The age estimation practice related to illegal unaccompanied minors immigration in Italy

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ABSTRACT

The migrants arrived to the Italian coasts in 2016 were 181.436, 18% more than the previous year and 6% more than the highest number ever since. An "unaccompanied minor" (UAM) is a third-country national or a stateless person under eighteen years of age, who arrives on the territory of the Member State unaccompanied by an adult responsible for him/her whether by law or by the practice of the Member State concerned, and for as long as he or she is not effectively taken into the care of such a person; it includes a minor who is left unaccompanied after he/she entered the territory of the Member States.

As many as 95.985 UAMs applied for international protection in an EU member country just in 2015, almost four times the number registered in the previous year. The UAMs arrived in Italy were 28.283 in 2016; 94% of them were males, 92% unaccompanied, 8% of them under 15; the 53,6% is 17; the individuals between 16 and 17 are instead the 82%. Many of them (50%), 6561 in 2016, escaped from the sanctuaries, thus avoiding to be formally identified and registered in Italy in the attempt to reach more easily northern Europe countries, since The Dublin Regulations (2003) state that the asylum application should be held in the EU country of entrance or where parents reside. The age assessment procedures can therefore be considered as a relevant task that weighs in on the shoulders of the forensic experts with all the related issues and the coming of age is the important threshold. In the EU laws on asylum, the minors are considered as one of the groups of vulnerable persons towards whom Member States have specific obligations. A proper EU common formal regulation in the matter of age estimation procedures still lacks. According to the Italian legal framework in the matter, a medical examination should have been always performed but a new law completely changed the approach to the procedures of age estimation of the migrant (excluding the criminal cases) with a better adherence to the notions and concepts of vulnerability and psychological and social maturity.

Migration of unaccompanied minors in Italy

In 2015, the European Union (EU) offices received a record number of more than 1.392.155 applications for international protection, a number which represents the highest ever with the sharpest year-to-year growth (+110 % compared to 2014) since 2008. Germany (34 % of all applicants), Italy, Sweden, Austria and Hungary are the EU countries that received the higher number of applications.[1] The migrants arrived to

the Italian coasts in 2016 were 181.436, 18% more than the previous year and 6% more than the highest number ever since.[1] The interpretation of these already dramatic numbers becomes especially worrying if we consider that as many as 95.985 unaccompanied minors (UAMs) applied for international protection in an EU member country just in 2015, almost four times the number registered in the previous year. The UAMs arrived in Italy were 28.283 in 2016; 94% of them males, 92% unaccompanied, 8% of them under 15; the 53,6% is 17; the individuals between 16 and 17 are instead the 82%.[2] The largest part of the minor migrants comes from Nigeria, Eritrea, Guinea, Ivory Coast and Gambia. Many of them (50%) very soon go off the grid (6.561 in 2016), a huge number, rising from the 1.754 in 2015,[2] escaping from the sanctuaries, thus avoiding to be formally identified and registered in Italy in the attempt to reach northern Europe countries more easily, since The Dublin Regulations (2003) state that the asylum application should be held in the EU country of entrance or where parents reside. To be considered, however, is the fact that not any minor come to Italy unaccompanied and not any UAM then submits an application for asylum. The authorization to stay in Europe is not granted to illegal migrants if they do not obtain a specific asylum permission and if they are not unaccompanied minors.

The 50%, anyway a huge number, settle down in Italy, even if a relocation programme was politically agreed at EU level to support the frontline EU border member states – mainly Italy and Greece – that were, since the beginning of the migratory flows, under considerable social, economic and political pressure and struggling for the lack of financial resources.

International and EU legal framework

The following are the most relevant international and EU directives in the area of asylum and minors' protection:

(1) The Declaration Of The Rights Of The Child and the Convention On The Rights Of The Child

The first document, proclaimed by UN General Assembly Resolution 1386(XIV) of 20 November 1959 was the basis of the Convention of the Rights of the Child adopted by the UN General Assembly many years later on 20 November 1989 and entered into force on 2 September 1990. It stated in the prologue that "the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth". The focus on the notion of immaturity in this early document is therefore pretty clear actually anywhere. In the Principle 2 of the resolution it is highlighted that in the enactment of laws for the purpose of protection and development of the best conditions for the child, the best interests of the child shall be the paramount consideration. In the Principle 5, we find other important hints relying on the notion of vulnerability: "The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required by his particular condition" and again "Society and the public authorities shall have the duty to extend particular care to children without a family". The latter document was adopted by UN General Assembly Resolution 44/25 of 20 November 1989, in the thirtieth anniversary of the Declaration of the Rights of the Child, and entered into force on 2 September 1990. In art.1 it stated that "For the purposes of the present Convention, a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier". The 18 years age threshold has been then decided, despite any previous consideration of the notions of maturity and vulnerability.

