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## The Crucial Role of Timely Forensic Examinations in Investigating Crimes against the Sexual Integrity of Minors: A Case Study of Kazakhstan's Forensic Analysis System

*Kluczowa rola niezwłocznie podjętych badań kryminalistycznych  
w dochodzeniach dotyczących przestępstw przeciwko integralności  
seksualnej małoletnich. Studium przypadku systemu analizy  
kryminalistycznej w Kazachstanie*

## ABSTRACT

Timely appointment of forensic examinations in the prosecution of crimes against the sexual integrity of minors is the key not only to their rapid and complete investigation, but also the most important means of proving the guilt of suspects. In most cases, apart from the victim's testimony and the results of identification, the guilt of the criminal is confirmed only with the help of forensic expert opinions, and a delay in the implementation of forensic analysis can lead to the irreparable loss of traces of a criminal offense. The role of forensic expertise in the fight against crimes against the sexual integrity of minors in modern realities is massively increasing, as it directs investigations and provides evidence to combat the changing face of crime. In recent years, the Republic of Kazakhstan has experienced a qualitative development of the forensic analysis system, which is reflected in numerous adopted legislative initiatives. Proper organisation of criminal investigation and high-quality interaction of intelligence and investigative services in collecting and recording evidence, as well as strict compliance with the requirements of the Criminal Procedural Code of the Republic of Kazakhstan during forensic analysis, allow identifying crimes against the sexual integrity of minors and bringing the perpetrators to criminal responsibility. Strict adherence to protocols and procedures that ensure the integrity of medical records, documentation and all collected clinical and forensic evidence can only increase the value of a medical assessment of child sexual abuse during a forensic analysis.

**Keywords:** prosecution of crimes; forensic examinations; crimes against the sexual integrity; minors; investigation

## INTRODUCTION

Until the early 1970s, sexual abuse of children was considered a rare phenomenon and concerned only the impoverished segments of society. Increased public awareness led to an increase in the volume of reporting; for example, from 1970 to 1990, the number of reports of sexual abuse of children increased more than of other categories of neglect or abuse.<sup>1</sup> In the countries of the Commonwealth of Independent States, this problem is very relevant in modern realities. For example, in the Republic of Kazakhstan, the fact that, according to official data from the

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<sup>1</sup> M. Hébert, L.M. Amédée, *Latent Class Analysis of Post-Traumatic Stress Symptoms and Complex PTSD in Child Victims of Sexual Abuse and Their Response to Trauma-Focused Cognitive Behavioural Therapy*, "European Journal of Psychotraumatology" 2020, vol. 11(1).

Ministry of Internal Affairs, 550 crimes against the sexual integrity of minors were committed only in the period from January to August 2020<sup>2</sup> is of great concern.

Offenses that violate the sexual sanctity of minors are particularly alarming and require legal consequences. Different societies, with their unique history and culture, hold responsible individuals accountable for these types of crimes. Sexual violence includes any behavior involving a child before they reach the age of consent that is meant to satisfy the desires of an adult or significantly older child. The most widespread form of sexual violence is child abuse committed by family members, known as incest. However, it can be challenging to detect and control sexual violence within families. The conduct of forensic medical, biological, psychiatric, and other types of analyses plays a crucial role in resolving these crimes.

The dynamics of sexual violence against children differ from the dynamics of sexual violence against adults.<sup>3</sup> In particular, children rarely talk about sexual violence immediately after the event. Moreover, disclosure is usually a process, not a single episode, and is often initiated after a physical complaint or a behavior change. The examination of children requires special skills and methods of collecting anamnesis, conducting a forensic medical analysis. Obvious signs of trauma to the genitals are rarely observed in cases of sexual abuse of children since physical force is rarely used. The accurate interpretation of injuries resulting from crimes against the sexual integrity of minors requires special training and, if possible, experts in this field should be consulted. In this regard, World Health Organisation strongly recommends a second consultation. Although a physical examination may not be necessary, a second consultation makes provision for an opportunity to analyze any psychological problems that may have occurred since then and to ensure that the child and its guardian receive adequate social support and counseling.<sup>4</sup>

The expert's opinion is crucial for the investigation of criminal proceedings relating to crimes against the sexual integrity of minors, it is the basis for bringing a person to criminal responsibility; the correct qualification of the crime; changing the charge; it can expose the suspect or victim of giving false testimony.<sup>5</sup> As a result, it is critical to prevent errors in the activities of experts upon forensic analysis. The above

<sup>2</sup> C.W. LeCroy, S. Milligan-LeCroy, *Public Perceptions of Child Maltreatment: A National Convenience Sample*, "Children and Youth Services Review" 2020, vol. 119.

