

# Day to day issues in the forensic identification practice related to illegal immigration in Italy

Vilma Pinchi  
Martina Focardi  
Francesco Pradella  
Rossella Grifoni  
Marco Palandri  
Gian-Aristide Norelli

*Section of Medical Forensic Sciences, Department of Health Sciences, University of Florence, Italy*

**Corresponding author:**  
[pinchi@unifi.it](mailto:pinchi@unifi.it)

Disclosures of Conflicts of Interest:  
none declared

## KEYWORDS

*Mediterranean migrations, identification of dead migrants, forensic odontologist, DVI Interpol*

J Forensic Odontostomatol 2017. Dec;  
(35): 157-165  
ISSN :2219-6749

## ABSTRACT

The migratory flows to Europe from the African countries, Asia and Middle East, have hugely intensified in the recent years. In 2016, more than 98,000 out of a total of 260,000 migrants across the Mediterranean Sea arrived in Italy and in May 2017, the trend of arrivals is: Italy +576%; Greece -39% compared to previous years. Some migrants die before touching the sole of the European continent, during the crossing, often afforded with ships, made available by unscrupulous smugglers or criminal organizations, which are unsuitable for this type of transportation. The tremendous occurrence of migrant casualties during the Mediterranean Sea crossing remains underestimated and nobody, country officers or databank, can provide a reliable number of dead bodies in such a large and now, endemic phenomenon. Forensic officers, who intervened to examine migrants' corpses, are ideally required to perform the usual activity and to answer the routine questions about the causes of death by detecting signs of possible crimes and body identification. In practice, several specific issues and limits challenge the activity of the forensic professionals addressed to ascertain both circumstances of death and possible related crimes and the identity of the corpses. Generally speaking, in case of examining up to a few dead bodies in Italy, a complete autopsy is performed, whilst, when several tens or hundreds of corpses are recovered, the lack of resources on one hand and clearer clues on incident, connected crimes, and cause of deaths on the other, push the public prosecutor to limit the request of complete autopsies. In some cases, the dead migrants were identified through visual recognition by relatives, friends, or travel companions. The DVI Interpol protocol is never completely applied to dead migrants for several reasons, mainly for the huge difficulties in retrieving AM data of the missing persons and for some limitations affecting both the primary and the secondary identifiers. The few chances of identification by dental data are further reduced by the systematic lack of an odontologist among the forensic teams charged of the PM; valuable dental data for body identification or for constructing the biological profile of the missing person (age, ancestry, country of provenance/residence, etc.) are likely to be overlooked.

This approach implies a clear disparity with the approach applied when corpses of citizens of the EU or other developed countries are involved and undergo identification. The dead migrants' identification activity should be reconsidered for an improvement in the common international effort in accordance

to an approach more respectful toward the legal rights and dignity of the dead migrants and their families.

### **Defining the issue**

The migratory flows to Europe from the African countries, Asia, and Middle East, have hugely intensified in the recent years to become an important humanitarian issue, and even a great risk of socio-political turmoil for the host countries and for the EU as a whole. The countries in the so called "Mediterranean route", such as Italy and Greece, are, since the beginning, in the front line to cope with the phenomenon, especially nowadays when the so-called "Balkan migratory route" has been interrupted by the contingent policies of countries such as Turkey and Hungary among others.<sup>1,2</sup>

In 2016, more than 98,000 out of a total of 260,000 migrants across the Mediterranean Sea arrived in Italy and in May 2017, the trend of arrivals compared to previous years was: Italy + 576%; Greece - 39%.<sup>3</sup>

The migration flow implied the occurrence of more than 5000 migrants' deaths during the crossing, 1530 in just the first four months of 2017, which are definitely very high numbers. It was able to constitute an important ethical and humanitarian problem and put to the test the whole range of the services provided by the host country's government. 95% of the migrants who arrived in Italy come from African countries, where Nigeria and Eritrea lead the list, being irrelevant to the middle-eastern and Asiatic component.<sup>4</sup>

