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ORIGINAL ARTICLE

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International collaboration in mass disasters involving foreign nationals within the EU

Medico-legal investigation of Finnish victims of the Milan Linate airport SAS SK 686 aircraft accident on 8 October 2001

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Abstract Identification of and investigation into the cause of death of foreign nationals in mass disasters are generally conducted according to the jurisdiction of the country in which the disaster occurs. However, such identification can be achieved only through co-operation with the authorities of the victims' countries of residence. On October 8th 2001 at Linate airport in Milan, Italy, an MD87 SAS airplane with 110 crew members and passengers on board collided on the ground with a Cessna Citation II jet with 2 pilots and 2 passengers. The plane then caught fire after having crashed into an airport baggage hangar causing the death of 4 other victims among the groundstaff. The accident claimed a total of 118 victims of 9 nationalities. Based on our experience from investigation of the Finnish victims, we explore how current national legislations of the EU member states and varying compliance with existing recommendations may influence the medico-legal investigation of a mass disaster. Legislative measures and further harmonisation of medico-legal procedures in connection with mass disasters within the EU are needed.

Keywords Mass disaster · Foreign nationals · Identification · Cause of death

Introduction

Increasing international mobility raises the possibility of foreign nationals being involved in mass disasters [1]. Since 1970 at least 45 major air traffic accidents involving commercial flights have occurred in the EU and claimed more than 3,600 victims [2].

Identification of the victims and investigation into the cause of death generally follow the jurisdiction of the country in which the disaster has occurred. However, the identification of foreign nationals requires close co-operation between the authorities of the country where the accident occurred and those of the victim's country of residence [1].

Sequence of investigations and legislation

Scene, rescue operations and medico-legal investigation

On October 8th 2001 at 8.06 a.m., an SAS (Scandinavian Airlines) MD 87 on its scheduled flight SK 686 from Milan-Linate airport in Italy to Copenhagen, Denmark, collided on the ground into a Cessna Citation II business jet on take-off. The small jet fragmented into two main portions and caught fire. The MD 87, after sliding for several hundreds of meters, collided into an airport baggage hangar. Here, a posterior portion of the fuselage separated from the main body of the aircraft and caught fire within the hangar, while the more anterior portion, although severely warped, remain untouched by the flames.

Responsible for the general emergency situation was the Milan Prefecture, an organisation attached to the Ministry of Internal Affairs (*Ministero dell' Interno*) which deals with the logistics of all catastrophes and co-ordinates many police activities. The judicial authority in charge of the entire investigation of the mass disaster was a magistrate (*Procuratore della Repubblica*) from the Milan Tribunal, whose territorial jurisdiction covers the airport area. The immediate emergency situation was dealt with by the Fire Department *(Vigili del Fuoco),* which arrived promptly at the site of the MD 87 impact, assisted by police personnel from the airport (*Polaria*) and from the Milan Police Department (*Squadra Mobile, Polizia Scientifica)*. Then other law enforcement officers and rescue service personnel be-

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longing to agencies generally involved in the management of mass disasters within the city and region (*Carabinieri, Guardia di Finanza, Polizia Municipale, ASL, Croce Rossa*, etc.) also arrived at the scene.

The victim recovery procedures were handled mainly by the Fire Department, assisted by 10 specialists from the scene of crime personnel of the Milan Police Department (*Polizia Scientifica della Questura*) for photographic and video recording. Bodies were placed in numbered body bags furnished by the airport administration.

The entire recovery of victims from the wreckages took about 28 h. Medico-legal personnel did not participate directly in the recovery operation. However, personnel of the identification team and forensic pathologists, all from the Institute of Legal Medicine, University of Milan, screened and performed preliminary examination of the bodies at a working station located within the airport in order to direct the badly burned or maimed bodies to the Institute of Legal Medicine (directly connected with the main morgue in Milan which can hold over 100 bodies) for further investigation and the better preserved bodies to another Milan cemetery morgue (Lambrate) for visual identification.

Passenger list and collaboration offers from foreign identification teams

The passenger list was provided to the Italian authorities by SAS on October 8th at 9.00 a.m. and included 104 passengers, plus 6 pilots and flight attendants. The Cessna jet had 2 pilots and 2 passengers on board, 4 other victims were airport employees working on the ground in the hangar at the moment of the SAS MD 87 impact.

