Medical and forensic aspects of performing a remote interrogation of persons with disabilities

- Aspectos médicos y forenses de la realización de un interrogatorio a distancia a personas con discapacidad
- Aspectos médicos e forenses da realização de um interrogatório remoto de pessoas com deficiências

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Abstract

The **purpose** of the study is to develop new proposals for improving criminal procedural legislation in the field of conducting remote investigative actions with disabled persons, taking into account their physiological and functional characteristics. Research material and methods: This study is based on an analysis of the norms regarding the criminal procedural legislation of the Republic of Kazakhstan and a number of foreign states that regulate the procedure for conducting remote investigative actions - as well as scientific publications on the research topic in the field of psychology and medicine. An integrated approach involves considering the studied phenomena of communication during an investigative action as a set of interconnected and interdependent elements, i.e., consideration of the issue from the medical, psychological and legal points of view. Situational and systemic types of analysis, complex sociological analysis, diagnostics and forecasting investigative situation were also used. Methods of analysis and synthesis, induction, deduction, methods of qualitative and quantitative analysis were employed to clarify the legal essence of the studied phenomenon. Findings: practical recommendations aimed at improving and developing the performance of remote investigative actions involving persons with disabilities (further - FWDs) y creating optimal conditions for the transfer of verbal, medical, and psychological information, as well as technical and forensic support for conducting RIAs. The following conclusions were made: in order to improve the current legislation, it is advisable to consider the issue of developing and including a special norm in the legislation, taking into account the characteristics of the communicative competencies of persons with disabilities. This norm regulates the procedure for conducting investigative actions involving the mute, deaf, blind and other persons with disabilities.

Keywords:

Investigator, victim (source: Thesaurus - United Nations Educational, Scientific and Cultural Organisation - UNESCO). Remote interrogation, dementia, pretrial investigation, person with disabilities, ramp, witness (source: authors).

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Resumen

El objetivo del estudio es elaborar nuevas propuestas de mejora de la legislación procesal penal en el ámbito de la realización de actuaciones de investigación a distancia con personas con discapacidad, teniendo en cuenta sus características fisiológicas y funcionales. Material y métodos de investigación: Este estudio se basa en un análisis de las normas relativas a la legislación procesal penal de la República de Kazajstán y de una serie de Estados extranieros que regulan el procedimiento para llevar a cabo acciones de investigación a distancia -, así como publicaciones científicas sobre el tema de investigación en el campo de la psicología y la medicina. Un enfoque integrado implica considerar los fenómenos estudiados de comunicación durante una acción de investigación como un conjunto de elementos interconectados e interdependientes, es decir, considerar la cuestión desde los puntos de vista médico, psicológico y jurídico. También se utilizaron los tipos de análisis situacional y sistémico, el análisis sociológico complejo, el diagnóstico y la previsión de la situación de investigación. Se emplearon métodos de análisis y síntesis, inducción, deducción, métodos de análisis cualitativo y cuantitativo para aclarar la esencia jurídica del fenómeno estudiado. Conclusiones: recomendaciones prácticas destinadas a mejorar y desarrollar la realización de acciones de investigación a distancia en las que participen personas con discapacidad (en adelante - RIA) y crear condiciones óptimas para la transferencia de información verbal, médica y psicológica, así como apoyo técnico y forense para la realización de las RIA. Se llegó a las siguientes conclusiones: con el fin de mejorar la legislación actual, es aconsejable considerar la cuestión de desarrollar e incluir una norma especial en la legislación, teniendo en cuenta las características de las competencias comunicativas de las personas con discapacidad. Esta norma regula el procedimiento para llevar a cabo acciones de investigación en las que estén implicadas personas mudas, sordas, ciegas y otras personas con discapacidad.

Palabras claves:

Investigador, víctima (fuente: Tesauro - Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura - UNESCO). Interrogatorio a distancia, demencia, investigación previa al juicio, persona con discapacidad, rampa, testigo (fuente: autores).

