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The Current Status of Forensic Anthropology in Poland-Assessment of the Discipline

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Abstract: The existing divergences in the development of forensic anthropology (FA) around the world justify an analysis of its situation in each country/region. The present article aims to discuss the current status and development of the field of forensic anthropology in Poland to highlight the existing challenges and contribute to the advancement of the discipline. The research consisted of personal visits to three main centers where forensic anthropology is practiced in Poland and semi-structured interviews with the practitioners. Only seven forensic anthropology practitioners who provide anthropological opinions for law enforcement agencies in Poland have been identified. In 2019, the first post-graduate course in forensic anthropology was created at the Jagiellonian University in Kraków. There are also supplementary workshops for pathologists, prosecutors, and police officers to familiarize them with practical concepts of forensic anthropology. Scientific publications in the field of forensic anthropology appear regularly in national and international professional journals, and cutting-edge research on new methods of analysis and identification from video surveillance systems is being carried out. Their results stand out and gain significant recognition from international scientists. Forensic anthropology in Poland is constantly developing, but there is a need to analyze and harmonize the norms regulating the profession of forensic anthropologists.

Keywords: forensic anthropology; forensic sciences; Poland; evaluation; practice; interviews



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1. Introduction

In the past years, the discipline of forensic anthropology has been gaining space and importance within the context of forensic sciences. Nevertheless, while this field is characterized by a highly unequal development pace with significant differences among countries [1–6], important steps are being undertaken in order to regularize this profession [5]. The highest level of organization, regularization, and professionalization of this discipline can be observed in the United States [2]. Kranioti and Paine [3] indicate significant differences in the aspects of education, training, research, professional status, and job opportunities, which can be observed when analyzing the structure of this discipline in particular countries.

Poland is the ninth largest country in Europe in terms of area and eighth most populous (~37.5 M) [7]. Its geographic location between the East and the West places the country in the heart of Europe, strongly affecting its history and native culture [8]. Historical circumstances left the country with innumerable hidden mass graves from various periods that offer an exceptionally fertile background for the practice of anthropology. However, the political conjuncture together with many, often opposed interests involved in these kinds of cases, as well as the relatively delicate context of many of them (especially those regarding Jewish victims), often negatively affect the conduction of effective investigations [9,10]. The Polish Penal Code establishes the forensic significance for a period of

30 years, except for crimes against peace, crimes against humanity, war crimes, and intentional offenses: murder, serious bodily injury, serious injury, or deprivation of liberty combined with particular torment, committed by a public official in connection with the performance of official duties [11]. As a result of complex historical circumstances (wars, prolonged occupation by foreign powers, totalitarian regime, etc.), the territory of Poland became a location of unprecedented acts of genocide with the consequent death and burial of millions of people of various nationalities, both military and civilians [8]. Due to the impossibility of identifying either living perpetrators, living survivors or witnesses [10], the majority of such crimes in Poland are treated in a historical rather than strictly forensic light.

Regarding typical forensic cases, Poland is not a very violent country [12] that would produce an overwhelming amount of recent material for forensic anthropologists. However, different circumstances of death, as well as skeletal remains, either human or animal, found accidentally (e.g., during construction works, by passersby, etc.) often require anthropological expertise.

There is hardly any information on the status of forensic anthropology in Poland. Obertova et al. [5] include Poland among the 28 European countries that they analyze jointly in order to construct a broad image of this discipline from the European perspective. Trzciński and Borkowski [13] provide a comprehensive report on the situation of forensic archaeology in Poland being inextricably linked with forensic anthropology, yet they constitute clearly separate fields [14]. They point out the interconnection of both disciplines and emphasize the importance of collaboration for effective outcomes.

Despite minimal movement regarding the consolidation of the discipline of forensic anthropology in Poland, practicing professionals intensively engage in academic activities. Firstly, as a great part of forensic experts work at universities, they consequently share their knowledge and expertise with their students, mostly in medical courses. Secondly, as university professors/researchers, they are also required to research and publish, and they do so in various national and international journals. Their work is highly appreciated and has been gaining significant recognition, especially regarding the research on the analysis and identification from video surveillance systems [15,16].