<sup>3</sup> K.L. Hullenaar, M. Frisco, *Understanding the Barriers of Violence Victims' Health Care Use*, "Journal of Health and Social Behavior" 2020, vol. 61(4), pp. 470–485.

<sup>4</sup> O. Balyńska, R. Blahuta, V. Sereda, N. Shelukhin, I. Kharaberiush, *Neurolaw: Branch or Section of New Sciences, a Complex Branch of Law or a Way to Justify Criminals (Review)*, "Georgian Medical News" 2019, no. 289, pp. 162–168.

<sup>5</sup> T.A. Khanov, M.R. Sikhimbayev, B.K. Birzhanov, K.K. Birzhanov, *Genomic Registration as a Universal Personal Identifier in Crime Prevention: The Research and Prospects of Introduction*, "Russian Journal of Criminology" 2016, vol. 10(3), pp. 544–553; K.A. Bakishev, T.A. Khanov, B.M. Nurgaliev, D.S. Abdrahmanov, *Punish Ability and Punishment for Careless Transport Crimes*, "Journal of Advanced Research in Law and Economics" 2019, vol. 10(1), pp. 41–51.

actualizes the consideration of the role of forensic analysis in proving cases of crimes against the sexual integrity of minors on the example of the Republic of Kazakhstan. To achieve the intended purpose, the following tasks of the study were defined: 1) to analyze the current legislative initiatives of the Republic of Kazakhstan regarding the forensic analysis procedure, as well as its role in proving cases of crimes against the sexual integrity of minors; 2) to identify current issues in this area and possible ways to improve the mechanism of conducting forensic analysis in cases of crimes against the sexual integrity of minors in the Republic of Kazakhstan.

## MATERIALS AND METHODS

Considering the complex and historical nature of the subject matter, the philosophical basis of the methodological paradigm of the study is dialectics as a general philosophical method of cognition. In the course of the study, the dialectical method allowed sounding out a holistic view of the development and organizational and tactical support for the investigation of crimes against the sexual integrity of minors. Comparative legal and formal legal methods were used in the analysis of the provisions of the current criminal procedural legislation of the Republic of Kazakhstan. Comparative legal and formal legal methods were used in the analysis of the provisions of the current criminal procedural legislation of the Republic of Kazakhstan. The comparative legal method was also used during the comparison of scientific research and concepts available in Kazakh and world science, the provisions of other regulations. This method was used to identify positive legislative practice that is appropriate and possible for testing on the territory of the Republic of Kazakhstan, considering the specific features of the national legal system. The research methodology was based on a set of principles, among which the principle of unity of theory and practice is the main one. The study involved an integrated approach, which became its methodological basis and allowed for systematic consideration of certain issues. The chosen methodological approaches allowed studying the subject matter in the unity of social content and legal form.

## RESEARCH AND RESULTS

### **1. Forensic analysis in the criminal justice system of Kazakhstan**

Forensic analysis is an essential element of the criminal justice system. Forensic experts examine and analyze evidence from crime scenes and other sources to obtain objective results that can help in the investigation and prosecution of criminals or remove suspicion from an innocent person. On 10 February 2017,

Law of the Republic of Kazakhstan No. 44-VI “On forensic expert activity” was adopted,<sup>6</sup> which consolidated the basic requirements for the procedure of forensic expert analysis, which are based on the achievements of science, technology, special disciplines, and their main purpose is to clarify the factual circumstances of what happened. This activity is performed by specialists of forensic analysis bodies, persons conducting the procedure of forensic expert analysis based on a license, or by other persons in accordance with the procedure and on the conditions corresponding to the legislation (Article 273 of the Criminal Procedure Code of the Republic of Kazakhstan of 4 July 2014 No. 231-V<sup>7</sup>); the grounds for the analysis are a procedural document and objects that are subject to research (Article 272 CPC RK); the results of the analysis are drawn up in the form of an expert opinion, which acts as a procedural source of evidence (Article 283 CPC RK); the period of judicial expert research is a period of time not exceeding 30 days, except for cases that comply with the legislation of the Republic of Kazakhstan (Article 34 of the Law of the Republic of Kazakhstan “On forensic expert activity”). Moreover, the corresponding terms are established in accordance with the Rules for determining the categories of complexity of forensic analyses.<sup>8</sup>