Resumo

O objetivo do estudo é desenvolver novas propostas para aprimorar a legislação processual penal no campo da realização de ações investigativas remotas com pessoas com deficiência, levando em conta suas características fisiológicas e funcionais. Material e métodos de pesquisa: Este estudo baseia-se em uma análise das normas relativas à legislação processual penal da República do Cazaquistão e de vários países estrangeiros que regulamentam o procedimento para a realização de ações investigativas remotas, bem como em publicações científicas sobre o tópico de pesquisa no campo da psicologia e da medicina. Uma abordagem integrada envolve a consideração dos fenômenos estudados de comunicação durante uma ação investigativa como um conjunto de elementos interconectados e interdependentes, ou seja, a consideração da questão dos pontos de vista médico, psicológico e jurídico. Também foram usados tipos de análise situacional e sistêmica, análise sociológica complexa, diagnóstico e previsão da situação investigativa. Métodos de análise e síntese, indução, dedução, métodos de análise qualitativa

e quantitativa foram empregados para esclarecer a essência legal do fenômeno estudado. **Resultados**: recomendações práticas com o objetivo de aprimorar e desenvolver o desempenho de ações investigativas remotas envolvendo pessoas com deficiência (mais adiante - FWDs), criando condições ideais para a transferência de informações verbais, médicas e psicológicas, bem como suporte técnico e forense para a realização de RIAs. **Foram feitas as seguintes conclusões:** para aprimorar a legislação atual, é aconselhável considerar a questão do desenvolvimento e da inclusão de uma norma especial na legislação, levando em conta as características das competências comunicativas das pessoas com deficiência. Essa norma regulamenta o procedimento para conduzir ações investigativas envolvendo pessoas mudas, surdas, cegas e outras pessoas com deficiência.

Palavras-chave:

Investigador, vítima (fonte: Thesaurus - Organização das Nações Unidas para a Educação, a Ciência e a Cultura - UNESCO). Interrogatório remoto, demência, investigação pré-julgamento, pessoa com deficiência, rampa, testemunha (fonte: autores).

Introduction

As research analysis has shown, there is an insufficient number of scientific works devoted to conducting remote investigative actions involving persons with disabilities. In addition, nowadays the legislator of the Republic of Kazakhstan does not provide for the creation of special conditions to conduct online investigative actions with PWDs, which represents a significant scientific problem for researchers involved in the study and development of recommendations, as well as for practitioner-investigators who carry out quite complex investigations taking into account technical and psychological aspects - online interrogation of persons with disabilities.

The use of modern achievements of scientific and technical progress in the process of conducting a pre-trial investigation (video conference calls, communication via instant messengers, communication via video call, use of the interrogation module, ZOOM programmes, Microsoft Teams, Google meet, etc.) has affected efficiency, saving human resources and state funds. In the authors opinion, it is possible to provide the use of a remote format when conducting investigative actions involving people with disabilities in connection with such phenomena as:

- a. lack of contact between people to prevent infection with the coronavirus;
- b. opportunities provided by the Internet industry;
- c. convenience of attendance when persons with disabilities act as a witness/victim in a case, taking into account their individual characteristics.

The motivation for the study lies in the applied solution of problems arising during the remote interrogation of persons with disabilities and the possibility of using modern IT technologies in order to obtain reliable testimony within the framework of a pre-trial investigation. The novelty of the research is in the fact that, based on fundamental documents regarding the protection of citizens' rights and a significant base of literature sources, a study regarding the issues associated with the remote interrogation of persons with disabilities was conducted and scientifically based recommendations were proposed for improving the legal and organisational foundations of this issue.

As research analysis has shown, there is an insufficient number of scientific works devoted to conducting remote investigative actions involving persons with disabilities. In addition, nowadays the legislator of the Republic of Kazakhstan does not provide for the creation of special conditions to conduct online investigative actions with PWDs, which represents a significant scientific problem for researchers involved in the study and development of recommendations, as well as for practitioner-investigators who carry out quite complex investigations taking into account the technical and psychological aspects of the online interrogation of persons with disabilities.

The aforementioned factors are relevant for consideration.

The research is aimed at substantiating the practical recommendations in order to improve and develop the performance of remote investigative actions with PWDs by creating optimal conditions for the transfer of verbal, medical and psychological information, as well as providing technical and forensic support for conducting remote investigative actions (referred to as RIAs).