However, no evidences show that the European continent would really be the desired destination of the migrants' journey. They initially left their home country to follow the job market in the neighbouring countries (mainly Sudan and Egypt) and, at a certain time, were unable to obtain the desired improvement of life conditions, and after a long and often dangerous moving, tried to migrate to Europe. This was done with the help of family networks of friends or relatives already in Europe, who organize and/or fund a part or the full journey. This local migration created specific risks, as smuggling operations developed into trafficking, once migration had begun. There is a clear legal distinction between smuggling and trafficking, but in practice, these processes may become indistinct.<sup>5,6</sup> Smugglers contacted by individuals to facilitate their journey can sell

them to traffickers, who extort more money through mistreatment, sexual exploitation or forced labour. From a recent survey on 2387 migrants published by IOM (April 2017), it emerged that migrants who experienced at least one type of exploitation came from Senegal, Ghana, Cameroon, Bangladesh, and Mali (> 93% of positive responses), whilst Pakistanis, Afghans (31%), and Iraqis (9%) had the lowest percentage. Exploitation events were reported to take place mostly in Libya (91% of all cases), followed by Algeria (2%), and other Countries (Greece, Iran, Nigeria ≈1%).<sup>7</sup>

Those migrants who have paid in advance for their entire journey or those who are deemed of being relatively wealthy in their countries of origin, are most at risk. Moreover, some migrants reported that they had left without telling family members in their countries of origin, for fear that they would try to prevent them. This fact creates specific difficulties in retrieving and contacting families for identification purposes when fatalities occur somewhere along the journey. The people on the move leave few or no traces due to the irregularity of their travelling, which can last years, making it actually impossible to identify the Country or the village of origin to search families.

The first and the most important problem that affects rescuing operations of migrants can be identified as the huge difficulties the government faces in funding the missions and in the logistic difficulties of transportation of the migrants recovered at sea. In the very front line of the Mediterranean route, the migrants find Italy, a big and friendly country but since many years of struggling with a financial crisis, a stagnating economy and, above all, continuous political fight about the policy to be adopted to cope with the impressive arrivals of migrants, who will be mostly judged as economic migrants, not refugees. Libya is without a government since 2011, with the result that people who embarked there cannot be sent back, thus, most of them end up staying in Europe despite being denied asylum. Many political voices in Italy say that the EU seems to have left Italy with the responsibility of managing and financing the migrants' reception and ID program on its own, as the relocation program runs very slowly and does not work properly. The chronic shortage of national financial resources, and especially those dedicated to the humanitarian missions, strains

the whole system of national reception, from the first phase of the rescue operations at sea to the establishment and management of sanctuaries, and there are huge problems which often cause the ignition of the political debate about sustainability and soon becoming a serious concern for the social peace and the consequent security issues.

Some migrants die before touching the sole of the European continent, during the crossing, often afforded with ships unsuitable for this type of transportation and made available by unscrupulous smugglers or criminal organizations. Afraid of police, the smugglers provide boats with enough fuel just to reach international waters. Migrants are sometime thrown into the sea or abandoned by smugglers, thus, condemned to wait in the water for international rescuing services from Italy or the other nations involved in the patrolling operations.

The tremendous occurrence of migrant casualties during the Mediterranean Sea crossing remains underestimated. We can count only the recovered bodies, so, the real amount of deceased people remains unknown. Therefore, nobody, country officers or databanks<sup>8-10</sup>, can provide a reliable number of dead bodies in such a large and now endemic phenomenon. Often the number of the disappeared migrants is calculated by simply putting together pieces of information collected from the shocked and sick survivors. The Missing Migrant Project website and the Migrant Files speak of some thousands fatalities, confirming that the Mediterranean route is most dangerous due to the highest number of deaths in comparison to other routes.

The casualties are usually few, even if sometimes there are large mass disasters with several hundred bodies. Table 1 shows the data of some rescuing operations or disembarks in southern Italy in 2016 and it can be noted that the number of the dead bodies varies from few up to a few dozens.