The forensic expert system of the Republic of Kazakhstan is currently represented by the Republican State-owned Enterprise “Forensic Expertise Centre” of the Ministry of Justice of the Republic of Kazakhstan.<sup>9</sup> The forensic analysis is performed according to the “List of types of forensic analyses” established by the Ministry of Justice of the Republic of Kazakhstan,<sup>10</sup> the State Register of Forensic Research Methods of the Republic of Kazakhstan,<sup>11</sup> which are subject to mandatory

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<sup>6</sup> Law of the Republic of Kazakhstan of 10 February 2017 No. 44-VI “On forensic expert activity” (as amended, 29.6.2020), [https://online.zakon.kz/document/?doc\\_id=37215312#pos=90;-42](https://online.zakon.kz/document/?doc_id=37215312#pos=90;-42) (access: 8.5.2023).

<sup>7</sup> Criminal Procedure Code of the Republic of Kazakhstan of 4 July 2014 No. 231-V (as amended, 1.2.2021), [https://online.zakon.kz/document/?doc\\_id=31575852#pos=4460;-46](https://online.zakon.kz/document/?doc_id=31575852#pos=4460;-46) (access: 8.5.2023), hereinafter: CPC RK.

<sup>8</sup> Order of the Minister of Justice of the Republic of Kazakhstan of 27 March 2017 No. 303 “On approval of the Rules for determining the categories of complexity of forensic examinations, the procedure for calculating the timing of the production of forensic examinations depending on the category of their complexity, as well as the grounds and procedure for the suspension and extension of the term for the production of forensic examinations”, <http://adilet.zan.kz/rus/docs/V1700014961#z17> (access: 8.5.2023).

<sup>9</sup> RGKP “Forensic Expertise Center” of the Ministry of Justice of the Republic of Kazakhstan, 2020, <http://forensic.gov.kz/staticpage/struktura/ru> (access: 8.5.2023).

<sup>10</sup> Order of the Minister of Justice of the Republic of Kazakhstan of 27 March 2017 No. 306 “On approval of the List of types of forensic examinations conducted by forensic authorities and expert specialties, the qualifications for which are assigned by the Ministry of Justice of the Republic of Kazakhstan”, <http://adilet.zan.kz/rus/docs/V1700014992> (access: 8.5.2023).

<sup>11</sup> State Register of Forensic Research Methods of the Republic of Kazakhstan (MJ RK), 2017, [https://online.zakon.kz/document/?doc\\_id=31190279#pos=1929;-31](https://online.zakon.kz/document/?doc_id=31190279#pos=1929;-31) (access: 8.5.2023).

validation, and the Rules for handling objects of forensic analysis.<sup>12</sup> Acceptance of research objects, their accounting, and storage for the duration of the analysis, as well as their return are performed in accordance with the requirements of the Rules for handling objects of forensic analysis. Having studied the international experience of the countries of the Organisation for Economic Cooperation and Development and the countries of the Eurasian Economic Community, international associations of forensic expert institutions, since 2016, the World Bank's Strengthening Forensic Expertise Project has been implemented in the Republic of Kazakhstan<sup>13</sup> with the support of such international organizations as Key Forensic Services,<sup>14</sup> King's College London,<sup>15</sup> which contains the development, piloting of basic data on the effectiveness of forensic analysis, modernization of the legislative and institutional structure of forensic analysis and improving the level of qualification of forensic experts.

It is especially necessary to note the fact that the Law "On forensic expert activity" for the first time indicated a new form of activity of licensed forensic experts, consolidating the Chamber of Forensic Experts of the Republic of Kazakhstan. In 2020, the Ministries of Justice, Internal Affairs, and the Prosecutor General's Office of the Republic of Kazakhstan signed a joint order on the transfer of certain types of forensic analyses appointed by the internal affairs bodies in criminal cases to a competitive environment through outsourcing.<sup>16</sup> When it comes to crimes committed against the sexual integrity of minors, forensic analysis is frequently required during criminal investigations. In the Republic of Kazakhstan, the Criminal Code<sup>17</sup> specifies the provisions that outline the legal responsibility for these crimes: rape of minors (Article 120), violent acts of a sexual nature (Article 121), sexual intercourse or other acts of a sexual nature with a person under the age of 16 (Article 122), coercion to sexual intercourse, sodomy, lesbianism, or other acts of a sexual nature (Article 123).

