set out by the Health and Civil Registry agencies. The procedures that govern the movement of NN bodies to a mass grave are the National Penal Procedures Code (CNPP 2016) and the chain of custody protocol (Acuerdo a009 DE 2015), which provides that in the absence of identification or reclamation, individuals will be transported to a mass grave, and removal and burial falls to the expert services. According to these procedures, the designation and marking of spaces are the responsibility of the municipal cemetery and the health secretary. But there is no compliance with the requirements established in the protocols or the management of the graves, as the cases of misplaced bodies presumably buried in mass graves demonstrate.

The case of the Palo Verde cemetery in Xalapa (Veracruz) exposes a series of irregularities that are often discussed regarding the management of NN bodies and their burial in mass graves (Milenio Digital 2016). Complaints filed by relatives who are members of organizations (*colectivos*) searching for their family members revealed the negligence committed by the public prosecutor's office: manipulating and hiding corpses, losing bodies, carrying out irregular burials or faulty exhumations in efforts to recover bodies claimed by family members (Villa 2016; Zamundo 2016). Records of NN bodies and their location in mass graves have been reported as nonexistent or lost, and the fact that the bodies are sent to the grave without even a reference label is evidence of the systematic lack of compliance with protocol. In addition, the discovery of a body is not reported to the deceased individual's relatives even when they have previously filed a report of the person's disappearance and the investigation file remains open. Officials also refuse to rely



FIG. 1—Mass grave area in the Dolores Civil Cemetery, Mexico City.



FIG. 2—Example of a mass grave in the Dolores Civil Cemetery, Mexico City.

on independent experts who can shed light on a case in the context of a lack of trust in official institutions (La Opinión 2018).

Another example is the case of the mass grave in the Municipal Cemetery of Tetelcingo (Morelos), which has corpses sent from the Regional Expert Services Coordinator. The irregularities in the burial of bodies and the lack of compliance with protocols were revealed in a report by the Autonomous University of the State of Guerrero (UAEM 2016), which indicates that crimes against humanity were committed. Subsequent investigations by Animal Político (Ureste 2016), in addition to the human rights-centered journal *Resiliencia* (Robledo et al. 2016) made public the details of these failures and neglect carried out by authorities of the state Public Prosecutor's office. During the incursion into the mass grave in which 150 bodies were allegedly buried, only 177 were found and it is presumed that there is a third grave that still has not been investigated. Additionally, 34 of the bodies did not have investigation files and autopsies had not been performed on 12 of the bodies, despite that nine of them showed marks of violence. Of the 117 total bodies buried, 84 showed evidence of violence and/or torture; four cadavers did not have skulls and other bodies had suffered amputations of limbs or even appeared with organs removed for no apparent reason.

During the burial of the bodies by the public prosecutor's office, the use of protocols and manuals for the handling of cadavers, their identification, and the protocols for the treatment of remains and graves were broadly ignored. Officials failed to set aside and catalogue clothing and elements associated with the bodies, which could have provided information for their identification. A forensic anthropological analysis of the remains was never done, reducing the investigation to taking four or five bone samples for DNA analysis in 97% of the remains. Upon analyzing the layout and characteristics of the graves and the corpses after the scientific exhumation, it was clear that it was “a burial with characteristics of clandestinity, similar to the pattern of illegal burials carried out in zones controlled by criminal groups” (Ureste 2016). Undertaking the exhumations also created many problems, given that the authorities themselves lacked knowledge of aspects like the location and dimensions of the grave, the final arrangement of the buried individuals, etc. Another alarming element was the lack of inventory or packaging of the bodies or the absence of spaces established for the observation of relatives, collectives, etc. 96% of the bodies had been buried with a tag that contained information from their investigation files, but in 50% of these it was impossible to read the information, and in the other 23% the labels inside the plastic bottles had been lost (Robledo et al. 2016).