No recommendations or regulations are included in the aforementioned documents about procedures to be adopted for the age estimation of the unaccompanied migrant.

(2) The UN Committee on the Rights of the Child, 2005, 2007

In General Comment No.6 on the Treatment of Unaccompanied and Separated Children outside their Country of Origin, the UN Committee on the Rights of the Child states that identification measures, including age assessment, should not take into account only the physical appearance of the individual, but also his or her psychological maturity. Moreover, the assessment must be conducted in a scientific, safe, child and gender-sensitive and fair manner, avoiding any risk of violation of the physical integrity of the child; giving due respect to human dignity. The Committee stresses that if there is no proof of age, the child is entitled to a reliable medical and social investigation that may establish his/her age and, in the case of conflict or inconclusive evidence, the child shall have the right to the rule of the benefit of the doubt and be treated accordingly.

(3) In May 2010, the European Commission presented an action plan for unaccompanied minors who are regarded as the most exposed and vulnerable victims of migration.
According to the Directive 2013/33/EU, Chapter 1 art. 2, of the EU Parliament and Council (26.06.2013) laying down standards for the reception of applicants for international protection, an "unaccompanied minor" is a third-country national or a stateless person under eighteen years of age, who arrives on the territory of the Member State unaccompanied by an adult responsible for him/her whether by law or by the practice of the Member State concerned, and for as long as he or she is not effectively taken into the care of such a person; it includes a minor who is left unaccompanied after he/she entered the territory of the Member States.
The very important threshold of 18 years is therefore determined, as far the coming of age - that is the attainment of 18 years of age - defines the individual as an adult, with all the inherent important implications on acceptance or refusal of the asylum application.
In the EU laws on asylum, the minors are considered as one of the groups of vulnerable persons towards whom Member States have specific obligations. Minors are entitled to a guardianship and their needs must be taken into account when implementing the provisions of the EU Reception Directive. The EU states must guarantee access to rehabilitation services to those who have been victims of any form of abuse, neglect, exploitation, torture or cruel, inhuman and degrading treatment or who have suffered from armed conflicts.[3,4]

UAMS identification procedures: age estimation

The task of correct identification of the minor is of huge importance as far as the detention of minors must be considered a matter of real concern as teenagers, especially if unaccompanied, separated from their family, are susceptible to mental and emotional distress, prone to self-harm and illegal behaviours.
The only way to perform a real, chronological age "determination" of the AS should be a documentary evidence; in all the other ways only an "estimation" is obviously possible. Unfortunately, however, it has been estimated that around 51 million births go unregistered each year in developing countries, mainly in South Asia and sub-Saharan Africa. Even when a birth has been registered, the individual may lose the documentation and have no way of replacing it, particularly in times of war or social unrest. Again, there is an unfortunate geographical coincidence of incomplete birth registration rates, wars and poverty which means that refugees and asylum seekers often come with no evidence of age.
The age assessment procedures can therefore be considered as a relevant task that weighs in on the shoulders of the forensic experts with all the related issues.
A proper EU common formal regulation in the matter of age estimation procedures still lacks. The procedures for age estimation and requirements to be performed at a continental level, are currently likely governed only by simple technical recommendations, mainly issued by national or local scientific institutions. 23 EU countries use carpal (hand/wrist) X-ray; 17 countries, dental X-ray; 15 countries, collar bone X-ray (over 18); 14 countries, dental observation; 8 countries use sexual maturation observation; 2 countries rely on a psycho-social assessment only.[5]
Such a plurality of approaches rises ethical problems regarding to the migrants' right to be correctly informed about the procedures to follow, properly assessed with a ratified homogenous and shared protocol, issued according to the most recent and accepted scientific evidence.
No EU law or regulation currently rules the standard of evidence legally required in age assessment decisions (on the balance of the probabilities vs. sure of the necessary facts). Everything is therefore devolved to the national interpretation of the ethical principle of beneficence according to which any decision must be anyway taken in the minor's best interest.
No agreement has been reached so far in the EU about the possible ethical and legal justification of methods of analysis of bone and teeth maturation relying on the use of X-ray exams, given that the medico-legal assessment of age cannot definitely be described as a clinical diagnostic procedure.
But even if we temporarily overcome the aforementioned special problem of justification of protocols and procedures, we should spend some words about the scientifically proven accuracy of the adopted approaches. Three main