The Finnish Embassy in Rome and the Finnish Consulate in Milan were informed by the Italian authorities that Finnish citizens might be among the victims according to Article 37 of the Vienna convention on consular relations (1963) [3], to which both Italy and Finland are parties. The Ministry for Foreign Affairs (MFA) in Helsinki, and the Interpol Office at the National Bureau of Investigation (NBI) in Vantaa were notified the same day. The MFA and the NBI Interpol Office did not release the passenger list to the Finnish media, based on the rule that victims' families must first be informed and must consent to divulgence of information to the media. However, within only a few hours after the accident the web site of the Italian newspaper *Repubblica* published the complete SK 686 passenger list. According to the Interpol recommendation [1], the Finnish Disaster Victim Identification (DVI) team contacted the identification team in Milan on October 9th to offer collaboration with the Italian authorities. Consultation between the forensic pathologist and forensic odontologist of the Finnish DVI team on the one side, and the medico-legal experts of the Institute of Legal Medicine of Milan in charge of the local identification of victims on the other, led to the decision not to send the Finnish representatives to Milan. Instead, they concentrated on collecting ante-mortem (AM) data on the Finnish victims in Helsinki. On the other hand experts of Swedish, Danish, and Norwegian DVI teams flew directly to Milan to offer their assistance in identification and medico-legal investigations.

Italian legislation and medico-legal investigation in Milan

In Italy, whenever there is suspicion of a crime causally related to the death (eg. homicide, suicide, manslaughter, malpractice, etc.), the cadaver falls under the judicial authority and according to the Penal Procedure Code (Codice di Procedura Penale, CPP) [4], the magistrate can order an autopsy or external examination in order to assess the cause and manner of death and to collect samples which may be useful for any other investigation. In such a case, the prosecutor will appoint a medical consultant to perform the medico-legal autopsy and any other technical assessments and to submit a written report. The prosecutor has wide discretionary powers over performance of any complementary investigations such as toxicological tests and identification procedures.

As far as identification is concerned, the CPP [4] states that the body should be identified before autopsy. If a body is fairly well preserved, i.e. visually identifiable, identification is performed by one of the relatives, who signs an official identification report in the presence of a representative of the magistrate, after having seen the body. In cases of badly maimed or burnt bodies the magistrate requests that identification is performed by scientific methods (i.e. dental, anthropological, or genetic) based on samples collected at autopsy.

The wide discretion of the prosecutor to order a judicial autopsy results in a relatively low rate of medico-legal autopsies. The national medico-legal autopsy rate is, however, difficult to assess since the National Statistical Office (*Istituto Nazionale di Statistica*, ISTAT) has no available databases and does not furnish estimates to the World Health Organization. At the Institute of Legal Medicine of the University of Milan, however, about 1,100 autopsies are performed annually in a jurisdiction of about 4 million inhabitants, which is relatively high compared to most other areas of Italy.

Italy still has no official national mode of proceeding in mass disasters as far as autopsies and identification are concerned. In Rome, a forensic pathologist is affiliated with the *Polizia Scientifica* as an Interpol DVI representative, but there is no operative DVI team, and magistrates generally turn to experts in the nearest university department or institute of legal medicine. In Milan, therefore, the medico-legal examination of victims, being part of the investigations ordered by the magistrate, was performed by the identification team and the forensic pathologists from the Institute of Legal Medicine, University of Milan.

Medico-legal investigation of the SAS SK 686 aircraft accident

After the accident, the magistrate ordered full medico-legal autopsies and laboratory investigations for the Cessna pilots and passengers and for all members of the SAS crew and attendants of the MD 87. Moreover, he ordered external (and internal examination, if necessary) of all the other victims to collect data and samples necessary for identification and determination of cause of death.

The Milan-Linate aircraft disaster counted in all 118 victims, i.e., 104 SAS passengers (of which 58 were from Italy, 17 from Sweden, 16 from Denmark, 6 from Finland, 3 from Norway, 1 each from Rumania, Great Britain, and South Africa), 6 members of the SAS crew (3 from Sweden, 2 from Denmark, and 1 from Finland), 2 pilots (both Italians) and 2 passengers (both Germans) of the Cessna aircraft, and 4 employees working on the ground in the hangar. Of the victims, 54 (46%) – those seated mainly in the rear section of the plane – were badly burnt, whereas others were maimed, but with still recognisable facial features. The means of identification of the victims included visual recognition and anthropology (42%), odontology (22%), DNA methods (16%), combination of odontology and DNA methods (18%), tattoos and scars (2%).