The irregularities in the burial of bodies in mass graves are also reflected in the investigations undertaken by the Mexican Forensic Anthropology Team (EMAF, for its initials in Spanish) (Pérez Guzmán 2018). They establish critical points on the journey of the NN bodies from the forensic medical services (SEMEFOS) to their burial in mass graves,

where they highlight the absence of guidelines during their stay in SEMEFOS, which could be from 72 hours to years, and the lack of standardization in the labeling system. Moreover, records of the chain of custody are poorly done or in some cases are completely absent. Transport of the body to the cemetery is sometimes done by funerary services, in contrast to the requirements established in the previously mentioned procedures. Another serious problem is the inscription in the cemetery registry. Generally, cemeteries do not maintain a systematic record of the entry of NN bodies or their location or position in mass graves, and everything is in the hands of the administrator of each cemetery. The EMAF carried out an estimation of the typologies of existing mass graves in cemeteries and found that they lack uniformity. Collective (diachronic) burials can be found, as well as multiple (synchronic) and individual burials (Almela 2012), directly in the ground or in cement, in dispersed rows or grouped together in a peripheral part of the cemetery.

The development of a comprehensive strategy that respects the different procedures involved, from the departure of NN bodies from the legal medical service to their burial in a mass grave is necessary. The unidentified individuals, according to Article 128 of the fourth section of the General Law on Forced Disappearance (. . .) (2017) “cannot be incinerated, destroyed or disintegrated, nor separated from their belongings.” In addition, according to Article 56, “. . . the corpses of unknown persons that the Forensic Medical Service remits for burial in a mass grave should be uniquely identified with the corresponding certificate number.” Despite the fact that current laws define it this way, the situation of accumulation of cadavers in some SEMEFOS in the country has reached such a degree that certain public prosecutors, like that in Jalisco, decided to start cremating NN corpses. In Jalisco, the rate of disappearances has been increasing since 2007. The most recent reports indicate that there are 7,695 people reported as disappeared there (CEDHJ 2018). Due to the quantity of unidentified and unclaimed corpses that have arrived to the public prosecutor's facilities, in line with the General Health Law (1984) which allows for the use of a crematory oven in the case of imminent sanitary risk, a total of 1,559 bodies have been incinerated from 2006 to 2015 (Cabral 2019; Robles 2019), or one-fifth of disappeared persons in the state.

Also in Jalisco, in 2018 a truck with the name Thermo King #1 began circulating in various municipalities of the state with 273 cadavers inside. Subsequently the existence of a second truck Thermo King #2 came to light. The number of unidentified and unclaimed persons that were found in the two trucks and in the facilities of the Jalisco Forensic Sciences Institute rose to 444, some of which have remained in the Forensic Medical Service for up to 34 months (CEDH 2019). The intervention of the National Human Rights Commission on the violation of postmortem rights, as well

as the undignified treatment that the bodies received and the uncertainty that the episode generated in Mexican society, demonstrates the urgent need to address the treatment that unidentified and unclaimed bodies in Mexico receive.

Another recent example of legal mass burial of unidentified bodies in a mass grave in Mexico is what happened following the 8.1 magnitude earthquake that took place September 19, 1985 in Mexico City. The number of deceased according to the Mexican Red Cross reached 10,000. In this context, the unidentified bodies went to mass graves in two cemeteries: The Civil Cemetery of Dolores and the Civil Cemetery of Lorenzo Tezonco. In the former, around 1,600 victims were buried. Between 25 and 30 people dug more than 15 graves of 1.5 by 2.5 meters and 3 meters deep, during eight consecutive days for 24 hours per day. The cadavers, according to the gravedigger's comments to a media source, "came wrapped in sheets, and they placed them into the graves as they arrived, laid them lengthwise or across, however they fit" (Pérez & Casillas 2015). In the Lorenzo Tezonco cemetery, the dynamic was different. Seven rows of graves with depths of between two and nine meters were dug, and during a 20-day period approximately 1,155 to 1,300 corpses were buried there. 800 identified but unclaimed bodies were also buried in another grave close to these rows (Milenio 2017; Pérez & Casillas 2015).

The adequate management of cadavers is one of the more complex aspects when the capacity of the systems is overwhelmed, and burial allows for prolonged temporary storage. International guidelines address the management of corpses in this kind of situation or context (CICR 2016), and cemetery regulations determine how mass graves should be adapted to some minimum standards that assure the easy location of an NN individual. The cadavers should be buried in individual, clearly marked graves, and collective burial is practiced only when the number is high, with depths of 1.5 to 3 meters, and always marked on the surface. Mass graves should consist of a trench containing a single row of bodies, each one placed parallel to the other and with bodies separated by .4 meters. Each body should be buried with its unique reference number recorded on a moisture-resistant label, and clearly marked on the surface and with the exact topographic location for future reference.