The following conclusions were made: in order to improve the current legislation, it is advisable to consider

the issue of developing and including a special norm in the legislation, taking into account the characteristics of the communicative competencies of persons with disabilities. This norm regulates the procedure for conducting investigative actions involving the mute, deaf, blind and other persons with disabilities, namely:

- conducting RIAs with the participation of persons with disabilities at their location in order to facilitate the process and obtain effective results of investigative actions;
- creating, during the interrogation of persons with disabilities, an environment that excludes the distraction of their attention to extraneous things and sounds, which will have a positive effect on their mental activity in the implementation of the successful conducting of investigative actions;
- establishing the mandatory involvement of the required specialised consultants: sign language interpreter, speech therapist, psychologist, etc. when conducting the online interrogation of persons with disabilities, as well as a legal representative in order to broaden their opportunity to fully participate as a witness or accused;
- training of law enforcement officers by developing educational programmes for acquiring relevant knowledge and practical competencies to assess the psychophysical development and abilities of this category of persons.

Based on these problems, the authors pursue the following tasks:

- formulation of recommendations on conducting remote interrogation procedure of persons with disabilities based on the analysis of theoretical and legislative sources;
- justification of the practical need to develop educational programmes for law enforcement officers carrying out online investigative actions to acquire relevant knowledge and practical competencies in order to assess the psychophysical development and abilities of persons with disabilities;
- determination of the location of the PWDs while conducting RIAs for the convenience of their appearance and for obtaining effective results of investigative actions;
- determination of the procedural position of PWDs, the mandatory involvement of the required specialised consultants in establishing conditions for favourable psychological contact with the interrogated person, overcoming fear in order to achieve an accurate explanation during investigation.

The research novelty lies in the fact that, based on fundamental documents regarding the protection of citizens' rights, and a large underpinning of literature sources, a study regarding the issues of remote interrogation of persons with disabilities was conducted and scientifically based recommendations were proposed for improving the legal and organisational foundations of this issue due to their absence in practice.

The aforementioned factors are relevant for their consideration. The purpose of the study is to develop and substantiate practical recommendations aimed at improving and developing the production of remote investigative actions involving persons with disabilities, taking into account their physiological and functional characteristics, by creating optimal conditions for the transmission of verbal, medical and psychological information, as well as technical and forensic support for the production of RIAs. This, in addition to an applied solution for problems arising during the remote interrogation of persons with disabilities and the possibility of using modern IT technologies in order to obtain reliable testimony within the framework of a pre-trial investigation.

Research materials and methods

This study is based on an analysis of the norms of the criminal procedural legislation of the Republic of Kazakhstan and a number of foreign states that regulate the procedure for conducting remote investigative actions, as well as scientific publications on the research topic in the field of psychology and medicine. Interdisciplinary and integrated approaches were used in this study involving general and particular methods of learning about objective reality: the scientific literature was studied; a social experiment was conducted. An experimental remote investigative action was carried out with the involvement of PWDs, characterised by different clinical diagnoses, in order to identify the degree of perception of non-verbal information (its receipt / processing / level of perception / actions in a conflict situation / the behaviour influenced by a number of confounding factors: quality of communication, sound, failures in the system). An integrated approach involves considering the studied phenomena of communication during an investigative action as a set of interconnected and interdependent elements, i.e., consideration of the issue from the medical, psychological and legal points of view. Situational and systemic types of analysis, complex sociological analysis, diagnostics and forecasting investigative situation were also used. Methods of analysis and synthesis, induction, deduction, methods of qualitative and quantitative analysis were employed to clarify the legal essence of the studied phenomenon.

Analysis, synthesis, generalisation and comparison were used in obtaining theoretical conclusions and

recommendations related to the problem of conducting remote investigative actions involving disabled persons.

In addition, within the framework of this research, the following methods were used: modelling - experimental action, online interrogation of persons with disabilities; the comparative legal method covered the legislation of the Republic of Kazakhstan and other countries abroad, near and far.

This article discusses the aspects of the performance of the remote interrogation of people with disabilities. The individual characteristics that are inherent to PWDs should be fully taken into account during investigative action using scientific and technical means of fixation. Based on the study of remote interrogation, the authors came to the conclusion that the indicated investigative action must be construed on the basis of psychological characteristics, as well as available medical indicators of the health of people with disabilities.