Notwithstanding, no major steps are being taken towards the advancement of this field either academically or professionally. This constitutes an excellent opportunity to establish an inquiry to understand the challenges and limitations that forensic anthropology may be facing in Poland. Moreover, considering the importance of forensic anthropology in the judicial process, it becomes crucial to understand the existing obstacles and difficulties that affect the daily practice and effectiveness of the service. Our goal is to report the information gathered directly from professionals acting in the field, their opinions, concerns, and difficulties encountered in their daily practice, with the aim of highlighting the challenges of the discipline and thus contributing to the advancement and development of forensic anthropology in Poland. The present paper focuses on addressing these issues in order to support the development of forensic anthropology in Poland and to contribute to the substantially growing knowledge of this field.

2. Materials and Methods

Between March and April of 2018, personal interviews were conducted at the three main research and teaching institutions that lead the forensic anthropology service in Poland: the Fingerprint and Forensic Anthropology Section, Department of Criminalistics, Institute of Forensic Research in Kraków; the Laboratory of Anthropology and Odontology at the Department of Forensic Medicine, Medical University in Poznań; and the Department of Forensic Medicine at the Medical University of Wrocław. Three professionals (one in each institution) were interviewed. Both the visited institutions and the interviewed professionals were chosen based on their active engagement in the practice of forensic anthropology. The three selected institutions are the most dynamic centers for the practice of forensic anthropology in Poland, and their activities cover a significant part of the country. Their main practitioners, our interviewees (one in each institution), are among the most renowned Polish

experts in the field. The number of experts interviewed accounts for 43% of all identified forensic anthropologists in the country. The information collected in 2018 was updated with more recent data from 2019–2021 in order to complete the present report and deliver the most accurate and up to date status of forensic anthropology in Poland.

Before the interviews, consent was obtained from all participants, and they were instructed that they could stop the interview at any moment or abstain from answering any question.

Semi-structured interviews were conducted according to an a priori prepared plan. Certain forms of interview methodology can yield data that would not be possible to obtain from other primary or secondary sources while simultaneously offering a better understanding of the motivations, preferences, desires, and perceptions of the interviewees [17]. This was especially useful in illustrating the field's professional reality, evaluating the homogeneity of education, and recognizing the challenges and perspectives of the forensic anthropology field in the country.

For the purpose of this research, we define a forensic anthropologist as an individual who has an academic degree in physical or biological anthropology with a subsequent specialization/extensive experience in forensic anthropology, as specified by the American Board of Forensic Anthropology (ABFA), and who performs professional activities in this field on a daily basis. Specialists that do not meet these criteria yet do perform professional activities in the field of forensic anthropology are considered forensic anthropology practitioners.

The applied inquiry was composed of nine questions encompassing topics regarding general forensic anthropology, the academic background of professionals, professional performance, and academic involvement of the interviewee. They were developed to collect the most abundant data about the status of forensic anthropology in Poland, the professional reality, and the most common challenges faced by the discipline and its practitioners.

The specific questions asked during the interviews, together with information gathered directly from our interviewees are reported in Section 3 below. The responses are jointly summarized in order to more effectively present commonalities or possible divergences of opinion for each question. The only information obtained from other sources is the number of ad-hoc specialists (last paragraph of point 3.2).

3. Results

3.1. Does the Profession of Forensic Anthropologist Exist in Poland? Who Performs the Tasks of a Forensic Anthropologist?

The profession of a forensic anthropologist does not formally exist in Poland. Such duties are taken over by individuals employed most often at forensic medicine institutes of medical universities (ZMS—*Zakład Medycyny Sądowej*), because these are the places to which law enforcement agencies transfer skeletal remains that did not initially yield historical origin.

Since, from an academic perspective, forensic anthropology is a relatively young discipline, none of the people working on anthropological cases in Poland have a strict academic background in this field. This implies a diversity of educational qualifications among Polish forensic anthropology practitioners.

Apart from our interviewees, there are also professionals working in the field of forensic anthropology in ZMSs that we were not able to include in our research. Additionally, our respondents indicated that there are also “on-call” specialists included in courts' expert lists that provide ad hoc opinions when necessary. It is the judgement of the court to decide whether an expert from a ZMS or an ad hoc specialist will be called to provide an opinion on a case.

3.2. How Many Forensic Anthropologists or People Working in This Field Are There in Poland? What Is Their Academic Background?