**Table 1:** Rescuing operations or disembarks in southern Italy in 2016

<b>SITE OF ARRIVAL</b>	<b>DATE</b>	<b>RESCUED PEOPLE</b>	<b>DEAD BODIES</b>
CATANIA (CT)	16/01/2016	246	1
TARANTO (TA)	30/01/2016	411	6
SICULIANA (AG)	19/02/2016	15	1
AUGUSTA (SR)	24/02/2016	534	5
REGGIO DI CALABRIA (RC)	17/03/2016	591	1
CATANIA (CT)	20/03/2016	254	1
PORTO EMPEDOCLE (AG)	26/05/2016	540	5
REGGIO DI CALABRIA (RC)	29/05/2016	626	45
BRINDISI (BR)	30/05/2016	346	1
AUGUSTA (SR)	04/06/2016	221	1
PORTO EMPEDOCLE (AG)	14/06/2016	242	1
CATANIA (CT)	24/06/2016	745	1
POZZALLO (RG)	30/07/2016	263	1
CATANIA (CT)	02/08/2016	409	4
MESSINA (ME)	02/08/2016	723	1

The recovery of the corpses during the rescuing operation in the open sea poses a specific logistic problem related to the ships which are to be used for the migrants' rescue and transportation procedures, considering also that often the rescuers find the living and the dead bodies at the same time and in the same boat. The dead bodies should be kept in a dedicated refrigerated containers. However, very few of the higher tonnage ships are provided with them. Most ships are provided with only the basic space to separate the corpses from the living. The boats supplied with the refrigerated containers usually take cadavers from other boats not similarly equipped. The temporary storage of the dead bodies in the smaller and not-equipped ships raises logistic problems, which are increased by the high temperatures reached seasonally in the Mediterranean area. However, in some cases, the corpses not immediately recovered or not properly stored appear in a clear state of decomposition<sup>11</sup>, thus dramatically reducing the chances of identification, that, as it will be later discussed, in the luckiest circumstances is linked to the possibility of a visual recognition by travel companions or relatives.

In the worst circumstances, the boat sinks with the bodies locked inside. In these fortunately rare occurrences, the recovery of the bodies require firstly, the raising of the boat from the bottom of the sea. The recovery of boats costs millions of euros, as we learned from the Costa Concordia sunk, and sometimes, the governmental offices cannot afford the expenses of such complex and costly operations.

Just as an example, the scale of resources deployed during the recovery of about 700 migrants<sup>12,13</sup>, who died in a wooden boat that sunk 137 km from the Libyan coast in April 2015, we can say that three big Italian Navy vessels with submarine robots were deployed to reach the corpses lying at 370 m under the sea level. The corpses were then carried with large transport barges properly equipped with liquid nitrogen refrigeration systems, a complex operation which cost the Italian government about 9.5 million euros. The Italian Government funded the recovery of the boat and the corpses inside it, but no financial support was available for body identification and the dedicated forensic personnel. Many forensic professionals and some postgraduate students in Legal Medicine volunteered to perform the body examinations.

The identification of the victims was deemed as highly difficult and with little chances even through DNA.<sup>14</sup> At the moment, 551 corpses had been buried after PM examinations and hopefully, some AM data could be retrieved through international cooperation and at least some unknown bodies might be identified at a later date.<sup>15</sup>

This paper aims to discuss the specific forensic issues connected with identification of the migrants recovered from the Mediterranean sea. The identification procedures of the dead bodies and the examinations addressed to establish the causes of death and possible crime emerge as quite different than the ordinary forensic cases. Some discussion is dedicated to the utility of the primary identifiers, resulting in the conclusion that the ID process is highly affected by the availability and retrievability of ante-mortem data to be compared with PM for migrants' unidentified dead bodies. Specific attention is dedicated to dental data collection that emerged to be underused as primary identifiers, both for being forensic odontologists in DVI teams less involved in the procedures and for the specific features of dead migrants.

### **The role of the forensic examiners: cause of death, crime investigation, and struggling for a (im)possible identification**

Forensic interventions to examine migrants' corpses are ideally required to perform the usual activity and to answer the routine questions about the causes of death by detecting signs of possible crimes and body identification. In practice, several specific issues and limits challenge the activity of forensic professionals addressed to ascertain the circumstances of death, the possible related crimes, and the identity of the dead.