Review and analysis of the problem

There are frequent cases when persons with disabilities become victims or eyewitnesses of criminal offenses. The legislator, taking into account all circumstances related to the disruption of the normal functioning of the citizens' life, determined the procedure for conducting investigative actions involving PWDs in criminal procedure legislation. The characteristics concerning the interrogation of PWDs are determined by the peculiarities of psychology, due to the fact that PWDs have certain limited resources.

The scientific literature indicates that a person with disabilities is characterised as a person with certain limitations associated with physical, mental or other disorders. This circumstance indicates that people with disabilities require special living conditions.

Currently, international legal acts enshrining the rights of disabled persons include: the Declaration on the Rights of Disabled Persons (Declaration on the Rights of Disabled Persons (DRDP), 1975), the World Programme of Action concerning Disabled Persons (World Programme of Action concerning Disabled Persons (WPACDP), 1982), the Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (The Standard Rules on the Equalisation of Opportunities (SREP), 1993), the Convention on the Rights of Persons with Disabilities (Convention on the Rights of Persons (CRP), 2006). The Declaration contains a rule stipulating that when the confining of a disabled person in a special institution is necessary, then the environment and living conditions in it should correspond as closely as possible to the environment and conditions of the normal life of persons of his or her age. At the same time, the Declaration enshrines that PWDs should be able to use qualified legal assistance to protect their persons and property as well as have effective access to justice, procedural and ageappropriate adjustments that facilitate their effective role as direct and indirect participants, including as witnesses, in all legal proceedings, involving the investigation stage and other pre-trial stages.

In domestic and foreign scientific literature, a significant number of scientists - proceduralists and forensic experts have addressed the problem of interrogation tactics and confrontation with the participation of PWDs. It is necessary to highlight the works of researchers such as V.A. Vasiliev, G.G. Dospulov and others. At the same time, we note an urgent need for scientific and methodological coverage of the problems regarding interrogation tactics and confrontation of persons with disabilities in a remote format.

The experience of countries such as the USA, Singapore, Finland, and Korea has shown that it is typical for pre-trial investigation agencies in their daily activities to use audio and video recordings of witness' testimonies located in a remote location. The experience of a number of countries studied through desk analysis and foreign practice showed that there are no strict legal restrictions on the legitimacy of electronic materials. For the designated countries, the main criterion is the sufficient technical level of the means used, as well as "digital equality" and the "digital comfort" of the participants. In the Republic of Belarus, videoconferencing is used during interrogation, confrontation, and identification (Article 224.1 of the Code of Criminal Procedure of the Republic of Belarus) (CPC of the Republic of Belarus, 1999). The provision of Estonian criminal legislation regarding interrogation by telephone is very interesting.

Science does not stand still, there is widespread use of information technology. Foreign researchers are studying the issues of multimedia investigations, digital forensics using blockchain (Khan, et al., 2023).

The legislator of the Republic of Kazakhstan, taking into account all circumstances related to the disruption of the normal functioning of the citizens' life, determined the procedure and conditions for conducting investigative actions involving PWDs in criminal procedure legislation. Thus, prior to the interrogation of PWDs, who have physical disabilities associated with deafness and dumbness, the person conducting the pretrial investigation must ensure the participation of a specialist with sign language interpretation skills.

There are the following categories of PWDs:

 hearing impairment (decrease in hearing acuity, the ability to perceive low-intensity sounds of 20 dB or more) (World Health Organisation (WHO), 2019). The complete inability to hear and recognise sounds is called deafness, partial - hearing loss of a different nature.

- visual impairment (limitation of the function of the visual system the perception of light waves in the range of less than 400 and more than 790 nanometers). Lack of vision leads to a decrease in attention and memory (WHO, 2019). The following groups of visual dysfunctions are distinguished: moderate, severe, blindness, specific, complex, etc. (WHO, 2022).
- locomotor system impairment (acute, short-term or chronic disorders and diseases of the musculoskeletal system, characterised by pain, limited mobility, functionality, may be accompanied by impaired vision, hearing, speech, mental health, which leads to disability, WHO, 2019).
- mental retardation (delay of thinking and intellectual development of varying severity). The following clinical forms of mental retardation are distinguished: oligophrenia and dementia. Oligophrenia is a congenital or acquired mental underdevelopment, characterised by the predominance of an intellectual defect. Dementia - develops as a result of diseases (meningitis, encephalitis, meningoencephalitis, stroke, Alzheimer's disease) and brain injuries, usually has a chronic or progressive course, during which degradation of memory, thinking, and behaviour occurs.