The visible problem regarding the practice of forensic anthropology in Poland is the insufficient definition of the profession and the lack of strict requirements for who can be included on the list of the court. It has not been legally regulated what qualifications a person providing expertise should have; therefore, it happens that the opinions issued are sometimes flawed or incorrect. This is generally related to insufficient basic expertise which is, on the one hand, due to inadequate academic background (not all experts have academic training in biological/physical anthropology with subsequent forensic focus) and on the other hand due to the lack of continuous practice in the field, which is mostly the case of ad hoc specialists. This fact can have important legal consequences and for this reason should be urgently addressed.

Due to the above-mentioned circumstances, it is relatively difficult to assess the exact number of forensic anthropologists in Poland. Taking into account the interests, professional performance, publications, and the provision of opinions for the court of law, and based on the information provided by our respondents, we were able to identify seven forensic anthropology practitioners in Poland, one in each of the following cities—Wrocław (ZMS), Poznań (ZMS), Olsztyn (consultant), Bydgoszcz (previously at ZMS, now a consultant), Szczecin (ZMS), and two in Kraków (Institute of Forensic Research—IES). However, if the criterion of evaluation would be the education of a physical anthropologist with subsequent courses and experience in forensic anthropology (i.e., as specified by the American Board of Forensic Anthropology—ABFA), then there are only four forensic anthropologists (three of which work in public institutions (ZMS) in Poznań, Wrocław, and Kraków, and one independent). In 2021, 3 years after the initial data collection for this research, at the Institute of Forensic Research in Kraków, an individual who graduated in human biology (biological/physical anthropology) with a Master's degree in physical and forensic anthropology (University of Granada, Spain) was hired and is consequently included in the above list. The independent expert is not affiliated with any institution or university and provides expertise ad hoc for both private clients and public contractors (personal communication). The highest academic degree of Polish professionals working in the field of forensic anthropology includes a PhD in biological/physical anthropology (Poznań, Bydgoszcz, Olsztyn), a PhD in forensic medicine (Szczecin), and a Master's degree in forensic and physical anthropology, as well as in general biology (both in Kraków).

A detailed analysis of courts' expert lists allowed us to identify 17 ad hoc consultants in the field of forensic anthropology, out of which only seven have an academic background in anthropology. Unfortunately, information on possible complementary courses in forensic anthropology is not available; therefore, we cannot determine whether they comply with the ABFA requirements or not. Other ad hoc experts include archaeologists, lawyers, psychologists, and police officers, among others.

3.3. Considering Your Professional Experience, What Academic Background Should a Forensic Anthropologist Have? Are There Any Courses/Trainings in This Area in Poland?

All interviewed professionals agree that a forensic anthropologist should complete a full course or specialization in biological/physical anthropology. Only this way can one acquire the basic knowledge necessary in this profession, which will be supplemented by further specialization in topics more directly related to forensic science. Although the field of physical/biological anthropology is well developed in Poland, the first postgraduate course in forensic anthropology was not established until 2019. The prolonged lack of training possibilities significantly thwarted access to adequate education for potential forensic anthropologists, and those interested in pursuing this career path often had/have to search for such options abroad. Since not every region in Poland can count on a forensic anthropologist service in situ, experts from Wrocław and Poznań conduct short courses on the subject matter. The courses are offered mainly to medical examiners so as to provide them with basic knowledge on determining the identity of anonymous remains using forensic anthropology techniques. The specialists also conduct trainings for prosecutors,

police officers, and forensic technicians with the aim of raising awareness that through the use of forensic anthropology methodology and knowledge, both bones and digital materials can be used to obtain a variety of evidence useful in criminal trials.

3.4. What Are Your Main Duties as a Forensic Anthropologist?

According to the interviewees, the main tasks of a forensic anthropologist are:

- skeletal analysis and identification;
- identification of bone injuries;
- estimation of postmortem interval (PMI) based on bone analysis;
- analysis of taphonomic changes and the pace of disarticulation;
- estimation of age of living individuals e.g., minors (child pornography), undocumented immigrants, cases of human trafficking, etc.;
- identification based on CCTV recordings;
- participation in exhumations (including historical cases);
- facial reconstruction;
- distinguishing between human and animal bones.