Autopsies and external examinations were performed from October 10th to October 19th 2001. The proper collection, handling, storage, and processing of data allowed the positive identification of all victims within 14 days. The identification team was composed of an ante-mortem (AM) and a post-mortem (PM) group, working on-site and at the Institute of Legal Medicine, University of Milan. The AM group was composed of 5 specialists in legal medicine, 5 trainees in legal medicine and 2 dentists, collecting general data on AM forms, medical and dental history of victims; one technician entering AM data into an Excel data base file, and 2 geneticists collecting buccal swabs from relatives and personal effects of the victims which could be useful for genetic identification. The PM team was composed of 12 specialists in legal medicine working on rotas for autopsies/external examinations, 2 dentists collecting information on the Interpol DVI form, 1 anthropologist collecting samples useful for age determination (e.g. pubic symphyses, 4th ribs, diaphyseal shafts for microscopy), 2 geneticists collecting muscle and other soft tissue samples, and 1 laboratory and 3 morgue technicians. Dental examinations were performed also with UV light and x-ray facilities, and entire jaws were excised from badly burned victims. Pathologists and technicians were also engaged in entering PM data into the Excel database for subsequent comparison with AM data.

The collection of dental AM data of Finnish victims was completed in 5 days and transmitted by fax to Milan for comparison with PM data. Of the 4 Finnish citizens/residents, 3 were immediately identified. The identification of the fourth required DNA profiling in addition to dental methods. Buccal swabs were therefore collected from the mother in Milan, and the DNA profile was obtained by PCR with the AmpflSTR SGM Plus kit (Applied Biosystem, Foster City, CA.). Prior to sampling, she signed an informed consent chain of custody form. The likelihood ratio for the weight of the DNA evidence of the suspected mother-daughter match was calculated by the KindTest spreadsheet (courtesy G. Carmody, Ottawa, Canada) employing Finnish population data [5].

Transfer of bodies

The magistrate gave permission for the release and transfer of corpses on a daily case-by-case basis after identification. The transfer of Finnish victims from Italy to Finland was performed according to the "Berlin convention" (1936) [6], that Italy signed and ratified in 1937. The bodies of Finnish victims were released to representatives of the Finnish Consulate in Milan on October 19th and 20th, and transferred to the Department of Forensic Medicine, University of Helsinki. The Finnish victims were accompanied by a laissez-passer for corpses. The 3 Finnish victims resident in Sweden were transferred to Stockholm, Sweden, where a forensic pathologist of the local Department of Forensic Medicine performed an external examination and took samples for DNA identification.

Finnish legislation and medico-legal examinations in Helsinki

In Finland, according to the Act of the Inquest into the Cause of Death [7, 8], the police shall perform an investigation (a) when it is known that death has not been caused by a disease, or when the deceased during his last illness has not been treated by a physician, (b) when death has been caused by crime, accident, suicide, poisoning, occupational disease, or medical treatment, or when there is reason to suspect that death has resulted from such a cause, (c) or death has been otherwise unexpected. When the order for a medico-legal autopsy is given, the forensic pathologist alone is responsible for the decision about complementary examinations [9].

The medico-legal autopsy rate in Finland is relatively high compared to other EU countries [10, 11]. Finland provides nationwide statistics on the overall autopsy rate and on autopsy rate by sex, age, and main causes and manners of death [12]. During the past decade, about 10,000 medico-legal autopsies were performed annually, representing 18–20% of all deaths, and about 98–99% of all unnatural deaths under 65 years of age [10, 12]. The medico-legal activities are conducted at 4 University Departments of Forensic Medicine (Helsinki, Turku, Oulu, and Tampere) and at few hospital morgues, with a total of 28 University forensic pathologists and provincial medical examiners. At the Department of Forensic Medicine, University of Helsinki, the largest in the country, 2,300–2,400 autopsies are performed each year for an area of approximately 1.4 million inhabitants.