Mental retardation can develop against the background of mental illness (schizophrenia, which is characterised by significant impairments in the perception of reality, mental disorders, attention, memory and behavioural changes; epilepsy, etc.), as well as hereditary metabolic disorders (WHO, 2019).

PWDs as participants in the criminal process may have features related not only to their state of health. Some of them have limited or completely obliterated socially useful connections and skills. This can lead to their complete or partial social maladjustment in society. It is necessary to correctly understand and adequately assess various kinds of citizens' mental deficiencies (defects in the intellect, emotional and volitional spheres, problems with thinking and the correct perception of objective reality), which are connected with permanent or temporary painful disorders of mental activity, which in some cases simply limit their rights for personal protection.

For the purpose of communication, PWDs use a "specific" language - sign language. Sign language is an independent language that consists of a set of gestures. The gesture is made by hands in combination with facial expressions or movement of the mouth and lips. A common sign language is used to communicate with these persons. Deaf-mutes cannot hear the investigator

during investigative actions. It is known that night time has a certain effect on the senses. Thus, interrogation of PWDs should in all cases be carried out during daylight hours.

Taking into account the physical condition of PWDs, the investigator can question him or her at the place of work, place of residence or at the scene of the incident. At the same time, the role of an interpreter participating in the interrogation of the deaf, dumb and deaf-mute is very important.

The accused person of the specified category reproduces information about the circumstances of the crime, which resides in his or her memory, as testimony with the use of various gestures and certain signs that have been formed over the years under the influence of various social factors. Expressing their attitude to the prosecution, during interrogation PWDs use their entire stock of facial expressions and gestures. Therefore, interpreters, on the one hand, translate the investigator's speech into gesture-mimic or dactyl speech and, conversely, the facial expressions, gestures or dactyl signs of deaf-mutes - into ordinary colloquial speech.

Interrogation of the deaf and dumb is impossible without the participation of interpreters, who help investigators not only to perform an investigative action, but also establish psychological contact with the interrogated person. It is necessary that during the interrogation, the interrogated person understands and communicates freely with the investigator.

In the case of interrogation of a person with hearing impairment, the investigator during RIA should resort to the use of tactics, such as a visual demonstration, providing photographs and documents for display. In other words, it is rational for these persons to provide material sources that contribute to the process of perception and recollection of the case, and remembering individual events-by means of remote interrogation, the provision of physical evidence, documents, etc. (Figure 1)

Figure 1. Demonstrates the stylus, the investigator's computer during the production of RIA



It should be noted that the conditions and procedure for the remote interrogation of PWDs have a number of differences from classic interrogation. The Criminal Procedure Code, unfortunately, does not reflect the methods of conducting the remote interrogation of seriously ill patients, PWDs. We believe that interrogation with the use of scientific and technical means of fixation will facilitate the process of movement and the burden placed on PWDs. It seems possible to conduct a remote interrogation of said person at his or her current location at home or in a medical institution. This legislative innovation will take into account the individual characteristics of PWDs.

Currently, the PWDs having disorders of the musculoskeletal system often experience a number of difficulties (entrance to administrative buildings, check-ins, etc.) in arriving at the pre-trial investigation body for testifying. According to building codes and regulations, a ramp (lifting platform) and lifting mechanism for the movement of people with limited mobility in a wheelchair are provided (figure 2). However, the indicated inclined platforms were not installed everywhere, serving to enter the front door, intended to replace the stairs, or platforms are established in violation of the rules for their installation. (Figure 2)

Figure 2. | A ramp designed to lift PWDs into institutions



Persons with physical or mental disabilities are characterised by increased excitability. When conducting investigative actions, the investigator needs to establish psychological contact with the interrogated person, which requires knowledge of special psychological rules and tactics. The climate, the condition surrounding investigative events, and the effectiveness depend on correct application of techniques for "investigative" communication. The communication of the investigator with the PWDs and their legal representatives - relevant specialists during the investigative actions - should be considered as an obligatory element of the investigative activity.