The responsible person of the investigative operations in Italy is in charge of the Public Prosecutor (PP) who is committed to ascertain if any event-related crime has been committed (human trafficking, smuggling, delay of rescuing, etc.), while the identification of the dead bodies is marginally relevant for the PP, especially when no crime was suspected. Most of the times the PP charges for PM examination police forensic officers and forensic pathologists, the latter being called to ascertain the manner and the cause of death. The cause of death is sometimes difficult to be assessed (unknown in 23% according to

Borderdeaths data)<sup>16</sup>, whilst in some cases it can be attributed to drowning, sometimes even possibly due to the delay in the rescue operations or choking (sometimes in mass) caused by the overcrowding in the scarce spaces of the ships. The data reported by UNCHR and Borderdeaths reveal the prevalence of drowning (> 50%), followed at a great distance by other causes of death (< 5%), dehydration, suffocation, burnt, violence, etc. Forensics involved in body examination also search for any possible lesions or signs of torture or violence as fractures and/or scars, on the migrant's dead body to determine if any possible crime causally related to torture or slavery at home or any possible traffickers' or smugglers' crimes had been committed. Some forensic pathologists or specialists in legal medicine (who provided medico-legal report to victims of torture) in Italy often faced the physical evidence of different techniques of torture adopted in different areas of the world. Forensic odontologists, when involved in the procedure, could contribute to this crucial process, since head-neck districts are often affected by injuries and some mouth lesions correspond to the torture perpetrated in some specific countries. Through migrants' interviews, we know that some of them had their teeth pulled out or injured in Lybia.<sup>17</sup> Hence, describing properly the crucial evidences found on the body and the mouth, the odontologist may provide relevant information about the origin of the victims or at least the country where they came from and were submitted to torture practices. Last and Spijkerboer et al.<sup>18</sup> highlighted that the aggregation of the data about the cause of death could help in measuring the entity of death occurrences in the Mediterranean crossing and to study the phenomenon at large, but privacy issues and the different coding systems adopted to register the PM data obstruct the large collection and the analysis of these data.

In the first large mass disaster in the Mediterranean Sea that required a DVI response from Italy in October 2013, the death of 366 migrants occurred. The DVI team of Police was activated and police personnel were deployed in Lampedusa island. No civilian forensic experts were recruited due to the lack of funds and organization, as also international observers have later highlighted.<sup>19</sup> The Police forensic officers worked under the most unfavourable conditions due to the large number of cadavers and the lack

of refrigerated containers. The teams were forced to examine more than 50 corpses per day with exhausting working sessions and some inexperienced operators reported psychological negative effects. The PM activities consisted of body examination, description of belongings, taking of photos and fingerprints, and biological sampling. Some dental data was scantily registered by the Police forensic pathologist, since no forensic odontologists or dentists were involved and nobody appropriately filled the Interpol 600s forms. Actually, some forensic odontologists, among whom the author is one, were alerted in the first response, but economic and logistic issues lead the authorities to use only the very few Police forensic experts.

This first large disaster depicted the real scenario and the activities that were realistic to provide in such circumstances. In other words, it was the first time that Italy experienced the tremendous issues and limitations concerned with post-mortem and ID procedures in case of irregular migrant deaths. Lampedusa 2013 disaster captured and shocked the public opinion, but dictated a sort of guidelines for body examination that, according to the data collected through personal contacts taken with Police and forensic pathologists involved in Sicily and Calabria, continue to be currently applied.

Generally speaking, in case of examining up to a few dead bodies, a complete autopsy is requested by the PP, whilst, when several tens or hundreds of corpses are recovered, the lack of resources on one hand and clear clues on the incident, connected crimes and cause of deaths on the other, push the PP to limit the request of complete autopsies. Nevertheless, in the latter circumstances some basic procedures are applied to collect at least some PM data, which will be possibly useful for later identification. The bodies undergo an external examination, fingerprints, photos, and biological (bone) sample collection and only in few specific cases, a full autopsy is ordered by the PP. In any case, forensic odontologists are very rarely called to work with the forensic pathologists in large mass disasters, and in cases with few dead bodies.