A detailed characterization of the activities and specializations of each of the centers is presented in Table 1.

Table 1. A detailed characterization of each of the visited facilities (data retrieved from the interviews).

	Fingerprint and Forensic Anthropology Section of the Institute of Forensic Research, Kraków	Laboratory of Anthropology and Odontology at the Department of Forensic Medicine, Medical University of Poznań	Department of Forensic Medicine at the Department of Forensic Medicine, Medical University of Wrocław
Main activity	Research and development (reports to the Ministry of Justice)	Scientific and didactic	Scientific and didactic
Number of cases per year	~100	~450	~1000
Academic background of the professional	Master of Biology, specialization: entomology	PhD in biological sciences, specialization: physical anthropology	Master of Biology, specialization: physical anthropology
Main specialization	Facial reconstructions	Analysis of audiovisual materials, forensic odontology	Age estimation, child pornography analysis – assessment of the age of minors (child pornography, foreigners)
Activity	– skeletal analysis – differentiation of ante- and post-mortem lesions – visualization and identification of fingerprints – identification on the basis of appearance features – facial reconstructions	– anthropological, dental, and radiological analysis of bone remains – identification of people based on monitoring records – identification based on bite marks – assessment of the age of living people	– identification based on monitoring records – distinguishing between human and animal bones – examinations of remains, skeletal material – exhumation

3.5. What Are the Main Differences between the Work/Profession of a Forensic Anthropologist and a Medical Examiner? How Important Is Cooperation between These Fields in Your Everyday Work?

Forensic anthropologists often work in interdisciplinary teams, consisting of experts in many fields. When human remains are found in a more advanced state of decay, a team consisting of a medical examiner and anthropologist (if employed in the area) is always preferred. The presence of a medical examiner is essential because, according to Polish law, only she/he can comment on the cause of death or the mechanism of possible injuries. The task of a forensic anthropologist is primarily to assist with identification. However, to be 100% sure, genetic testing is usually ultimately requested. When human remains are being discovered, and if there is any suspicion of identity, the existing medical documentation is used; for example, in the case of CT scans or radiographs, the data are

discussed with radiologists. All kinds of dental work present in the analyzed material, e.g., fillings, orthodontic appliances, dentures, or bridges, are consulted with a dentist or forensic odontologist.

Sometimes, a collaboration with (forensic) archaeologists is solicited, especially in the moment of recovery of human remains. These professionals are the best prepared to excavate encountered material, simultaneously paying attention and exploring the entire area for any signs of earth disturbance that could be significant for the case. They can also place the remains in a historical context based on material artifacts found in direct contact or within proximity to the remains.

When there is doubt regarding the origin of skeletal material (human vs. animal), forensic anthropologists may consult a biologist. Additionally, in the case of children's remains, when many small bony fragments are present, sometimes consultation with an osteologist is requested. As pointed out by our interviewees, forensic experts are criminally responsible for the expertise they provide, so they often prefer to consult and double-check their uncertainties than to make a mistake in their report.

In the past, in the case of facial reconstruction and identification from CCTV monitoring, cooperation with artists used to be frequent. Currently, as modern tools are used for this purpose (e.g., face approximation using digital methods), cooperation with specialists in audio-visual techniques or virtual engineering has become essential. They make 3D models based on measurements or reduce the interference from recordings, among others.

3.6. Approximately How Many Anthropological Cases Do You Receive per Year? Do They Concern Only Bone Material, or Are Age Assessment of Living Individuals or Facial Reconstruction (etc.) Also Performed?

The Institute of Forensic Research (IES) in Kraków performs approximately forty facial reconstructions annually. These are mainly historical cases. The activities of the Institute are directly subordinated to the Ministry of Justice; therefore, the forensic anthropologists take part in excavations considered relevant for the State, for instance in former Nazi extermination camps, in the case of the exhumation of the remains of important personalities, or at disaster sites. The percentage of actual forensic (modern and criminal) cases is rather low (~15%). There is also a lot of material from cemetery robberies. The Institute receives material from Prosecutor's Offices from all over the country, often to determine its origin (human vs. animal). The approximate number of cases that the Fingerprint and Forensic Anthropology Section of the IES receives yearly oscillates around 100.