### **Human Rights, Postmortem Rights, and Forensic Anthropology**

Over the last 30 years the deployment of forensic techniques applied to the investigation of the consequences of political violence and the role of forensic anthropology have become indispensable for the identification of victims and the interpretation of the death event (Doretti & Snow 2003). The field of forensic anthropology and other forensic sciences have developed in contexts of investigation of human rights

violations, which consider human remains as a source of truth about the past (Moon 2013).

The identification of human remains has become critical for the dignity of the dead and their relatives, with the emergence of terms like forensic humanitarianism, which applied scientific knowledge and its methodology to the resolution of legal questions linked to human rights violations (Moon 2014). Scientific research and the struggle for human rights have converged, as much in the reconstruction of events, the location and identification of victims, as in the return of the remains to families. Humanitarian practice is governed by international humanitarian law (IHL) which emphasizes two basic principles: the protection of the dignity of the dead and attention to the needs of their relatives (Tidball-Binz 2012). IHL governs the treatment of the dead and specifically establishes the obligation of parties to an armed conflict to carry out searches, recovery, and identification of victims (CICR 2003), as well as the right of families to know the whereabouts of their loved ones. It stipulates that the dead should be identified and treated in a respectful way, ensuring respect for their traditions and religious beliefs, and their burial in individual graves. IHL protocols require that the dead be treated as if they have rights, or at least, the right to dignity. In the Interpol General Assembly in 1996, it was established that ". . . human beings have the right not to lose their identities after death" (Interpol 1996).

The intervention of independent, nongovernmental teams of humanitarian and technical-scientific nature has increased in recent years in Mexico. The work carried out by the Argentine Forensic Anthropology Team (EAAF), the Forensic Anthropology Foundation of Guatemala (FAFG), or the Mexican Forensic Anthropology Team (EMAF) stands out, focused mainly on cases of disappeared persons and clandestine graves (EAAF 2016; Huffschnid 2015). A model approach to NN bodies and mass graves is that of Miguel Alemán in Tamaulipas, where accepting the limitations of the public prosecutor's office and Expert Services, the collaboration of Expert Services of the former Attorney General and the Scientific Division of the Federal Police was requested. In addition, they had the support of the German Corporation for International Cooperation (GIZ), which sent a forensic specialist and hired experts from FAFG to advise the public prosecutor's office and experts in the design, development, and execution of the project (PGJE 2018). The forensic project in Miguel Alemán showed that it is possible and necessary to coordinate interinstitutional efforts in the investigation of mass graves in the context of disappeared and unidentified persons in Mexico (Redacción Capital México 2017).

The current government has publicly announced its intention to create measures focused on responding to the problem of the disappeared and unidentified, which are grouped together in the Plan for Implementation of the General Law on Forced Disappearance and the National Search System.

This plan proposes the creation of a National Institute of Forensic Identification (INAID) or the creation of a Single System of Technological Information and Information Technology (SUITI), which would house the information in the National Registry of Disappeared Persons and Persons Not Located, that of the Unidentified or Unclaimed Deceased Persons, and a National Forensic Databank. The National Search Commission is being reinstated, which has the creation of new protocols and programs for search and exhumation among its priorities. The government has expressed the intention of including international technical assistance from the Office of the UN High Commissioner for Human Rights, the Inter-American Human Rights Commission (IAHRC), the International Committee of the Red Cross (ICRC), and GIZ (Arleta 2019).

The national legislative framework considers the right of the dead to dignity. An example is Article 346 of the General Health Law (1984), which explains that “corpses are not property and will always be treated with respect, dignity and consideration,” or the Regulation of Federal District Cemeteries (1984), which establishes the need to maintain records with information about the burials, exhumations and reburials (article 34) and mentions that the burials or incinerations of corpses can only be conducted with the authorization of the Civil Registry Judge and only when there is a death certificate (article 42). Moreover, the General Victims Law (2013) establishes that “once the technical and scientific tests which the State is obligated to undertake have been fully identified and carried out [ . . . ] only then the return of the bodies or bones of the victims to their family members should be done, fully respecting their dignity and religious and cultural traditions.” Just as Villareal (2013) notes, the right to proper treatment of a corpse and human remains and respect for its honor are fundamental pillars of the postmortem rights of the individual. Regarding the relatives, the General Victims Law catalogues them as “indirect victims” who have the right to receive “clear, precise, and accessible” information provided by public servants, and to have their security always guaranteed. Similarly, they may be present at exhumations and should be informed about the procedures and protocols followed in these events.