approaches are currently adopted: a simple physical assessment approach, which relies only on physical and skeletal maturation evaluations; a pure psycho-social assessment; and an holistic one, which keep into consideration not only the result of the body physical examination but also those of the skeletal and teeth X-ray examination and a psycho-social assessment.
Just as a reminder, the UN Committee on the Rights of the Child in its General Comment on the Treatment of Unaccompanied and Separated Children outside their Country of Origin stated that age assessments "should not only take into account the physical appearance of the individual, but also his or her psychological maturity, interaction of person with the interviewer, social history and family composition, developmental considerations, education, independence and self-care skills, general health and medical conditions, information from documentation and other sources", therefore a real holistic procedure.
According to the Italian legal framework in the matter, a medical examination should have been always performed so far, but a new State law[6] completely changed the approach to the procedures of age estimation of the migrant (excluding the criminal cases) with a better adherence to the notions and concepts of psychological maturity, interaction skills, social history, education, vulnerability, independence and self-care and coping skills, cited above. This new law, which privileges in the first place the administrative and documentary age determination and the psycho-social interview, relegates any medical procedure of assessment as the last tool, to be adopted only in case of persistent and founded doubts about the age of the migrant.

Age assessment

It is beyond the aim of this paper to summarize the vast literature existing about age estimation based on skeletal and dental maturation and relying on X-rays examinations but it is worth the effort to spend a couple of words about that since it is actually the main task for the forensic examiner.

Dental age assessment

Even if we realize that there is not a complete agreement in the literature about the correspondence of the different steps of the third molar radicular maturation and age, there is substantial agreement to consider an adult any individual at the last stage of maturation of the third molar radicular apex. No dental methods or parameters can be adopted to estimate age after the complete third molars root formation; generally speaking the stages of calcification of the third molar roots is a less regular as a phenomenon than that of the other teeth. Therefore, the study of the third molar development is more useful when not an age estimation but rather a classification of age with respect to the 18 years age threshold is requested.[7-22]
Moreover, a mature image is informative (at least 85-90% of probabilities of the attainment of 18 years) while the image of an immature apex is not, and this could lead to a large proportion of adults being assessed as minors. Moreover, Rodrigues Barros Soares et al. disagree stating that a full maturation of the third molars is found in the age average of 17.9 years, admitting therefore the possibility that a minor could have fully developed third molars.[23] The UK Royal College of Paediatrics and Child Health (RCPCH) said about dental age assessments: *"There is not an absolute correlation between dental and physical age of children but estimates of a child's physical age from his or her dental development are accurate to within two years for 95% of the population and form the basis of most forensic estimates of age".*

Skeletal age assessment

The Literature indicates that Greulich and Pyle (GP) is the most widely adopted method for skeletal age assessment, a method which was introduced into practice exclusively for auxological studies and that was only later adopted for forensic purposes and procedures, and derived by the analysis of few Caucasian North-American middle class individuals living in the past century. Regarding the skeletal methods, it has to be considered also that many conditions can affect skeletal growth, such as nutritional/ metabolic, socio-economical, pathological (major effects of the endocrine diseases on bone development and growth, such as precocious puberty, adrenogenital syndrome, hyperthyroidism), genetic alterations. Regarding the influence of ethnicity, we can say that no agreement has been reached in the literature yet, even if many authors consider ethnicity an important factor affecting growth. According to Schmeling A. et al., however, ossification is mainly influenced by the socio-economic status

of the considered population other than by ethnic considerations: the lower the status, the higher the risk of underestimation of growth/age.[24-27] Many authors indeed agree to consider the necessity of the adoption of ethnic-specific adjustment factors in the use of the skeletal age methods because ethnic and racial differences in growth patterns exist at specific ages.[28-29] It must be considered that most UAMs come from poor developing countries where patterns of maturation are likely to differ either from a genetic/ethnic or a socio-economic/nutritional point of view. The potential margin of error intrinsic in the use of a skeletal examination gets even bigger when no news are available about the individual's clinical history. According to the Literature, the accuracy of the skeletal methods for age estimation is poor in the age range 16-18, with a high percentage of overestimations; the left hand/wrist study is then completely useless over 18 years.[30] In any case, however, the estimation provided with the skeletal methods is everything but individually tailored to the proband and greater attention should be otherwise put to inter-individual variability.