The Department of Anthropology and Odontology in Poznań specializes in the identification of people registered on audio-visual recordings, and the majority of cases they receive per year are of this type. Materials are sent for analysis from the whole Polish territory. Reconstructions of rooms and event sites are also made to obtain comparative data. A large part of the work also involves issuing opinions on bite marks that are analyzed within an interdisciplinary team, as well as a great number of pedophilia-related cases, worked on with the help of IT specialists. The approximate number of cases fluctuates around 450 per year. Despite the ongoing work, more cases are still being sent. The Department operates in the entire region of central Poland and acts in many high-profile cases that often require months of work of specialists from various fields.

At the Department of Forensic Medicine in Wrocław, a forensic anthropologist specializes in age assessment of living individuals, e.g., assessing the age of minors from child pornography recordings and assessing the age of undocumented minors. In addition, she performs activities on site, as well as the examination of skeletal or highly decomposed remains. A great number of cases are strictly forensic, coming from modern, criminal proceedings. At the moment of data collection for the present research (2018), about a hundred remains were awaiting examination. At the request of the Institute of National Remembrance (IPN) which deals mainly with historical cases of war or communist regime victims, the anthropologist also often takes part in exhumations across the country and abroad. The total averaged number of cases that are being sent to the Department per year oscillates around 1000, which greatly exceeds its processing capacity.

3.7. How High Is the Awareness of Law Enforcement Agencies about the Existence of the Profession of Forensic Anthropologist?

Our interviewees acknowledge that the awareness of law enforcement agencies regarding the application of forensic anthropology in the investigation process is high, which is confirmed by the number of cases they receive yearly. The expertise of a forensic anthropologist has been a key element in many criminal high-profile cases in recent years when public pressure and the urge to explain the circumstances of the incident were exceptionally high. Prosecutors usually share among themselves their positive experiences with forensic anthropologists, thanks to which the awareness spreads further. However, it also happens that police officers are surprised when they find out that the possibility of using the skills and expertise of a forensic anthropologist applies in so many cases.

3.8. Based on Your Experience, Is the Work of a Forensic Anthropologist Associated with Field Work, or Is the Material always Delivered to the Laboratory by the Police/Prosecution?

When it comes to the work of forensic anthropologists, the Forensic Medicine Institute in Poznań is responsible for the entire Greater Poland Voivodeship. The forensic anthropologist from ZMS in Wrocław is also a consultant in the region of Łódź and Białystok. The Institute of Forensic Research (IES) in Kraków is mainly responsible for the southern regions of Poland; however, it is also common to receive material for expert analysis from the whole country. Historical cases constitute the majority of material that the IES receives, yet presentational exhumations are rather occasional (1–2 per year) and can be performed in various regions of the country. The extremely scarce number of trained forensic anthropologists in Poland makes it impossible for them to cover the whole country. When there is a matter of State importance or an emergency that requires an anthropological opinion, they can be sent to the field independently of their region of activity, but on a daily basis, should there be no forensic anthropologist available in the region, the opinion of only an expert doctor or medical examiner must suffice.

The frequency of fieldwork varies and depends on several factors: the number of remains found, their distance from the anthropologist's workplace, contracts between establishments/universities and individual units of the police and prosecutor's offices, the presence of a medical examiner in the area, and the amount of work on the spot. The average frequency of fieldwork for forensic anthropologists in Poland oscillates around two times per month. However, there have been peak periods during which dozens of personal visits were required, including two cases per day (e.g., Poznań), but conversely, there are facilities that perform on-site work only 1–2 times per year (e.g., IES). A relevant factor that influences the necessity of fieldwork is the nature of the case. If an anthropological opinion is required for CCTV identification, usually there is no need for the expert to go to the field, as all the necessary data can be sent to her/his workplace. Site visits become necessary when it is required to collect comparative material or when submitted comparative material was prepared incorrectly (a rather common occurrence), thus making it impossible to perform an analysis. Cooperation with the Institute of National Remembrance (IPN) also usually requires frequent presence at a site, not only in Poland but also abroad.

Bone remains are usually sent to forensic facilities from surrounding areas. If a forensic anthropologist is summoned to give an opinion outside his/her area, the remains are examined in their home facilities. Transportation is generally avoided in order to prevent generating unnecessary costs. Apart from bone remains, material for later genetic testing can be collected anywhere. Audiovisual materials from all over the country are sent to forensic anthropologists specializing in this topic (mainly Poznań and Kraków).

