


# Role of forensic medicine in addressing the war crimes: Perspective from Russia-Ukraine conflict during the COVID-19 pandemic

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## Abstract

The International Criminal Court has recently opened an investigation into the international crimes committed on Ukrainian territory. The ongoing Russian-Ukrainian war is a tragic opportunity for a necessary critical and scientific reading of the Rome Statute. In our work, we aim to critically analyse the contents of the International Criminal Court's Rome Statute, with particular attention to the definition and listing of war crimes. Our objective is to assess whether the content of the Rome Statute and the Geneva Convention is useful to provide a correct and complete orientation of the medico-legal work in the context of war. We believe, in fact, that the forensic pathologists, and forensic experts in general, are the only professional figures specialised in providing scientific evidence of crimes compatible with war crimes. Their timely intervention and the standardisation of their work – in association with a review of the deficient content found in the Rome Statute – is essential in order to allow the prosecution of international crimes, already potentially undermined by the slowdowns associated with the COVID-19 pandemic that is the backdrop to the current conflict.

## Keywords

War crimes, forensic medicine, legal medicine, human rights, international law

## Background

Ukraine is not a state party to the International Criminal Court (ICC). However, since November 2013, it has accepted the ICC's jurisdiction for three of the four international crimes listed under Article 5 of the Rome Statute<sup>1</sup> committed within its borders (crime of genocide, crimes against humanity, war crimes). Therefore, in March 2022, the ICC began investigating the aforementioned crimes committed in the territory of Ukraine during the ongoing Russian-Ukrainian war,<sup>2</sup> the recent situation in Ukraine is an emblematic example that can be used to analyse this issue. Particularly, Article 6 of the Rome Statute defines genocide as 'any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such'. *Crimes against humanity include* 'any of the following acts committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack'. In Article 8 of the Rome Statute, war crimes are defined by a detailed list of violations of the international law 'committed as part of a political plan or design, or as part of a series of similar crimes committed on a large scale'. These are

identified in the *grave breaches* of the Geneva Conventions of 12 August 1949<sup>3</sup> and include more than 50 offences, including voluntary manslaughter, torture or inhuman treatment, rape and hostage-taking as well as attacks on humanitarian missions. As stated in the Statute, the crimes that can be classified as 'war crimes' are numerous and described with a variable level of specificity.

These include both acts of violence against the life and health of civilians and combatants (wilful killing, torture or inhuman treatment, serious injury to body or health, physical mutilation, medical or scientific experiments which cause death to or seriously endanger the health), and acts of sexual violence contrary to the right to self-determination.

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Article 7 of the Rome Statute lists ‘rape, sexual slavery, enforced prostitution, forced pregnancy, enforced sterilization, or any other form of sexual violence of comparable gravity’ as a ‘crime against humanity’; Article 8 lists ‘rape, sexual slavery, enforced prostitution, forced pregnancy [...] enforced sterilization or any other form of sexual violence as serious violations of the laws and customs applicable in international armed conflict [...] rape, sexual slavery, enforced prostitution, forced pregnancy [...] enforced sterilization or any other form of sexual violence as a serious violation of Article 3 common to the four Geneva Conventions armed conflict not of an international character’.

Additionally, many war crimes involve the use of certain types of weapons because they are illegal under international law and/or because they cause superficial injuries that cause unnecessary suffering to the victim (poison or poisoned weapons, asphyxiating gases or liquids, employing bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions, weapons employing microbial or other biological agents or toxins, weapons whose main effect is to injure by shrapnel that cannot be located in the human body with X-rays, laser weapons specifically designed to cause permanent blindness).

The number and variability of crimes that can be considered as ‘war crimes’ requires the intervention of specialised professionals, including forensic doctors. In fact, in case of suspected war crimes, medico-legal investigations are essential for clarifying the circumstances of death and/or violence in war contexts.

Sources of law and jurisprudence concerning international crimes – in particular war crimes – and the law of war have been consulted in order to better understand the role of the forensic pathologists in such situations. Particularly, specific contents of the Rome Statute of the ICC, Geneva Conventions of 12 August 1949, and sentences of the International Criminal Court and the European Court of Human Rights concerning war crimes have been analysed.

## The role of forensic pathologist

The socio-cultural, socio-economic and legal systems diversity of European countries is also reflected in a great variability in the system of forensic medicine. In fact, there are differences between countries in terms of the training and skills required to the forensic doctor, and minimum standards of accreditation to the to the medical forensic service.<sup>4,5</sup>

In any case, the forensic pathologist is a medically trained and specialized professional doctor.