Even if this approach is quite far from a complete rigorous application of Interpol DVI protocol, the handling of PM exams and identification of migrants in Italy seems slightly better compared to what is generally performed in Greece, where identification issues are rarely addressed by competent authorities. Meaningful inputs are

discussed by Kovras and Robins (2016) who described the situation in Greece as follows: *"There is no standardized procedure to deal with a migrant body, and this policy vacuum legitimizes local authorities in denying their legal and moral responsibility to address the issue of identification. Most often relevant data found on the body – documents, tattoos, other identifying marks – are not systematically collected, analyzed and stored to support identification. Similarly, only a limited effort is made to collect other information – such as testimony from survivors of a shipwreck – that could advance this goal".*<sup>19</sup>

In any case, there is a widespread conviction also in Italy that a general description of the corpse and the sampling of bone as a source of DNA is more than enough for dead migrants; a wider effort tends to be considered useless also by forensic experts, that experienced frustration for the lack of interests by national and international authorities especially in retrieving AM data of missing migrants. There are no adequate response and deployment of resources and funds, thus, ending to feel that most of their efforts result ultimately useless and identification of dead migrants is a poorly motivated and then, an impossible mission.

The identification of the dead bodies should be best performed according to the usual Interpol protocol, which enables the only true scientific ascertainment of identity by the deployment of DVI teams properly composed of all the needed experts to collect and examine primary and secondary identifiers. In some cases, the dead migrants were identified through visual recognition by relatives, friends, or travel companions, but we know that visual recognition can be biased by several factors and cannot be considered a proper way to identify a corpse.

The DVI Interpol protocol is never completely applied for dead migrants for several reasons, mainly due to the huge difficulties in retrieving AM data of missing persons, some limitations affecting both primary and secondary identifiers and some not adequate response and operational organization.<sup>20,21</sup> Fingerprints are useless after the corpse has been in the water for hours or days and even in the cases in which fingerprints are obtained, they become useless since the countries which the migrants mostly come from do not have connections with any international. Therefore, the DNA collection offers the only option to try an identification of the dead body. However, many problems arise also in this case:

fingerprint data banks to enable the necessary comparisons for identification. The Commission report to the EU Parliament and Council in 2016 on SIS II reported the impressive number of fingerprints retained in the AFIS databank and the number of fingerprint identification performed in the Schengen area per day.<sup>22</sup> Nonetheless, most of the countries from which the immigrants started their journey, do not adhere to international programs of identification of travelers/visa or document check and have few or no connections with international fingerprints databanks. Fingerprints resulted, registered at their arrival in Italian hotspots (in Pozzallo, Porto Empedocle, e.g. in Sicily), are indeed decisive for identifying some irregular migrants who died after moving across Italy.<sup>23-25</sup>

The dental data do not help as many of the migrants were young and had very few dental treatments done to be possibly used for matching with AM dental data that might be possibly searched in the country of origin because, differently from fingerprints, no registration of dental data is made to migrants at their arrival, neither in case of dental cares received in Italy. When dental treatments are detected in unknown corpses, the chance to identify the dental practitioner and collect the dental file of the missing patient seems very unlikely. A list of the passengers of the boats is obviously unavailable, and it is not possible to obtain AM data to compare, since the migrant's country of origin is not known as well as any possible personal dentist's name. Sometimes the dental features can be compared with AM photos or at least recognized by families, but these evidences are far from being scientifically acceptable.

The few chances of identification by dental data are further reduced by the systematic lack of an odontologist among the forensic teams in charge of the PM examinations. Generally, only a forensic pathologist is called in Italy to provide the external examination or autopsy and police officers intervene in order to take fingerprints and photos, thus, concretely risking to overlook the collection of valuable dental data for body identification or for constructing the biological profile of the missing person (age, ancestry, country of origin/residence, etc.).

most of the time, the lack of information about data such as country of origin, the name of the body, and its family completely jeopardizes the

possibility of matching the data retrieved from the DNA analysis. Moreover, there is not a clear shared opinion about which national or foreign governmental institution should contact families and afford the costs of the whole ID procedure. However, very often, such piece of information is not available from friends and trip mates since many of the migrants usually lie about their home country to avoid any possibility of police/government retaliation against their families at home who often live in difficult socio-political conditions or in war-ridden countries.

Given the many limitations that affect ID procedures, largely due to poor efforts in retrieving AM data and to the incomplete application of fair and scientifically accredited PM approaches, with no PM examinations, anybody can be surprised by the low rate of positive identifications of migrants, especially if coming from Africa. According to the "Deaths at the Borders" database, two thirds of the migrants who arrived in southern Europe from 1990 to 2013 were not identified and people coming from sub-Saharan Africa remain more likely to be unidentified compared to Asians. Moreover, children or people older than 40 are more likely to be identified since they usually travel with relatives or friends, but many people illegally crossing the Mediterranean Sea are between 20 and 40, and the corpses have less chances to be identified.<sup>26</sup>

## CONCLUSION

The Mediterranean Sea route is the most dangerous and the increase in the immigration flows goes well with the rise in deaths and corpses to be identified.