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<sup>12</sup> Order of the Minister of Justice of the Republic of Kazakhstan of 27 March 2017 No. 305 "On approval of the Rules for handling objects of forensic examination", <http://adilet.zan.kz/rus/docs/V1700014958> (access: 8.5.2023).

<sup>13</sup> Kazguu University, *Strengthening Forensic Expertise*, 2020, <https://kazguu.kz/ru/2020/03/24/usilenie-sudebnoy-ekspertizyi> (access: 8.5.2023).

<sup>14</sup> Key Forensic Services Ltd., *Legal and Court-Ordered DNA Testing*, 2020, <https://www.keyforensic.co.uk/dna-testing> (access: 8.5.2023).

<sup>15</sup> King's College London, Research & Innovation, 2020, <https://www.kcl.ac.uk/research> (access: 8.5.2023).

<sup>16</sup> *The Ministry of Justice of Kazakhstan Outsourcing Part of Forensic Examinations*, 2020, <https://bestnews.kz/kazakhstan/3539-minyust-kazakhstana-peredaet-na-outsourcing-chast-sudebnoykh-ekspertiz> (access: 8.5.2023).

<sup>17</sup> Criminal Code of the Republic of Kazakhstan of 3 July 2014 No. 226-V (as amended, 30.12.2020), [https://online.zakon.kz/document/?doc\\_id=31575252#pos=1632;-54](https://online.zakon.kz/document/?doc_id=31575252#pos=1632;-54) (access: 8.5.2023).



Sexual abuse against children encompasses a range of actions, such as touching or exposing the genitals, forcing children to view pornography or participate in its production, and engaging in vaginal, oral, or rectal penetration. Crimes against the sexual integrity of minors involve sexual activity with a child who is unable to provide informed consent or is unprepared for such activity due to their age or developmental stage, and which violates societal norms or laws. Such violence may occur between a child and an adult or another child in a position of trust or power, and may involve inducing or coercing a child into illegal sexual activities, exploiting a child in prostitution, or using children in pornographic productions.<sup>18</sup>

If it is necessary to appoint a forensic analysis, a corresponding resolution is issued (Article 272 CPC RK), and its conduct takes place with the written consent of the persons to be accordingly analyzed (Article 274 CPC RK). The appointment and performance of expert analysis are mandatory if it is necessary to establish the following in the case: the causes of death; the nature and severity of the harm to health; the age of the suspect, the accused, and the victim; the mental or physical condition of the suspect and the accused; the mental or physical condition of the victim, the witness; other circumstances of the case that cannot be reliably established by other evidence (Article 271 CPC RK). Most often, during criminal proceedings for these crimes, a forensic medical analysis of the victim and the suspect, a forensic medical examination of the objects of investigative information, a forensic psychiatric analysis of the suspect, a forensic psychological analysis of the victim, and general forensic analysis are appointed. The purpose of medical forensic analysis is to establish and evaluate facts wherein, apart from the knowledge in general forensic medicine, special scientific knowledge in forensic identification and the use of various special laboratory research methods (physical, photographic, technical, chemical, mathematical) are required.

## **2. Forensic examination of minors in cases of sexual abuse: importance, challenges, and common mistakes**

To obtain data on the commission of sexual acts related to vaginal, anal, or oral penetration into the child's body using genitals or any other object, as well as to establish the type of bodily injuries indicating a violent sexual act, after the opening of criminal proceedings against the victim, a forensic medical examination is appointed. It is used to determine the presence of the fact of sexual intercourse and the consequences of rape (the severity of bodily injuries, pregnancy, infection with venereal disease, etc.). The object of research of this type of analysis in cases of crimes against the sexual integrity of minors is the victim, the suspect, their

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<sup>18</sup> E. Quayle, *Prevention, Disruption and Deterrence of Online Child Sexual Exploitation and Abuse*, "ERA Forum" 2020, vol. 21, pp. 429–447.

clothes, shoes, as well as other material evidence important for establishing accurate and reliable information that will be further recorded in the expert's opinion. Before sending the case materials, clothing, shoes, and other things seized from the victim or suspect for examination, the investigator and the prosecutor must receive samples of blood, saliva, and hair of the victim or suspect for comparative research during the preparation of examinations.