3.9. Are There Any Research Centers in the Field of Forensic Anthropology in Poland? Is There a Significant Number of Publications on This Topic?

The main academic centers that produce knowledge in the field of forensic anthropology in Poland are the ones working in this field on a daily basis. On the one hand, it gives the authors first-hand experience to later share with the academic community, but at the same time, this activity also consumes a great part of their time which could otherwise be

spent on cases. Other academic institutions also produce knowledge in the field of forensic anthropology without being so deeply involved in the practical aspects of this discipline.

The Laboratory of Anthropology and Odontology at the Department of Forensic Medicine, at the Poznań University of Medical Sciences performs research in the field of broadly understood forensic anthropology. During any given year, many papers are published and presented at international conferences and congresses. The main scope of the research focuses on the role of computed tomography and super-projection in identification and facial reconstruction [18,19], Body Mass Index estimation with the use of computed tomography [20], age estimation from pornographic materials [21], bite mark analysis [22,23], and the role of odontological analysis in identification [24–26].

The key topic of publication at the Department of Forensic Medicine of the Medical University of Wrocław and the Department of Criminalistics and Forensic Medicine of the University of Warmia and Mazury in Olsztyn center around the exhumations of post-war mass graves [27–30]. The Fingerprint and Forensic Anthropology Section of the Institute of Forensic Research in Kraków publishes mainly on the topic of anthropological research and facial reconstruction of World War II victims [31]. Other topics that are being addressed by various researchers in the field of forensic anthropology in Poland include methods of age assessment at death based on different variables [32–34], assessment of children's age in pornographic materials [35,36], and identification based on monitoring records and the super-projection method [37,38].

The national journals most frequently used for publication include the Archives of Forensic Medicine and Criminology, as well as the Problems of Forensic Sciences. The publications of Polish scientists also appear in international journals, such as the International Journal of Legal Medicine, The Journal of Forensic Odontostomatology, Forensic Science International, Annales Academiae Medicae Stetinensis, and Anthropologischer Anzeiger, among others.

4. Discussion

The data obtained during field research and its careful analysis result in the inference that forensic anthropology in Poland having a double face. On the one hand, the exceptional expertise and experience of professionals, combined with relatively advanced scientific production in this field, represent highly positive aspects. On the other hand, the lack of legal regularization of the profession, scarcity of formal training options, and lack of real job opportunities constitute factors that hinder the development and advancement of this discipline in Poland.

The lack of legislative regularizations of the profession of forensic anthropologists, as highlighted by our respondents, constitutes one of the most relevant issues affecting the practice of this discipline in a worldwide context. Continuous efforts are made in this direction by the greatest authorities in forensic anthropology in Europe [1–3,39–41]. Unclear definition and the absence of formal legal structure for the practice of forensic anthropology results in a situation in which experts without proper training and practice may be called upon to provide an anthropological opinion for the court. During the interviews, our respondents highlighted that improper academic training and lack of extensive practical experience may result in faulty or incorrect opinions, which, in the context of legal implication of forensic expertise, can set a very dangerous pattern that should be strongly avoided. For this reason, they emphasized the necessity and urgency of providing the profession of forensic anthropology in Poland with a legal basis in order to standardize education, training, and experience that would be required for practice, as is practiced elsewhere, e.g., the US or the UK [1,2].

As indicated by the interviewed experts, an important step towards avoiding such situations in the future would be the creation of a national system of certification or a requirement of international certification (e.g., ABFA or FASE—the Forensic Anthropology Society of Europe) for the practice of forensic anthropology. We are not aware of any Polish professionals that hold either FASE or ABFA certificates. Likewise, to our knowledge,

Polish forensic anthropology facilities do not follow any kind of national or international standardized procedure regarding the practice of forensic anthropology or the management and quality assurance of the laboratory. The standardization of education and the qualification of forensic anthropologists, as well as the unification of procedures, would guarantee a certain level of homogeneity for credentials and quality of service [42].