Very few corpses are identified so far with a family and trip mates' visual identification procedure, therefore, implying that the chances of positive ID are bound to the contingency that the dead individual crossed the sea with other people who survived.

The ID procedures for migrants in Italy are limited to the collection of some very essential data because very rarely it is possible to wholly apply the Interpol DVI protocol<sup>27</sup> with the proper deployment of all the necessary professionals. The PM examination is generally not extended to consider all the primary and secondary identifiers and is performed by teams in which the required participation of some essential professionals according the Interpol

DVI guidelines, such the odontologist, is quite systematically lacking.

Dental data of dead migrants, even if unlikely useful for a comparison with hardly obtainable AM data, are likely to be largely overlooked either for the identification or for the description of the biological profile of the corpse. Some essential information about the country where migrants experienced tortures featuring mouth lesions are likely to be neglected.

This approach implies a clear disparity of approach compared to situations in which corpses of citizens of EU or other developed countries are involved and undergo identification. The dead migrants' ID activity should be reconsidered for an improvement in a common international effort according to an approach more respectful of the legal rights and the dignity of dead migrants and their families. Italy, on the other hand, is facing the immigration emergency with a scarcity of financial resources, moving from a general condition in which the Interpol protocol is hardly applied completely and uniformly in any case of an unidentified dead body. However, the real issue, seems to be not the lack of financial resources, a problem which might be considered as a valid issue only in those very costly cases of boat recovery. The lack of a valid organization is deemed the main issue, without a careful and clever optimization of the financial and professional resources, indeed largely available in Italy, and in the international scarce interest in the ID of the migrants, since, once verified, their condition of migrants and the awareness that identification has few chances of success, only some basic investigations are granted. On the contrary, identification of a human being should be strongly sought in order to restore dignity and to give relief to the families left behind. Moreover, the ID of a body enables the protection of the many legal rights (marriage, inheritance, etc.) of the relatives involved. The effort in persuading the local authorities of the importance of the ID procedures must certainly be a political one, providing the necessary support to the national or international DVI teams. The identification procedures should be standardized and refined with a common effort, to the best application of the DVI Interpol protocol, firstly involving all the experts in treating primary identifiers data, and especially forensic odontologists that, at the moment, are seldom involved, and secondly, enhancing the improvement of the international databank of

unknown dead bodies. However, we are all aware that the greatest weakness of the identification procedure lies in the AM data collection, and the cooperation of the national and International Committee of the Red Cross and the NGOs, whose networks could help in retrieving families and contacting them without any threat for an unfavourable political context, could be of great importance.