It is important to note that not every examination will involve so many steps and analyses, as the child may be harmed in different ways. The examination of a minor in a situation of suspected sexual abuse is a delicate process that requires careful attention to detail and a thorough understanding of the potential challenges that may arise. Unfortunately, there are several common mistakes that can occur during the examination process, which can compromise the safety and well-being of the minor involved. Some of the most common mistakes include:

1. Lack of proper training. Examiners who lack proper training and experience in conducting examinations of minors who have experienced sexual abuse may inadvertently harm the minor through inadequate or inappropriate examination techniques.
2. Insufficient attention to the minor's emotional needs. It is important to remember that minors who have experienced sexual abuse are likely to be traumatized and emotionally fragile. Examiners who fail to provide appropriate emotional support and guidance during the examination process may inadvertently cause further harm.
3. Failure to document findings accurately. Failure to document the findings of the examination accurately can lead to incorrect conclusions, improper treatment, or a failure to provide adequate support to the minor and their family.
4. Insufficient communication with other professionals. The examination of a minor in a situation of suspected sexual abuse often involves a team of professionals, including law enforcement, child protective services, and medical personnel. Insufficient communication between these professionals can lead to confusion and inconsistencies in the examination process.

To avoid these common mistakes, it is important for examiners to receive proper training and to maintain ongoing education in the field of forensic examination of minors. Examiners should also prioritize the emotional needs of the minor and their family, providing appropriate support and guidance throughout the examination process. It is also essential to document findings accurately and to maintain clear communication with other professionals involved in the case. Finally, it is crucial to ensure that the minor's safety and well-being are protected throughout the examination process, which may include providing appropriate medical care and counselling, as well as working with law enforcement and child protective services to ensure that the minor is safe from further harm.



Based on the above, it can be concluded that in recent years there has been a qualitative development of the forensic analysis system in the Republic of Kazakhstan, which has been reflected in numerous adopted legislative initiatives. Forensic analyses play a decisive role in the investigation of attacks on the sexual integrity of minors since they can be used to procure objective evidence of the involvement of particular persons in a crime, and the essence of which is to conduct an expert study necessary to clarify certain circumstances of the case that are important for criminal proceedings. Thus, considering the nature and complexity of the investigation of criminal cases of this category, it can be concluded that only the proper organization of a criminal investigation and a qualitative interaction of intelligence and investigative services in gathering and recording evidence and rigorous compliance with the CPC RK in conducting forensic analysis allows identifying crimes against sexual inviolability of minors and bringing offenders to criminal responsibility.

## DISCUSSION

In cases of confirmed sexual violence against minors, physical evidence may not always be present, making the child's testimony crucial in determining the likelihood of abuse. A conversation, as emphasized by A.P. Giardiano and M.A. Finkel, should start with topics that are interesting and not "dangerous" for the child. This study nicely complements the current article with observations on conducting an examination. It is important for experts to establish a positive and comfortable rapport with the child during questioning, as children may be intimidated by doctors or authority figures. Wearing non-intimidating clothing and starting with topics that interest the child can help establish trust. Interviews should be conducted in private, unless the child's guardian is involved in the abuse. Careful documentation of the questions and answers is necessary.<sup>19</sup> However, the impact of abuse may not always be immediately apparent, especially in young children or when the abuser is known to the child. Emotional distress may be the only symptom present during the examination, with more severe effects manifesting later in life. Most psychological disorders related to sexual abuse occur in adulthood rather than in childhood.<sup>20</sup>

The reasons for a child not showing physical evidence of sexual abuse can be varied, according to experts. It is crucial to consider that sexual violence against a child can encompass non-penetrative forms, such as touching or caressing erogenous zones, or other forms of violence that do not involve physical contact. Ad-

<sup>19</sup> A.P. Giardiano, M.A. Finkel, *Evaluating Child Sexual Abuse*, "Pediatric Annals" 2005, vol. 34(5), pp. 382–394.

<sup>20</sup> J. Werner, M.C.M. Werner, *Child Sexual Abuse in Clinical and Forensic Psychiatry: A Review of Recent Literature*, "Current Opinion in Psychiatry" 2008, vol. 21(5), pp. 499–504.

ditionally, fears of losing access to the victim can lead to an abuser engaging in non-traumatic sexual actions, as noted by M. Pillai.<sup>21</sup> Furthermore, detecting the biological material of the offender on the victim's body may be challenging due to the short period during which such traces remain, even in cases involving penetration or types of touching with ejaculation, according to the observations of M. Nittis and M. Stark.<sup>22</sup> Finally, research by A.K. Myhre et al. showed that genital or anal injuries heal quickly, leaving no traces or only non-specific ones.<sup>23</sup> These findings are consistent with the results reported in the current article. In addition, all the dangers of delaying the examination are described in more detail.