Since 1991 (order 3546/63/91, Ministry of the Interior), the investigation of the victims of a mass disaster has been

the responsibility of a national DVI team appointed by the Director General of the National Bureau of Investigation (NBI). The team includes, in addition to a commanding police officer and 15 staff members, 3 forensic pathologists, 2 forensic odontologists, 1 autopsy technician, a psychologist and a pastor. The DVI team starts its work by order of the Director General of the NBI, the DVI team leader, or his deputy. The police officer in charge will decide where the medico-legal investigations are to be conducted. These usually take place at the Department of Forensic Medicine, University of Helsinki, which provides comprehensive logistic, personnel, and technical resources.

Medico-legal investigations of Finnish victims

On October 19th the NBI ordered the Department of Forensic Medicine, University of Helsinki, to perform a full autopsy for each Finnish resident victim of the Milan accident. The copies of PM data collected in Milan were made available at the Department on October 22nd. The following morning, forensic pathologists from the Institute of Legal Medicine, University of Milan, sent to Helsinki by e-mail the PM photos and radiography of the victims' jaws sampled for odontological identification in Milan. The forensic odontologist of the Finnish DVI team performed odontological comparisons. All autopsies, preceded by whole-body X-rays, were performed on October 23rd and 24th by University staff supervised by the senior forensic pathologists and assisted by a police officer of the DVI team. Histology, toxicology, and blood samples for DNA identification were collected from all bodies. Autopsies allowed the description of the pattern of injuries in all victims. DNA profiles were obtained by use of the Ampf*l*STR SGM Plus kit (Applied Biosystems). The bodies were released to the families for burial, at the Department morgue on October 30th after the results of DNA investigations confirmed the identity of the victims.

Discussion and observations

A comprehensive literature exists on medico-legal investigation of air traffic accidents and other mass disasters. The logistics, identification challenges, and autopsy procedures have been described in great detail, together with the practical experiences of medico-legal teams investigating single air traffic accidents [13, 14, 15, 16]. In spite of recent concerns related to re-investigation of individual nationals dying abroad [17, 18, 19, 20, 21], little has been reported on legislative and practical issues in mass disasters involving victims of various nationalities. In the current context of progressive EU legislative harmonisation [22, 23], the problems related to medico-legal investigations of EU nationals involved in mass disasters within the EU deserve special consideration.

The United Nations has published guidelines for medico-legal investigations for which there are a few procedures in place, but these mainly concern inquiries for alleged massacres within the framework of violations of human rights [24]. The Interpol DVI manual provides more specific recommendations to member states on international co-operation for identification of victims of mass disasters [1] according to which member states are encouraged to establish a DVI national team and a liaison team to be activated in cases of mass disasters abroad. Whenever foreign nationals are involved in mass disasters, the country in charge of the identification should rapidly establish and maintain, directly or through Interpol, close co-operation with corresponding authorities in the victim's home countries. Member states are advised to explore the possibility of one or more of their experts travelling to the site to assist in identification of their own nationals [1].

In the early 1990s, the "Report on the Harmonisation of Autopsy Rules (1990)" by the Parliamentary Assembly of the Council of Europe invited "... the member States to apply the Interpol guidelines on disaster victim identification" [25]. Later, the explanatory memorandum of the "Recommendation no R (99) 3 of the Committee of Ministers to EU member states on the harmonisation of medico-legal autopsy rules (1999)" also stressed how imperative "the adoption of uniform guidelines on the way autopsy reports are to be established" is and that "this is particularly true in cases of mass disasters ... involving persons of different nationalities (e.g. air accidents)" [26].

It is worth noting that after more than a decade since the publication of the Report on the Harmonisation of Autopsy Rules, the adoption of these recommendations at an academic level has not yet been followed by implementation through significant legislative initiatives of Member States.

Due to the lack of international agreements on co-operation and responsibility for mass disaster investigations even within the EU, each country can, for a variety of reasons, re-investigate its nationals according to national procedure and law [1], resulting in duplicate investigations and additional expenses. This may lead to further delay in the release of victims' bodies to families for burial. Despite effective collaboration between forensic experts, the differences existing between legislation and medico-legal systems may still hamper the rational and optimal coordination of the medico-legal investigation of a mass disaster. Our joint observations on the investigations of the Finnish victims of the Milan-Linate accident are summarised as follows.

Legislation on investigation of cause of death

In Italy, the prosecutor has wide discretional power in performance of medico-legal autopsies and complementary investigations, also in cases of unnatural deaths [4, 27]. For this reason, only some of the victims were autopsied in Milan; the Finnish victims, not having being autopsied, were fully investigated in Finland according to the national law on medico-legal ascertainment of cause of death [7, 8].