The General Law on Forced Disappearance of Persons, Disappearance Committed by Private Actors and the National Search System (2017), establishes the need to “locate the families of the identified and unclaimed deceased persons, in coordination with the corresponding institutions, to be able to return the cadavers or human remains [ . . . ]”. The relatives have reported systematic irregularities in investigations about their disappeared family members, in addition to threats or victimization of the relatives themselves, which have united them. They have formed collectives throughout the country and participated in proposing laws that are now in effect, like the Law on Forced Disappearance.

In the recent public hearing “Forced disappearances and the proposal for an Extraordinary Mechanism for Forensic Identification,” the United Nations High Commissioner for Human Rights in Mexico raised the alert about the “forensic emergency” that the country is experiencing, indicating the need to set up an international mechanism for technical forensic assistance, that might address the identification of bodies in storage in the forensic medical services or buried in mass graves in cemeteries (OACNUDH 2019). On May 9, 2019, officials from the Interior Ministry, representatives of international organizations like the UN and the International Red Cross and relatives of victims of disappearance met to begin working on this mechanism, under the premise that it be “like a special body of an extraordinary nature with technical and administrative independence, with its own resources and international technical and financial support, with the objective of addressing, exclusively, forensic problems related to the identification of persons, which includes a transnational perspective for the identification of foreigners disappeared in Mexico” (Movimiento por nuestros desaparecidos en México 2019a, 2019b; SEGOB 2019b).

## Final Reflections

Mexico is undergoing an unprecedented humanitarian and rule of law crisis. The current process with almost 40,000 disappeared persons and an estimated 26,000 unidentified bodies demands a forensic scientific approach based on the defense of human rights, which guarantees timely, impartial, and independent investigations. We do not know the number of graves in Mexico nor how many may be created in the future. The absence of official investigations and statistics reflects the inattention to the problem of unidentified bodies and lack of management of their burial in mass graves. This is an ongoing process which has barely begun to be addressed, and journalistic information is the only kind available to evaluate the current context.

The adequate mobilization of resources and the necessary specialists will largely determine the success of the identifications, as well as the communication with family members and the correct management of information by state authorities. Systematic centralization will be essential to increase the possibility of finding matches among requests for searches for disappeared persons and the available information about the unidentified bodies. It is fundamental to adopt the principles provided by current protocols on forensic archaeology and anthropology (CICR 2006; Interpol 2018; Minnesota Protocol 2016), critical disciplines in the approach to this context, where clandestine graves, mass graves, persons considered disappeared and unidentified corpses mix. But it is neither forensic anthropology nor forensic genetics nor forensic dentistry alone that identifies a

deceased unidentified person: instead, it is the sum of the postmortem information and the availability of antemortem information. As such, professionalization demands knowing all the links in the chain; the contribution of each specialization must be understood, given that no specialist will achieve an identification in isolation (Wade 2016).

In addition, methods of human identification adapted to the population should be considered in the work protocols of the forensic services. The diversity of the Mexican population (Kirkwood 2000), in addition to technical difficulties, makes it imperative to investigate and develop methods for dependent populations. There are projects in forensic anthropology in institutions like UNAM, the National School of Anthropology and History (ENAH) or collaborations with foreign universities, that provide methodologies and formulas adjusted to the Mexican population, for instance, in estimations of age at time of death (Cerezo-Román et al. 2014; Escorcia et al. 2015; Muñoz et al. 2018), or the sex (Sánchez-Mejorana et al. 2011; Spradley et al. 2015) or stature of the individual (Menéndez Garmendia et al. 2018).

We can take away the following points from the review, which analyzes the current situation of NN bodies in Mexico:

- Absence of a national interdisciplinary strategy for professionalization in forensic science.
- Infrastructure and insufficient resources. Need to produce research, update methodologies, and establish scientific agreements among different institutions that can contribute to mitigating needs and sharing data and accurate and official information.
- Insufficient communication with family members and a lack of systematic centralization of information, which becomes essential to increase the likelihood of finding overlap between the petitions for searches for disappeared persons and the available or known information about unidentified bodies.
- Failures and discrepancies regarding compliance with the protocols and basic elements of human identification, which respect the different procedures from the departure of NN bodies from the legal medical service to their burial in a mass grave.
- Absence of comprehensive strategies that consider the overlaps among disappeared persons and unidentified corpses, between management of clandestine graves and mass graves, or in the processes of search and identification.

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