Therefore, it is possible that physical evidence may not be found during a forensic analysis of sexual violence due to the passage of time between the occurrence of the abuse and the examination. Finally, it is necessary to consider the possibility of false reports of sexual violence. The minor's dependence on the aggressor makes it probable that a false report will be created. In situations where the perpetrator of sexual violence is a family member, particularly a parent, there can be a great deal of fear surrounding the disclosure of abuse. Victims may be threatened with rejection or other forms of punishment, leading to feelings of conflict and ambivalence. This can be especially true when the perpetrator is also the provider of financial support, affection, and attention, as noted by A.H. Green.<sup>24</sup> Even in cases where the abuser is a stranger, there can be overwhelming feelings of shame and guilt that make it difficult for victims to come forward. In addition, the fear of potential threats or retaliation can prevent victims from disclosing information about the abuse. W. Silva and U. Barroso emphasized the low sensitivity of forensic medical analyses for sexual violence detection.<sup>25</sup> The identification of sexual violence is highly reliant on the information provided in the medical records; nevertheless, a forensic medical examination is regarded as an effort to acquire physical proof of a criminal act. Such research, akin to the present paper, highlights the need to enhance the quality of forensic medical assessment. Nonetheless, the authors of the article propose a distinct remedy – the engagement of independent experts.

<sup>21</sup> M. Pillai, *Genital Findings in Prepubertal Girls: What Can Be Concluded from an Examination?*, "Journal of Pediatric and Adolescent Gynecology" 2008, vol. 21(4), pp. 177–185.

<sup>22</sup> M. Nittis, M. Stark, *Evidence Based Practice: Laboratory Feedback Informs Forensic Specimen Collection in NSW*, "Journal of Forensic and Legal Medicine" 2014, vol. 25, pp. 38–44.

<sup>23</sup> A.K. Myhre, J.A. Adams, M. Kaufhold, J.L. Davis, P. Suresh, C.L. Kuelbs, *Anal Findings in Children with and without Probable Anal Penetration: A Retrospective Study of 1115 Children Referred for Suspected Sexual Abuse*, "Child Abuse and Neglect" 2013, vol. 37(7), pp. 465–474.

<sup>24</sup> A.H. Green, *True and False Allegations of Sexual Abuse in Child Custody Disputes*, "Journal of the American Academy of Child and Adolescent Psychiatry" 1986, vol. 25(4), pp. 449–456.

<sup>25</sup> W. Silva, U. Barroso, *Characteristics of Children under 12 Years Subjected to Forensic Examination on Suspicion of Child Sexual Abuse in Salvador Brazil*, "Spanish Journal of Legal Medicine" 2016, vol. 42(2), pp. 55–61.

From the standpoint of medical evidence of the fact of violence, the main role belongs to doctors of medical institutions, where children are usually first taken for examination. Y.N. Grigorieva pointed to the fact that most of the entries do not meet the requirements for registration of medical documentation: failure to record the time of examination, the colors and hints of bruises, describe the condition of abrasions, edges, tips, and bottom of the wounds, the exact location, quantity, shape, and size of the injuries, including follow-up.<sup>26</sup> Doctors confuse anatomical names, give contradictory information within one examination. Frequently, examinations performed within a few hours by doctors of the same specialty are contradictory. Entries in medical records are sometimes illegible. All of the above prevents any conclusions on the prescription of injuries, their nature, etc. Taking smears and other traces of biological origin usually does not cause difficulties, but there have been cases in which smears taken within 5 days by forensic experts had a different result with those taken on the day of the incident, which indicates an incorrect technique for sampling biological material.<sup>27</sup> This state of affairs can be explained by the lack of understanding and skills of doctors of clinical specialties to describe the genitals and their injuries in children and adolescents for the purpose of further forensic medical analysis. The authors of the current article agree with the fact that the low qualification of doctors can cause errors during the examination, as well as with the fact that it is necessary to take care of improving the qualifications of personnel.