Considering the increasing importance of forensic opinion in the legal process, the existing situation should be urgently addressed by the relevant authorities. Regularization of the profession of forensic anthropologist on a worldwide scale has long been advocated by the international community of both professionals and academics [3,5,6]. In the Polish context, it would certainly constitute an important step in the direction of a controlled and planned development of this discipline.

An important step towards the consolidation of the profession of forensic anthropologists in Poland was the creation of the Polish Society of Forensic Anthropology (PTAS) in 2013. It brings together specialists from various fields related to forensic sciences who conduct research and scientific work at universities or other research institutions. As stated in the PTAS statute, the association aims to “promote the progress of knowledge in forensic anthropology, support scientific creativity in the field of forensic anthropology and related disciplines, maintain contact among Polish and foreign researchers, improve the quality of forensic expertise in forensic anthropology by developing, implementing and maintaining national quality standards in the field of forensic anthropology and related sciences” [43]. In 2018, there were about 30 members [Lorkiewicz-Muszyńska, personal communication]; however, the Society seems to be rather inactive—we have not received an answer to our inquiries for over four months now, despite various attempts and different methods of contact. This, in a way, portrays the situation of forensic anthropology in Poland: the goodwill of the community and the efforts to advance are faced with the reality of a continuous lack of time and limited human resources to move the process forward.

When we look at the practice of forensic anthropologists in Poland, they closely follow the methodological advancements of this discipline and adopt international standards of procedure to enhance the quality of their service. Despite many limitations, Polish scientists contribute to the progress of this discipline and regularly work on innovative methodologies that could be applied in the field. An important aspect of the scientific work carried out in our country is analysis and identification based on monitoring recordings. Polish forensic anthropologists presenting the results of their work at international conferences are met with great interest and appreciation from colleagues, as this line of inquiry is still greatly unexplored.

A frequent lack of comparative material brings significant limitations to the process of positive identification of an unknown individual. This constitutes one of the most difficult challenges in the practice of forensic anthropology in various contexts [6,44]. In Poland, the legal requirement for the storage of medical documentation is established for a period of 20 years [45]. This provides a relatively increased chance of obtaining comparative data (either medical or odontological) for cases within this time frame. Once 20 years have lapsed since the last medical procedure, access to comparative material is almost impossible.

A common perception of Polish professionals who practice forensic anthropology on a regular basis is that the human resources in this field are greatly insufficient. The great disproportion of the number of experts (seven) to the general population size (~38 M) and the amount of cases they receive annually leaves them with an enormous work overload that they would gladly share with others.

The easiest solution seems to be opening up a course that would provide all the necessary theoretical and practical background for the practice of forensic anthropology for potential future professionals. However, in the present context, the education and training of future forensic anthropologists also brings to light important issues that should be taken into account.

As commented by our interviewees, the content of such a course should be prepared, or at least consulted, with them in an in-depth manner, as they are the experts with hands-on experience in the field. A chronic shortage of time makes such a task almost impossible at this moment, especially considering that any university program, aside from substantive content, also requires a great deal of bureaucratic and administrative work. Additionally, university authorities are not necessarily convinced of the need for such courses. On first glance, it seems incomprehensible, as the interest level among students for this area is currently massive, which would certainly guarantee an audience for such a proposal. However, considering the extremely limited job opportunities in this field, such a course would quickly saturate the labor market, a situation that has already been commented on and criticized by Black [1] in the context of the United Kingdom. Moreover, aspiring anthropologists in Poland face the problem of unemployment, which has been an ongoing issue of this profession as it is. This is, however, mainly the result of administrative and bureaucratic issues diminishing the possible employment opportunities; the lack of new job offers is the issue rather than the lack of work itself. Therefore, efforts should be undertaken to open or create new vacancies for aspiring and properly trained forensic anthropologists. Here, nevertheless, forensic anthropology in Poland faces another obstacle.