Its activity includes forensic investigations not only on deceased subjects (autopsy or post-mortem examination), but also on living subjects (e.g. external examinations on

victims of injury, sexual violence or torture). The forensic pathologist, thanks to his medical training, has in fact a particular competence in evaluating and qualifying pathological injuries suggestive of heterogeneous violence. This, together with circumstantial data (subject’s medical history and/or crime scene findings) allows the forensic pathologist to reconstruct the time, cause and means of death and, if unknown, to define the identity of the body. The role of this professional in the crime scene is crucial. In fact, while the police play an essential role in preserving the scene, collecting evidence and testimonies, the forensic doctor is the only one who can assess the injuries on the victim’s body and their compatibility with the means used, any post-mortem changes, and blood spatter; this role is essential to reconstruct the dynamics of death.

As recently stated by the United Nations Human Rights Council, the contribution of the medico-legal death investigation systems to criminal justice, the rule of law and the protection of the right to life cannot be underrated. In fact, the forensic pathologist has a key role to play in identifying the increase in drug-related deaths, road accidents or work-related deaths. In addition, forensic activity is crucial to clarify the dynamics of violent deaths (infanticides, femicides, prison deaths) or personal injuries (sexual violence, abuse). In addition, even in the case of non-violent hospital deaths, the medical examiner is indispensable to understand the patient’s clinical course and cause of death, to help prevent future deaths of other patients and improve health activity. Finally, the role of medico-legal work has been instrumental in understanding the cause of death in patients who died from COVID-19, helping to reduce patient mortality and develop new preventive measures.

The forensic pathologist has played a key role in international criminal trials in providing evidence sources of numerous crimes against humanity and human rights violations in the context of mass murder and/or war conflicts.<sup>6</sup>

In particular, the forensic pathologist in the past has been charged with providing anthropological-forensic evidence on exhumed bodies, many years after the event. Although delayed, even in these circumstances forensic activity played a decisive role in reconstructing the contexts and places of burial, in tracing the identity of the bodies found, in determining the time of death, to detect and qualify any signs of violence on the bone remains and to determine the cause of death.<sup>7-10</sup>

We believe, however, that many of the medical examiner’s expertise can be particularly useful in detecting crimes against humanity and war crimes and in ensuring that they are properly valued and punished.

First, during his career, the forensic pathologist is accustomed to dealing with circumstantial data of death (complaints, statements, video footage, testimony, traces, and details present in the crime scene) whose analysis – together with the scientific findings on the corpse – is essential to reconstruct in a complete way the dynamics of violent death.

These skills can be particularly useful in war scenarios where, to ascertain an international criminal offence, a comparison between the circumstantial and the scientific data is often necessary. In this sense, it must be considered that in war media contexts – such as the one currently underway in Ukraine – it is often necessary to interpret the content of images, videos, and statements that, to assume evidentiary value, require a rigorous scientific interpretation. The medical examiner is an expert in comparing the physical evidence of a crime with the circumstantial data and then to corroborate or refute, with the right method, data that, otherwise, would have a mere circumstantial role.<sup>11</sup>

Moreover, during his career, the medical examiner is called upon to clarify particularly complex suicidal and/or homicidal dynamics involving several subjects. For example, in mass disasters or mass murders/suicides, the medical examiner must face particularly critical contexts linked to unforeseen and sudden events (major accidents or natural disasters) and often characterized by a disproportion between the number of victims and available resources; these critical issues are also found in contexts of war.<sup>12</sup>

Furthermore, the forensic doctor is the only professional figure specialised in detecting, qualifying and backdating the presence of external signs of violence or torture on those who died in a war. Verifying the nature and number of such signs, clarifying whether they are synchronous with the death or prior to it, and whether they present lethal power or not is fundamental to establishing the time and means by which they were inflicted. Moreover, this assessment is essential to characterise the injuries and to understand whether they are superficial and, therefore, inflicted with the sole aim of causing further and useless suffering to the subject, who then died of different causes. Therefore, medico-legal assessment is not only essential for evaluating the signs objectively present on the body, but also to direct the legal experts about the intention behind an act and the psychological element of a crime.

The medico-legal inspection, autopsy, and instrumental and laboratory tests carried out by the forensic pathologists and professionals working alongside them (engineers, toxicologists, radiologists, and ballistic experts) are the only scientific instruments useful for reconstructing the cause and the dynamics of the death as well as for ascertaining the use of weapons prohibited by international law of war.

The forensic medical assessment of crimes that can be defined as ‘war crimes’ is not only carried out only on dead bodies. The forensic doctor is also summoned in case of survivors of potential war crimes.