It is worth noting that there are no legislative provisions, neither in Italy nor in Finland allowing the direct

participation of foreign forensic experts in medico-legal investigations. In Italy, according to the Penal Procedure code [4], a foreign medico-legal expert can indirectly participate in the identification and investigation of cause of death, if appointed as an expert by the victim's next of kin or the defendant. The expert then has the legal right to attend the autopsy or external examination, to discuss the case with the prosecutor's expert and to testify in court. In Finland, no such "adversarial" system exists [27, 28], and the role of a consultant appointed by the victim's next of kin is not contemplated by Finnish law nor employed in routine practice.

In the Milan accident, the lack of any appointment of medico-legal experts by foreign victims' relatives may have been caused – in addition to the relative's deliberate choice – by insufficient information about Italian legislation or the feeling of being sufficiently represented by DVI team specialists arriving in Milan (but devoid of any legal status). Whatever the cause, the lack of such an appointment of experts by victims' families provided substantial rationale for our decision to collaborate at a distance without sending representatives of the Finnish DVI team to Italy.

The SAS chose to transport the Finnish victims' family members to Milan the day following the accident without consulting the Finnish DVI team. Therefore no psychological support could be provided to them until the victims were transferred to Finland. In the future, it would be more advisable to co-ordinate the efforts of the airline company and those of DVI team in order to guarantee an adequate psychological support and prompt collection of reference samples necessary for identification.

National DVI team

Italy – like some other EU countries – does not yet comply with the Interpol recommendation to establish a national DVI team. The reasons for this are various. The high number of University Departments and Institutes of Legal Medicine (n=30) made it difficult to realise a national DVI team composed by forensic pathologists that would operate within the jurisdiction of other departments with adequate personnel, logistics, and technical resources. The transfer of bodies to departments far away would be time-consuming, expensive and difficult for families of victims to accept. Moreover, the relationships of University Departments and Institutes with police organisations that generally co-ordinate Interpol DVI teams are less close than in countries where medico-legal autopsies are directly ordered by the police.

Conversely, the realisation and activities of a national DVI team are more feasible in Finland due to the low number (n=4) of Departments of Forensic Medicine with adequate facilities, due to clear differences between the logistic and technical resources of the Helsinki Department and the other three University Departments, and to the well established system of long-distance transfer of bodies between sparcely inhabited regions. Moreover, the Helsinki Vantaa airport has effective international connections, which made it simpler to transfer the nationals who died abroad to the Department of Forensic Medicine, University of Helsinki.

The Finnish DVI team was founded in 1991 and has so far been involved in the investigation of the M/S Estonia mass disaster (1995) [29] and in a few domestic aircraft accidents. Medical personnel of the DVI team have operated abroad in the medico-legal investigation of alleged war victims in Bosnia-Herzegovina and Kosovo, and in Russia in the identification of Finnish victims of the Second World War [30]. The Finnish DVI team representatives maintain an international collaboration with their foreign counterparts by participating in regular meetings with other DVI teams of the Nordic countries and with the Interpol Standing Committee on Disaster Victim Identification in Lyon (France).

Transmission of AM and PM data

The forensic odontologist and police officers of the Finnish DVI team collected all AM data on Finnish victims for submission by fax to Milan within a few days. Access to AM medical data may differ in different countries, e.g., as a consequence of a legislative mandate regulating dental record keeping [29]. In turn, the medico-legal specialists from Milan furnished by e-mail, before re-examination of Finnish victim's in Helsinki, all appropriate PM information collected in Milan. This procedure may raise concern as to the confidentiality and the risk of manipulation of AM and PM medical data. More precise rules and access to the existing Interpol network should be available for the transmission of medical data during a mass disaster.

Transfer of corpses

Italy and Finland are not party to the same convention for the transfer of bodies from one country to another. Italy is party to the Berlin Convention (1936) [6], but as of March 2002 has not yet signed the Agreement on the Transfer of Corpses of the Council of Europe (Strasbourg, 1973) [31], recommended by Interpol [1], and the report on the harmonisation of autopsy rules (1999) by the Council of Europe that invited "...those Council of Europe member States which have not yet done so to ratify the Council of Europe agreement on the transfer of corpses." [26]. Conversely, Finland has signed and ratified the Strasbourg Agreement on the Transfer of Corpses, drawn up within the Council of Europe by the European Public Health Committee, but is not a party to the Berlin convention. It must be noted that among the 15 EU countries, only 10 have ratified the Strasbourg Agreement. Denmark, Germany, Ireland, and UK have not yet, like Italy, signed and/or ratified this convention [32].