In recent years, as T.Z. Zhakupova et al. rightly emphasized, major efforts were made to centralize and optimize the functionality of forensic activities in the Republic of Kazakhstan, which allowed concentrating financial resources and creating a unified infrastructure, optimizing the number of administrative staff in terms of the transformation of forensic activities, creating the House of Forensic Experts and regulating its activity, thereby creating the basis for the transition to a competitive environment.<sup>28</sup> This proposal coincides with the author's opinion. Private examinations solve a number of issues, so they are definitely a positive step.

Currently, some problematic issues concerning the training and advanced training of forensic experts remain unsolved in the Republic of Kazakhstan. In this regard, G.T. Alayeva indicated the need to address the issue of equal methodological support of a forensic activity, for both experts – employees of the state body,

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<sup>26</sup> Y.N. Grigorieva, *The Role of the Forensic Service in Detecting and Investigating Crimes of Violence against Minors*, [in:] *Disclosure, Investigation and Prevention of Crimes Related to Violence against Minors: Proceedings of the International Scientific and Practical Conference*, Moscow 2017.

<sup>27</sup> V.Y. Tatsiy, V.A. Zhuravel, G.K. Avdeeva, *Independent Forensic Medical Examination as a Mean of Proving the Facts of a Torture Usage*, "Wiadomosci Lekarskie" 2019, vol. 72(12/2), pp. 2596–2601.

<sup>28</sup> T.Z. Zhakupova, K.E. Ospanova, F.A. Galitsky, V.D. Osipov, N.E. Imambaeva, *Forensic Medical Service of Kazakhstan: History, Current State and Prospects*, "Armenian Journal of Forensic Science and Criminalistics. National Bureau of Expertise" 2019, vol. 1(1), pp. 127–131.

and licensees, and highlighted the presence of certain discrimination in access to training, participation in international programmes, new scientific and methodological information relating to licensees of forensic activities.<sup>29</sup> According to M.B. Kurbanmaev and T.A. Shagdarova, an increase in the level of professional knowledge will be facilitated by the involvement of private experts in research work, the development of methods of forensic expert analysis, their approbation and implementation in the practice of forensic analyses conducted by them.<sup>30</sup> These initiatives, according to scientists, are one of the development factors of the institution of private forensic experts in the Republic of Kazakhstan.

As a result of the discussion, it can be concluded that the diagnosis of sexual abuse of children can often be made based on the child's medical history. Physical examination alone is rarely diagnostic without anamnesis and/or some particular laboratory data. The doctor's duty is to interpret the injury, gather samples, treat the injury and, above all, help and support the vulnerable patient. Strict adherence to protocols and procedures that ensure the integrity of medical records, documentation, and all collected clinical and forensic evidence can only increase the value of a medical assessment of abuse. Attention to detail will benefit a child victim of sexual abuse by improving the identification of trauma, providing better prevention of pregnancy and infection, and will also contribute to a more effective investigation and prosecution of the offender. At present, in the Republic of Kazakhstan, there is a need to consider the issue of equal methodological support for forensic expert activities, both experts-employees of the state body and licensees, the involvement of private experts in research work. The decision to allow private entities to conduct forensic examinations in Kazakhstan was made in an effort to improve the quality and speed of forensic examinations, as well as to reduce the backlog of cases awaiting examination. Prior to this decision, all forensic examinations were conducted by state-owned forensic institutions, which often experienced delays due to a lack of resources and staffing. Since private entities were allowed to conduct forensic examinations, there has been an increase in the number of examinations performed, which has led to a reduction in the backlog of cases awaiting examination. Additionally, private entities have been able to provide more specialized services in certain areas of forensic examination, such as DNA analysis and digital forensics, which has led to improvements in the quality of examinations in those areas.<sup>31</sup>

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<sup>29</sup> G.T. Alayeva, *The Current State of Licensed Forensic Expertise in Kazakhstan*, [in:] *Aubakirov Readings: Proceedings of the International Scientific-Practical Conference*, Almaty 2019.

<sup>30</sup> M.B. Kurbanmaev, T.A. Shagdarova, *Institute of Private Forensic Experts in the Republic of Kazakhstan*, "Law and State" 2016, vol. 70(1), pp. 57–60.

<sup>31</sup> S.S. Cherniavskiy, M.L. Hribov, A.A. Nebytov, S.M. Kniaziev, S.S. Telenyk, *The Forms of International Co-operation in the Area of Undercover Investigations*, "Journal of Legal, Ethical and Regulatory Issues" 2020, vol. 23(1), pp. 1–9.