Article 8 of the Rome Statute lists ‘wilfully causing great suffering, or serious injury to body or health’ as a war crime. This definition is questionable because, first, it is too general and, therefore, does not guide the medico-legal work; these risks leaving ample room for subjective interpretations that are not acceptable in the criminal field. Moreover, this definition is partial because it does not

make specific reference to the victim’s psychological impairment, which is a fundamental element of a person’s overall health, understood as psycho-physical well-being.<sup>13</sup> We have noted that Article 8 never specifically mentions injury to the psychological health of victims but only generically refers to ‘serious suffering’.

Such omission is scientifically and bioethically questionable, especially because it is inscribed in a context – that of war – particularly prone to the development of psychological pathologies. Filling this gap is fundamental for guaranteeing medico-legal assessment as complete and reliable as possible and also through the recruitment of experts specialised in the identification and evaluation of psychological damages, such as forensic psychiatrists. The risk, even in this case, is to leave too much room for subjectivism and to compromise the indispensable medico-legal objective rigour, especially in the criminal field.

In the Rome Statute, sexual violence is listed both as a crime against humanity and a war crime. Even in this case, however, the definitions used are rather generic and not in line with the scientific and legal specificity required. The Statute speaks of ‘rape, sexual violence, sexual slavery, forced pregnancy, enforced sterilisation’. As known in the jurisprudential and medico-legal doctrine, *sexual violence* is a generic term that includes several subspecies of specific crimes whose definitions vary across different countries worldwide and have undergone numerous developments over the years.

For example, in the United States, classically, the term *rape* referred exclusively to ‘the forcible carnal knowledge of a female against her will and was generally restricted to vaginal-penile penetration’. Later, the definition of *rape* became: ‘non-consensual sexual penetration of an adolescent or adult obtained by physical force, by threat of bodily harm, or when the victim is incapable of giving consent by virtue of mental illness, mental retardation, or intoxication’.<sup>14,15</sup> This definition was then further extended in 2012 into ‘the penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim’.<sup>16</sup> Furthermore, in the United States, the term *sexual assault* is used to refer to crimes of sexual assault, which is the ‘intentional sexual contact characterized by use of force, threats, intimidation, or abuse of authority or when the victim does not or cannot consent. The term includes a broad category of sexual offenses consisting of the following specific Uniform Code of Military Justice (UCMJ) offenses: rape, sexual assault, aggravated sexual contact, abusive sexual contact, forcible sodomy (forced oral or anal sex), or attempts to commit these acts’.<sup>17</sup> Moreover, in the United States, the term *sexual abuse* refers primarily to child abuse; in other countries, such as Italy, it also refers more generically to sexual acts committed by abusing the offender’s physical or mental inferiority at the time of the act and/or misleading the offender by substituting another person.<sup>18</sup>

As revealed by a recent study of the European Institute for Gender Equality (EIGE) also among the countries of the European Union there is a great heterogeneity in the definitions of different types of gender-based violence.<sup>19</sup>

The concept of 'rape' is also different from country to country, so much so that it adversely affects the effective and complete statistical collection of European data on the subject. As revealed by the recent report of the Swedish National Council for Crime Prevention (Brå), the legal definition of rape is extremely diverse in Europe and is characterised by different levels of specificity. The differences are substantial and concern the gender of the subjects involved (in some cases we speak generically of 'person' or 'subject' to refer to the victim and the offender, other times we speak explicitly respectively of woman and man), the manner in which violence occurs and the consent and ability to oppose the violence of the victim.

For example, in Malta and Poland the definition of rape is rather generic: rape means, in fact, respectively 'sexual intercourse achieved through violence' and 'a person who by force, illegal threat or deceit subjects, another person to sexual intercourse'. On the contrary, in other countries the definition of rape is much more specific and has as a condition the penetration of the victim's body. For example, in Portugal, the definition of rape is: 'a person who uses violence, force, or serious threat, or to make a person unconscious or unable to resist, in order to have vaginal, oral or anal sexual intercourse with the victim or enabling someone else to do so, or to insert body parts or any other objects into the vagina or anus'. In France rape is 'any act of sexual penetration, whatever its nature, committed against another person or on the perpetrator, by violence, constraint, threat or surprise, is rape'. Moreover, if, for example, in Malta and Poland – as we have seen – the victim's ability to react is not specified, in many countries rape is referred to when sexual violence occurs without the woman's consent or if the woman is unable to oppose it. For example, in Romania, rape is 'the sexual act, of any kind, with a person of the opposite sex or of the same sex by forcing that person or by taking advantage of his or her impossibility to defend herself/himself or to express his/her will'.<sup>20</sup>

Therefore, the lack of homogenisation of the definitions of crimes of sexual violence in various countries worldwide and their continuous and varied evolution motivates the need to specify, with greater clarity, which of them can be considered internationally punishable as crimes of war. This is indispensable to make it possible for every forensic pathologist intervening in the field to fully understand – independently of their geographical and socio-cultural origin – the signs of sexual violence to be sought in victims. Additionally, a more thorough definition of war crimes related to the sexual sphere would allow to optimise and rationalise the work of forensic doctors recruited. These gaps need immediate attention because of the high

incidence of sexual violence during armed conflicts not only against civilians, but also among the military personnel.<sup>21</sup>