Psycho-social interview

The psycho-social interview, in fact, even if on one hand it can be largely influenced by many biases such as the historical, political and social context in which the assessment is being made, the poor and unfamiliar setting in which the assessment is done, the lack of scientifically determined data about the overall margins of error, on the other hand it anyway seems the more suitable method to catch all the maturity and vulnerability aspects of the personality of the migrant, overcoming any strict limitation imposed by an age threshold.

All that said, we must admit that there is no method (neither medical or non-medical) available so far that enables the assessment of chronological age to the accuracy requested by government and border agencies, especially around the critical age threshold of 18 years; it is easier indeed to estimate the compatibility of the declared age with the 18 years of age threshold.

What happens in Italy?

In Italy the UAMs are under the full administrative responsibility of the City Council that is in charge also of the daily expenses for the minor - about 35 euro per day - which is about as much as twice the amount paid for any adult migrant. But, despite the high numbers of migrants arriving in the Italian coasts and the consequent costs, very few age assessments are eventually performed. All of them are requested by the Government local offices, but ordered by the Public Prosecutors (PP) at the local Magistrates' Court offices.

Generally speaking, the age assessment in Italy is requested mainly in case of unaccompanied migrants or criminal proceedings. It has been performed, at least until April 2017, with a skeletal (left hand-wrist X-ray, LHW) and sometimes also dental (ortopantomographs) development data analysis. In the cases dealing with illegal migration, however, the best practice – with the combination of skeletal and dental data analysis, as it is recommended in the Literature - is followed indeed only in few cases.[31,32] The skeletal assessments are often performed with the Greulich and Pyle (GP) method by Accident & Emergency (A&E) radiologists without any experience of age estimation cases and who have not received any specific education in the field. They often provide assessments that lack of any description of the margins of error or percentage of possible misjudgement with respect of the 18 years threshold.

No data are available on the frequency of adoption of physical and sexual maturation examinations for age assessments of minors in Italy, methods poorly accurate and no more acceptable also for ethical reasons. Physical and sexual examinations in fact are highly questioned both for being scarcely accurate and an humiliating practice for children that sometime have already experienced sexual violence, exploitation or ritual mutilations of genitals.

Even if in a substantial lack of real data, we can say that the physical examination of the minor is adopted in very few cases in Italy also because the assessment is mainly performed only with X-rays by the A&E doctor who is not qualified and competent indeed for any other kind of examination.

In Italy, the widespread practice to estimate the age or to provide a classification with respect to the 18 years threshold only with the X-ray of left hand-wrist implies a great risk of misclassification and overestimation considering that a mature LHW can be found even in a minor. On the other side, the teeth might provide useful

evidence with the third molar full maturation, tooth which seems not influenced by ethnic and environmental factors, but a dental assessment very seldom is required by the PP.
According to the Italian legal framework in the matter, a medical examination should have always been performed so far, but a new and recent law[6] completely changed the approach to the procedures of identification and even age estimation of the migrant (excluding the criminal cases), with a better adherence to the notions and concepts of psychological maturity, interaction skills, social history, education, vulnerability, independence and self-care and coping skills. This new law, which privileges in the first place the administrative and documentary age determination and the psycho-social interview, relegates any medical procedure of assessment as the last tool, only in case of persistent doubts about the age of the migrant.
According to the new law, the documentary evidence must be firstly pursued with the consent of the minor, even if this would require to activate the diplomatic routes. The age assessment is requested only if absolutely necessary and not systematically, in respect of the minor's right to preserve his/her identity, and preserve from any possible negative psychological and emotional outcome in case of doubts about identity and age.
The age assessment performed with the analysis of the narrative data retrieved from the UAM interview and a psychological evaluation of the UAM's demeanour, other than the attainment of a specific chronological or biological developmental stage, tends mainly to determine the attainment of the individual's level of maturity, which is ultimately the understanding if the individual can be considered able to successfully look after her/himself and cope with the everyday life's tasks eventually in the new host country. Hence we must consider maturity and vulnerability result in an inversely proportional ratio. Any procedures of age assessment based on the evaluation of the attainment of a maturity level can be defined as "needs-oriented".
The psycho-social assessment, performed - according to the new Italian law - by experts in a neutral setting, is one of the mainstays of the age estimation procedures defined by the new law. This is a method that more accurately than others accounts for the evaluation of the young migrant's real vulnerability or psycho-social autonomy, a principle which opens the door to an important discussion about what is a vulnerable person and if an age threshold is the best way to define it. The focus of the Italian law on the minor's vulnerability and protection is therefore better represented in this psycho-social approach, despite any consideration about the scientific basis of the assessment and the possibility to indicate a margin of error of the estimation. The medical methods of assessment (included the odontological) are therefore currently relegated to a second stage. The medical assessment must be performed with a holistic approach by specialized personnel in a proper setting. No exams which can be potentially invasive or harmful for the minor's psycho-physical condition can otherwise be performed. The margin of error of the estimation must be always clearly indicated in the report. The minor age is always presumed if any doubt still persists.