In recent years, the Republic of Kazakhstan has experienced a qualitative development of the forensic analysis system, which is reflected in numerous adopted legislative initiatives, and which plays a crucial role in the investigation of attacks on the sexual integrity of minors, since they help obtain objective evidence of the involvement of particular individuals in the crime. Proper organization of criminal investigation and high-quality interaction of intelligence and investigative services in collecting and recording evidence, as well as strict compliance with the requirements of the CPC RK during forensic analysis, allow identifying crimes against the sexual integrity of minors and bringing the perpetrators to criminal responsibility.

## CONCLUSIONS

It can be concluded that the forensic expert becomes a witness to various aspects of the case, including sociological and psychological aspects in addition to technical details and fundamental scientific grounds. The expert opinion should be reasoned and contain answers to the questions put to them within their competence, and ensure specificity.

The globalization caused by information technologies requires law enforcement officers, judicial authorities, and lawyers to become more familiar with the basics of digital forensic science. An integrated approach to the study of physical evidence containing video information will allow experts of different specialties to solve their specific questions within the framework of one analysis, conduct research in parallel, perform the necessary interaction, give answers to complex questions and, as a result, substantially reduce the time of preliminary investigation and judicial investigation. The data presented in this study allow suggest that activity errors during the forensic analysis can be caused by the unsatisfactory work of the investigator (court), i.e. the subject appointing the analysis, as well as by forensic experts who are not sufficiently aware of the subtleties of the methodology for investigating crimes against the sexual integrity of minors; their low level of professionalism, insufficient awareness of the possibilities of the assigned analysis and requirements for materials that should be submitted to the expert. These include incompleteness of the submitted materials, their unreliability, or poor quality.

The Impact Cyber Trust project can assist forensic experts of the Republic of Kazakhstan in solving crimes against the sexual integrity of minors while problems with the lack of data exchange, which is the key to improving the quality and pace of research, especially in such an area as forensic analysis of computer technology. Nowadays, the Republic of Kazakhstan faces a need to consider the issue of equal methodological support for forensic expert activities, both experts – employees of the state body – and licensees, the involvement of private experts in research work, the development of methods of forensic expert analysis, their approbation



and implementation in practice of forensic analyses carried out by them. These initiatives, according to scientists, are one of the development factors of the institution of private forensic experts in the Republic of Kazakhstan.

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#### ABSTRAKT

Szybkie podjęcie badań kryminalistycznych w ramach ścigania przestępstw przeciwko integralności seksualnej małoletnich nie tylko ma istotne znaczenie dla sprawności i kompletności dochodzenia, lecz także jest najważniejszym sposobem prowadzącym do zdobycia dowodów winy podejrzanych. W większości przypadków, oprócz zeznania pokrzywdzonego i wyników identyfikacji, вина przestępcy jest potwierdzana jedynie za pomocą ekspertyz kryminalistycznych, a zwłoka w przeprowadzeniu analizy kryminalistycznej może prowadzić do nieodwracalnej utraty śladów przestępstwa. Współcześnie rola wiedzy kryminalistycznej w walce z przestępczością skierowaną przeciwko seksualnej integralności małoletnich coraz bardziej nabiera na znaczeniu, ponieważ ukierunkowuje dochodzenie i zapewnia materiał dowodowy do zwalczania przestępczości o stale zmieniającym się kształcie. Republika Kazachstanu doświadcza w ostatnich latach rozwoju systemu analizy kryminalistycznej, co znajduje odzwierciedlenie również w licznych inicjatywach legislacyjnych. Właściwa organizacja działalności dochodzeniowo-śledczej oraz wysokiej jakości interakcje między służbami wywiadowczymi i śledczymi przy zbieraniu i utrwalaniu materiału dowodowego, a także ścisłe przestrzeganie przepisów Kodeksu postępowania karnego Republiki Kazachstanu podczas analizy kryminalistycznej pozwalają na identyfikację przestępstw przeciwko integralności seksualnej małoletnich i pociąganie ich sprawców do odpowiedzialności. Dokładne wykonywanie protokołów i procedur zapewniających spójność dokumentacji medycznej oraz wszelkiego zgromadzonego klinicznego i kryminalistycznego materiału dowodowego może podnosić kryminalistyczną wartość oceny medycznej przypadków seksualnego wykorzystania dziecka.

**Słowa kluczowe:** ściganie przestępstw; badania kryminalistyczne; przestępstwa przeciwko integralności seksualnej; małoletni; dochodzenie