## REFERENCES

1. European Commission. "Managing migration along the Central Mediterranean Route – Commission contributes to Malta discussion", Retrieved from: [http://europa.eu/rapid/press-release\\_IP-17-134\\_en.htm](http://europa.eu/rapid/press-release_IP-17-134_en.htm). Accessed on 7 June 2017.
2. Joint communication to the European Parliament, the European Council and to the Council. "Migration on the Central Mediterranean route Managing flows, saving lives", Retrieved from: [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/20170125\\_migration\\_on\\_the\\_central\\_mediterranean\\_route\\_-\\_managing\\_flows\\_saving\\_lives\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/20170125_migration_on_the_central_mediterranean_route_-_managing_flows_saving_lives_en.pdf). Accessed on 7 June 2017.
3. Migration flow- Europe. Retrieved from: <http://migration.iom.int/europe/> and [http://migration.iom.int/docs/Monthly\\_Flows\\_Compilation\\_Report\\_No5\\_May\\_2017.pdf](http://migration.iom.int/docs/Monthly_Flows_Compilation_Report_No5_May_2017.pdf). Accessed on 7 June 2017.
4. UNCHR-refugees, Mediterranean situation. Retrieved from: [http://data2.unhcr.org/en/situations/mediterranean#\\_ga=2.76932117.1644378256.1494496680-702185543.1494496680](http://data2.unhcr.org/en/situations/mediterranean#_ga=2.76932117.1644378256.1494496680-702185543.1494496680). Accessed on 7 June 2017.
5. Campana P, Varese F. Exploitation trafficking and smuggling, *Eur J Crim Policy Res.* 2016;22:89.
6. Carrera S, Guild E. Irregular migration trafficking and smuggling of human beings. Policy dilemmas in EU, Centre for European policy studies (CEPS), Brussels. 2016.
7. International Organization for Migration (IOM)-The UN migration agency – DTM Flow monitoring surveys the human trafficking and other exploitative practices prevalence indication survey. April 2017. Retrieved from: [http://migration.iom.int/docs/Analysis\\_Flow\\_Monitoring\\_and\\_Human\\_Trafficking\\_Surveys\\_in\\_the\\_Mediterranean\\_and\\_Beyond\\_26\\_April\\_2017.pdf](http://migration.iom.int/docs/Analysis_Flow_Monitoring_and_Human_Trafficking_Surveys_in_the_Mediterranean_and_Beyond_26_April_2017.pdf). Accessed on 7 June 2017.
8. Black J, Singleton A, Malakooti A. The Central Mediterranean route: deadlier than ever, Global Migration data analysis centre – data briefing series. 2016;3.
9. Mediterranean updates, Migration flows Europe: arrivals and fatalities, Retrieved from: [https://missingmigrants.iom.int/sites/default/files/Mediterranean\\_Update\\_9\\_August\\_2016.pdf](https://missingmigrants.iom.int/sites/default/files/Mediterranean_Update_9_August_2016.pdf). Accessed on 7 June 2017.
10. Last T, Spijkerboer T. Trafficking deaths in the Mediterranean. Chapter 3 in: *Fatal Journeys: Tracking Lives Lost during Migration*. Edited by Brian T, Laczko F. International Organization for Migration (IOM). 2014.
11. Al porto di Reggio Calabria tra i sommersi e i salvati del Mediterraneo, Retrieved from: <http://www.lastampa.it/2016/05/29/italia/cronache/al-porto-di-reggio-calabria-tra-i-sommersi-e-i-salvati-del-mediterraneo-PMrOWKD9EEykfN4mEz4mII/pagina.html>. Accessed on 7 June 2017.
12. Strage nel Mediterraneo, recuperato il relitto del naufragio del 2015 con 700 morti, Retrieved from: [http://palermo.repubblica.it/cronaca/2016/06/29/n\\_e\\_w\\_s\\_/recuperato\\_il\\_relitto\\_del\\_naufragio\\_del\\_2015-143050001/](http://palermo.repubblica.it/cronaca/2016/06/29/n_e_w_s_/recuperato_il_relitto_del_naufragio_del_2015-143050001/). Accessed on 7 June 2017.
13. Nuova strage nel Canale di Sicilia, morte dieci migranti. Ad Augusta arriva il relitto del maxinaufragio con 700 vittime, Retrieved from: [http://palermo.repubblica.it/cronaca/2016/06/30/n\\_e\\_w\\_s\\_/augusta\\_arriva\\_il\\_relitto\\_del\\_maxinaufragio\\_con\\_700\\_vittime\\_altre\\_dieci\\_donne\\_morte\\_nel\\_canale\\_di\\_sicilia-143112588/](http://palermo.repubblica.it/cronaca/2016/06/30/n_e_w_s_/augusta_arriva_il_relitto_del_maxinaufragio_con_700_vittime_altre_dieci_donne_morte_nel_canale_di_sicilia-143112588/). Accessed on 7 June 2017.
14. La tragedia del barcone affondato I migranti morti sono 675, Retrieved from: [http://www.corriere.it/cronache/16\\_luglio\\_14/tragedia-barcone-affondato-migranti-morti-sono-675-augusta-libia-0e851b8c-49b6-11e6-8c21-6254c90f07ee.shtm](http://www.corriere.it/cronache/16_luglio_14/tragedia-barcone-affondato-migranti-morti-sono-675-augusta-libia-0e851b8c-49b6-11e6-8c21-6254c90f07ee.shtm). Accessed on 7 June 2017.
15. Migranti: strage dei 700 due anni dopo "Basta morti, Ue agisca", Retrieved from: [http://www.agi.it/regioni/sicilia/2017/04/18/news/migranti\\_strage\\_dei\\_700\\_due\\_anni\\_dopo\\_basta\\_morti\\_ue\\_agisca\\_-1694190/](http://www.agi.it/regioni/sicilia/2017/04/18/news/migranti_strage_dei_700_due_anni_dopo_basta_morti_ue_agisca_-1694190/). Accessed on 7 June 2017.
16. Last T. Human costs of border control. Preliminary findings, Retrieved from: [http://www.borderdeaths.org/?page\\_id=293#\\_Toc418880585](http://www.borderdeaths.org/?page_id=293#_Toc418880585), Accessed on: 7.06.2017
17. UN 'deeply concerned' at migrants allegedly held for ransom in Libya, Retrieved from: <https://www.theguardian.com/world/2017/jun/15/un-says-film-of-migrants-held-captive-in-libya-seems-authentic>.