Very often the migrant arrived in Italy lies to the officers regarding his/her real age or sometimes changes his/her mind just once arrived in the sanctuary. Sometimes lies are different from any expectations: (1) The migrant claims to be minor but he/she is not. This is the typical situation when age estimation is requested in criminal cases. The young criminals know that the punishment, if any, is decided according to juvenile Laws. So asylum seekers are sometimes prone to declare a lower age to be admitted to receiving international protection as refugee unaccompanied minors. (2) Nevertheless we were involved instead in a few cases of children that declared an older age in the aim to avoid the guardianship controls which International law requires. In these cases the migrants think that being considered an adult would provide them with more freedom of movement. Sometimes the adult migrant who declared to be a minor changes his / her mind once arrived at the sanctuary, when he/she realizes that the guardianship offered to the minor reduce any possibility of movement and full personal autonomy.
In these cases the pure chronological age estimation showed off all its limits in assessing the maturity and vulnerability of the migrant.
We had recently to face the explanatory and sad cases of two migrants, both in the age range about 18 but classified as adults, who despite any

considerations about age showed a fatal, tragic and deadly lack of psycho-social maturity.
One of them, fled off the grid of his sanctuary, trying to reach northern Italy or perhaps northern Europe. His social immaturity made him take the deadly choice to follow the train trucks and enter a completely dark tunnel dedicated to high speed trains, 32 km long, which he never saw the light again from.
Another migrant of the same age range, adult for the officers, bypassed the institutional limitations and went in the middle of a forest, where he lost his way and decided to put an end to his desperate escape hanged to a tree.
The cases show that a mere assessment of the biological age does not enable to catch the individual's level of maturity, which is ultimately the understanding if the individual can be considered able to successfully look after her/himself and cope with the everyday life's tasks in the new host country, quite different from those of the country of origin. A more needs-oriented assessment might therefore be considered most suitable or even necessary, as part of a holistic approach.

CONCLUSION

Even if a more scientific and formal protocol should be applied in the age assessment of the migrants, things seem to go quite different in the daily practice.
Many migrants lie to the officers about their real age. It could be likely expected that many declare to the officers to be minor just to make the acceptance in the EU easier but the opposite really often happens instead. Many minors, in fact, try to be considered adults in the attempt to skip the restrictions of the compulsory guardianship attributed by law and the consequent limits to the personal freedom of movement or trying to reach another country in northern Europe.
An important reflection spontaneously rises, however, when we consider the attempts of the minors to escape the guardianships and the limits to the freedom of movements imposed in the sanctuaries. This issue, in our opinion, deals with the notion of a sort of social maturity much more than the implicit possession of all the sort of skills at the chronological attainment of the coming of age. Thus – in our opinion – the estimation of a chronological age gives poor results and shows its insufficiency in the evaluation of the needs and the vulnerability of the migrant, which are, basically, the most important notions to consider and appraise according to the Declaration Of The Rights Of The Child and the UN General Comment No.6 on the Treatment of Unaccompanied and Separated Children outside their Country of Origin.
The two reported cases, very sad stories of social disability, vulnerability and immaturity, made us think that the new Italian law, more committed to catch any possible need and any sort of vulnerability of the young migrants - actually the first in the EU in which a protocol for the migrants' identification is stated – adopts the procedure most adherent to the founding notions of solidarity originally included in the Declaration Of The Rights Of The Child and the UN General Comment No.6 on the Treatment of Unaccompanied and Separated Children outside their Country of Origin.

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