Experts from some States which were parties to the Berlin agreement expressed doubts as to the position in international law of member States of the Council of Eu-

rope if they were to be parties to both instruments. In the new agreement, therefore, provisions are in no way in conflict with those of the Berlin agreement [33]. Hence, the transfer of bodies does not seem to pose major problems when it occurs between one country which is part of the Berlin convention and another of the Strasbourg convention, since provisions of the latter are less strict. Nevertheless, we hope that a single convention on the transfer of bodies within EU countries will become mandatory.

Duplicate investigations

As previously discussed, the different medico-legal systems and legislations led to the performing of full autopsy investigations in Finland that were not performed in Italy. Concerns could be raised as to the need for odontological and DNA investigations in both Italy and Finland, using the same AM and PM data and the same reference material. In principle, standardisation of DNA methodology and the use of internationally agreed common core DNA markers [34, 35, 36] facilitate comparisons of DNA profiles produced in different laboratories. Both the DNA laboratories in Milan and Helsinki were using the same set of DNA markers included in a standardised identification kit (AmpflSTR SGM Plus). Thus, at least in cases with good preservation of samples, duplicate analysis can be avoided and the analysis of samples be performed according to the easiest access to reference and case samples. However, it must be underlined that even the use of commonly agreed DNA loci does not exclude the possibility of false inclusions, especially in cases of reverse paternity testing [37].

As far as odontological identification was concerned, the comparison between AM and PM data collected both on DVI Interpol dental forms, along with the presence of peculiar dental morphology and restorations, allowed for quick identification of 3 out of 4 Finnish victims in Milan. The identification of the fourth required DNA profiling in addition to dental methods.

The decision to re-analyse DNA profiles and re-perform odontological investigation in Helsinki was based on the original order for performing a full autopsy, which in Finland also includes those investigations when there is any doubt about identity of the victims.

Victims' remains and tissue sampling for identification

The issue of unassociated remains has been overlooked by Interpol and EU recommendations. In the USA, guidelines developed on the matter of unassociated remains are more precise. The recommendation of the USA "Task Force on Assistance to Families of Aviation Disasters" [38] determines that all conventional efforts must be employed to identify victims and associate all separated remains, but DNA testing should not be utilised to identify unassociated remains. Each family should be given the option of being notified if any remains are later recovered and identified, and the families should be given the possibility to choose whether they want them returned. The medical examiner or coroner should respect that decision.

The question of unassociated remains was not a major problem for the Finnish victims. Conversely, concern can be raised regarding body parts used for odontological identification during the investigation in Italy. According to Italian law and the Milan prosecutor order, medico-legal experts can take samples and excise tissues if necessary for investigation and identification, within the limits imposed by the Penal Code [39] on "contempt and illegitimate use of cadavers". There is no official regulation, however, concerning their subsequent use or disposal. The victims' relatives should be adequately informed also about sampling of tissue or body parts during the PM investigation and about local laws on their preservation. Only with families' consent can the biological remains be destroyed, or possibly be used for scientific purposes.

In conclusion, in the Milan-Linate accident, the smooth collaboration between our Departments/Institutes allowed a rapid and effective identification of the Finnish victims, a positive response to the legal and ethical priority for the decedents' families and authorities to identify victims [1]. Investigations were completed within 14 days of the accident. However, the different medico-legal systems and legislation in our two countries, together with differing compliance with existing recommendations, led to re-examination of the bodies in Finland, to delayed release of corpses to families and, limited to odontological and DNA investigations, to duplicate investigations.

More precise regulations should be given at the EU level for the following:

- 1. To delegate to the identification team of the place where mass disaster occurs the full responsibility for complete investigation,
- 2. To better define the role of foreign DVI teams
- 3. To improve collaboration between the DVI or other team working at the site and those teams collecting AM data in other countries.

Moreover, existing recommendations should be implemented in areas such as the confidentiality of transmission of medical information and the treatment of biological unassociated remains. The guidelines and recommendations should be followed by legislative action to better coordinate investigations of mass disasters involving citizens of different nationalities within the EU.

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