Forensic anthropology in Poland is practiced mainly at medico-legal institutes (ZMSs), which form part of medical universities. There are currently 11 such facilities in Poland [46]. The only exception is the Institute of Forensic Research (Kraków), which reports directly to the Ministry of Justice. The employees of ZMSs are mostly university lecturers or assistants, and they divide their time between practical forensic work, teaching, and research. Due to legal and bureaucratic limitations, it is not possible to employ, within the structure of a university, an assistant that would focus solely on forensic work. He or she would also be obligated to teach. However, ZMSs do not have a sufficiently extensive academic curriculum; therefore, there is no need for extra lecturers, and, as a result, the ZMS administration is not eager to create new vacancies. In this way, the circle closes. These circumstances make it almost impossible to advance in terms of new professionals entering the field, opening up training options for interested students, and improving the distorted proportions between the number of experts and workload demand. A possible solution would be to alter the existing regulations to allow the possibility of opening positions for researchers/experts that could focus solely on issuing anthropological expertise and/or conducting academic research.

A significant increase in interest for studies in forensic-related fields, as described by Black [1], is easily noticeable among Polish students. Based on this demand, various courses with forensic scope have been recently created in Poland (e.g., forensic biology, forensic toxicology, forensic genetics, etc.). Nevertheless, such courses are mostly complementary, and none of them can serve as a basic form of training for potential forensic anthropologists. In this context, the scarcity of forensic anthropology courses seems somehow surprising. The first post-graduate course offering theoretical and practical training in forensic anthropology was opened only in 2019 at the Jagiellonian University in Kraków. The course is open for any students holding at least a bachelor's degree. In consequence, such broad acceptance in qualification creates the possibility that individuals without a deep understanding of human biology can be certified as specialists in forensic anthropology after only 180 hours of theoretical–practical training. The course encompasses a wide range of topics related to forensic anthropology but focuses primarily on introducing participants to the basics that should have been learned and practiced much earlier, during their under and postgraduate studies in physical/biological anthropology. These basics include, for example, the anatomy of the human body, including intra- and inter-population variability, detection of intravital pathological changes, etc. The proposed curriculum also introduces standard search, exploration, and identification techniques of human remains [47]. Such courses, as indicated by Black [1] and Cunha [48], are not fully able to provide all the necessary training required for a qualified forensic anthropologist, given the great amount of time that is dedicated to introducing participants from other fields of

study to physical/biological anthropology. Moreover, these types of courses have rather limited practical training, which is fundamental in the field of forensic anthropology [1,48]. Cunha states [48] that the recently increased interest in forensic anthropology brings with it a demand for more rigorous professional preparation, including “rigorous methodologies and a very demanding process of certification”. Otherwise, we face a situation in which individuals who complete an intensive course of forensic anthropology may feel qualified to issue legal opinions in anthropological cases. The initiative of the Jagiellonian University constitutes a great step towards the consolidation of forensic anthropology in Poland; yet, at the same time, caution should be taken to prevent perpetuating the situation in which professionals without adequate qualifications may issue opinions in legal cases [1,48].

A lack of comprehensive manuals on the practical and theoretical aspects of forensic anthropology in the Polish language also constitutes a critical obstacle for aspiring students. Although many have an intermediate knowledge of English [49], students are often not proficient enough to consult and refer to specialized, international literature. Therefore, a project to provide Polish students with access to such knowledge is highly necessary and would be of great value in the student community. Forensic anthropologists currently working in Poland are paving the track for young, ambitious candidates who must be made aware of the obstacles they may encounter on their career path.

As Obertova et al. indicate, the situation of forensic anthropology varies greatly among European countries and depends mainly on the “national legal system, as well as the education and employment status of forensic anthropologists” [5] (p. 9). However, we believe that the general condition of this discipline in Poland (advanced professional performance within a context of legal and educational limbo) can also be met in many other countries. Therefore, it is vital to continue efforts to better understand the condition of this highly applied field of science in various contexts so as to construct and facilitate the best strategies for its development, advancement, training, and practice.

5. Conclusions

Forensic anthropology constitutes a rapidly growing branch of forensic science. Its importance in the legal process requires both legislative and academic measures to guarantee the highest quality of expertise, together with transparent and evidence-based standards of practice. In Poland, the professional excellence and relatively advanced academic environment are at odds with the legislative limbo of the profession, lack of specialized training options, high demand of cases, limited human resources, and lack of employment opportunities. Efforts taken by the community to consolidate this field in our country are insufficient and are ultimately diminishing—those involved in the consolidation attempt lack the time needed to dedicate themselves to the cause due to extensive work overload. This challenging environment requires the close cooperation of academics and professionals to undertake the task of consolidating the field of forensic anthropology in the Polish context.

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