A few critical issues also emerge in the evaluation of the outcomes of sexual violence by a forensic pathologist. As is well known and consolidated in forensic doctrine, the physical signs of rape and sexual violence are, by their very nature, volatile and often only minimally objectifiable. In fact, this leads many countries to adopt specific early detection protocols for suspected sexual violence in which specialised professionals are involved.<sup>22,23</sup> The finding of traces of sexual violence is particularly delicate and must be carried out with extreme care and timeliness to guarantee the victims of violence the use of forensic evidence during the trial. Such systematic behaviour and timeliness – already difficult to achieve in a context of ordinary health care – is difficult to achieve in a context of war where the victim cannot – in most cases – access health services. Therefore, in complex circumstances, such as wars, the signs of sexual violence may also be completely lost if timely medico-legal assessment of the victims is not guaranteed. Consequently, it is necessary for a forensic doctor to intervene as soon as possible so that sexual violence can be proved, enabling a war crime to be prosecuted at an international level. The rapid medico-legal intervention is therefore essential to pursue the objective of entrusting the demonstration of sexual crimes to objectifiable, scientific evidence and not only to testimonies of less probative value in the trial context. Finally, even in this case, it must be stressed that the Statute does not make explicit reference to psychological outcomes of sexual violence, even though these are very frequent – both in the short and long term – in victims of violence. As can be easily and sadly deduced, such outcomes are even more pronounced when placed in a context like war. As previously argued, evaluation of the aforementioned psychological outcomes requires the intervention of professional figures who have specialised in managing and ascertaining them, such as forensic psychiatrists.

It should also be pointed out that the ongoing Russian-Ukrainian war is taking place during the COVID-19 pandemic. This risks further undermining the correct and congruous assessment of specific signs which are already in themselves subject to substantial changes over time.

In fact, any positive cases of SARS-CoV-2 can create risks in transmission prevention measures and the bureaucracy causing further delays in the movement of healthcare professionals and/or victims. Additionally, a victim who tests positive for COVID-19 may be prone to further delays in the physical examination essential for establishing the occurrence of sexual assault.

Therefore, in addition to delays in the medico-legal assessment due to the context of war, there are also delays due to the fact that the current conflict is taking

place during an ongoing pandemic. Bureaucratic and health issues could further worsen the process of justice, especially if the role of the forensic pathologist is not adequately defined.

## Perspectives

Due to ongoing war, the main priority of the war afflicted population is the safety of themselves and their loved ones. Then the priority is for food and shelter. Then comes the safety and security of their belongings. The seeking of justice comes thereafter. There might be situations where the seeking of justice is a secondary issue. Humanitarian organizations need to act in such scenarios primarily to protect human rights. However, immediately after ensuring the protection of human rights, it will be necessary to identify who violated them (and how and when fundamental rights were violated). Ensuring justice, even in war scenarios, is essential to prevent the recurrence of certain atrocities in the future, as well as to punish war criminals.

Hence, we think that it is necessary to provide the forensic pathologist with a more specific definition of the physical signs in case of dead bodies and, more importantly, of the psycho-physical signs that can be ascertained in case of survivors.

This would allow optimising and standardising the role of the forensic doctor in war scenarios, avoiding further underestimation of war crimes, already immanent in emergency circumstances, both military and sanitary (COVID-19 pandemic). Ensuring timely and standardised medico-legal intervention in war situations is fundamental for allowing the scientific assessment of signs of violence indicative of any war crime. This is to contribute towards preventing a qualitative and/or quantitative overestimation or underestimation of war crimes.

During this ongoing war in Ukraine, it will be essential to organise teams of forensic experts to ensure that no war crime goes unpunished or misjudged. Notwithstanding the possible problems related to the COVID-19 pandemic, in-depth inspection activities, followed by autopsy analysis of dead bodies or visits of war veterans (civilian or military), will not be possible. Moreover, it will be essential to provide a more accurate and complete definition of crimes that qualify as war crimes in the light of recent scientific progress and legal evolution. In fact, with particular reference to sexual violence, it is essential that the Rome Statute provides more specific definitions that can be reproduced unambiguously at the international level.

In conclusion, we believe that the definition of a modern protocol of forensic activity aimed at ascertaining the presence of signs of crimes indicative of ‘war crimes’ is essential to ensure that those who are responsible (direct perpetrators) or co-responsible (although aware of the crimes committed, they did not act to prevent them) for the violation of human rights are adequately punished.


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