18. Last T, Mirto G, Ulusoy O, Urquijo I, Harte J, Bami N, Pérez MP, Delgado FM, Tapella A, Michalaki A, Michalitsi E, Latsoudi E, Tselepi N, Chatziprokopiou M, Spijkerboer T. Deaths at the borders database: evidence of deceased migrants' bodies found along the southern external borders of the European Union. *Journal of Ethic and Migration Studies*. 2017;43(5):693-712
19. Spijkerboer T, Human costs of Border control. Policy conclusions. Retrieved from: [http://www.borderdeaths.org/?page\\_id=295](http://www.borderdeaths.org/?page_id=295). Accessed on 7 June 2017.
20. Kovras I, Robins S (2016). "Death as the border: Managing missing migrants and unidentified bodies at the EU's Mediterranean frontier. *Political Geography*. 2016;55:40-49.
21. Report: "Migranti Dispersi: La Gestione delle Salme in Sicilia", Retrieved from: <http://www.mediterraneanmissing.eu/wp-content/uploads/2015/10/Mediterranean-Missing-Italy-short-report-IT.pdf>
22. Report from the Commission to the European Parliament and the Council: "The availability and readiness of technology to identify a person on the basis of fingerprints held in the second generation Schengen Information System (SIS II)" Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A93%3AFIN>. Accessed on 7 June 2017.
23. The hotspots approach to managing exceptional migratory flow, Retrieved from: [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/2\\_hotspots\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/2_hotspots_en.pdf). Accessed on 7 June 2017.
24. Storni J. Vaglia, l'addio al profugo ignoto Fiori, poesie e versi del Corano, Retrieved from: [http://corrierefiorentino.corriere.it/firenze/notizie/cronaca/16\\_settembre\\_07/vaglia-l-addio-profugo-ignoto-fiori-poesie-versi-corano-4929208c-74cf-11e6-9906-6ef1680ebarf.shtml](http://corrierefiorentino.corriere.it/firenze/notizie/cronaca/16_settembre_07/vaglia-l-addio-profugo-ignoto-fiori-poesie-versi-corano-4929208c-74cf-11e6-9906-6ef1680ebarf.shtml). Accessed on 7 June 2017.
25. D'Amico P. Profugo si impicca in Ferrante Aporti «Sull'accoglienza bisogna fare di più» Retrieved from: [http://milano.corriere.it/notizie/cronaca/17\\_maggio\\_08/profugo-si-impicca-ferrante-apor-tisull-accoglienza-bisogna-fare-piu-27aa9400-3373-11e7-b29f-317790db902d.shtml?refresh\\_ce-cp](http://milano.corriere.it/notizie/cronaca/17_maggio_08/profugo-si-impicca-ferrante-apor-tisull-accoglienza-bisogna-fare-piu-27aa9400-3373-11e7-b29f-317790db902d.shtml?refresh_ce-cp). Accessed on 7 June 2017.
26. Laczko F, Singleton A, Brian T, Rango M. "Migrant arrivals and deaths in the Mediterranean: what do the data really tell us?", Retrieved from: <http://www.fmreview.org/sites/fmr/files/FMRdownloads/en/destination-europe/laczko-singleton-brian-rango.pdf>. Accessed on 7 June 2017.
27. Interpol DVI guide. Retrieved from: <https://www.interpol.int/INTERPOL-expertise/Forensics/DVI-Pages/DVI-guide>.