The interrogation of PWDs being conducted in online format, ethically, creates conditions that allow PWDs to avoid visiting police stations (excluding a criminogenic environment), which creates a favourable interrogation environment. This is a type of ethical measure that supports the condition of persons with disabilities.

Thus, remote interrogation is a complex interaction not only of one investigator with the person being questioned, but also due to the participation of specialised medical consultants and the investigator who is executing the order of the legal representatives. It should be noted that the psychological characteristics of PWDs are little known to law enforcement officers. Therefore, the development of the psychological basis of interrogation, in particular the remote interrogation of PWDs, is conditioned by practical necessity.

Emphasis should be placed on the unique psychological and communication needs of persons with disabilities. This requires training of employees through (scientific and methodological support) the development of educational programmes for acquiring relevant knowledge and mastering practical competencies needed to assess the psychophysical development and abilities of this category of persons. For example, participation in training seminars involving medical workers, specialised consultants, psychologists, IT specialists; conducting classes at academies involved in personnel training; completion of enhanced training courses for investigators conducting pre-trial investigations. Such interdisciplinary cooperation creates the preconditions of a global perspective for the wider use of online technologies, understanding the psychophysical state of persons with disabilities, which in turn will improve the quality of obtaining testimony in a criminal case. Interdisciplinary collaboration could encourage greater insight into how different sectors can work together effectively to meet the unique needs of people with disabilities.

Interrogation being the main form of obtaining evidence in the criminal case investigation is also a special form of interpersonal relations. In these relations the totality of connections between people studied by cognitive (from Latin cognitio - knowledge) psychology is of great importance. The concept "cognitive distortion" is distinguished and understood as the allowable systematic errors in thinking or patterned deviations that arise on the basis of dysfunctional beliefs embedded in cognitive patterns detected when analysing automatic thoughts (Aleksandrov, 2002).

People with impaired vision especially need help to carry out life processes. "During legal proceedings many of them are in need of assistance. Bidirectional translation is required, when using the special software, an ordinary font is translated into Braille and vice versa" (WHO, 2022) Ensuring the rights of participants with disabilities, 2021).

The criminal procedural legislation of the Republic of Kazakhstan does not contain special exceptions for PWDs and only part 3, paragraph 1 of - Article 67 of the Criminal Procedural Code of the Republic of Kazakhstan determines the mandatory participation of a defense lawyer if the suspect, due to physical or mental disabilities, cannot independently exercise his right to a judicial remedy (CPC of the Republic of Kazakhstan).

However, state programmes are being implemented throughout the Republic (for example, the programme "Digital Kazakhstan", which implies the use of digital technologies, the transition to a digital state, and the online services to the population) (Programme "Digital Kazakhstan", 2017). The recommendations proposed by the authors for improving the process of the interrogation of persons with disabilities are closely implemented with the specified programme. Thus, the development of the digital infrastructure of governmental agencies is being carried out, on the one hand, and convenience and conditions are provided for persons with disabilities through online services, on the other hand.

Deaf-mutes are not able to directly hear the investigator and participants of investigative actions. When interrogating PWDs, it must be taken into account that no one should be at the place of investigation except the officials conducting the interrogation, as well as the defense counsel and interpreter. During interrogation of the blind and visually impaired, it is necessary to exclude extraneous sounds that interfere with the investigation and decrease the effectiveness of mental activity, the process of remembering what happened. These factors "destroy the psychological readiness of the interrogated person to give truthful and complete testimony" (Vasiliev, 1967). Therefore, the interrogation of the deaf and dumb is impossible without the involvement of an interpreter, that not only helps the investigator conduct an investigation, but also establishes psychological contact with the interrogated person.

Some authors have conducted research on the issue of expanding the capacity of using remote technologies aimed at obtaining procedural and economic evidence in support of the performance of investigative actions in an electronic environment. These authors consider that a remote format is possible for conducting not only interrogations, but also for presentation for identification and examination (Martynov et al., 2017). Research confirms that during investigative actions such as interrogations, confrontations, examinations, identification parades involving PWDs, the possibilities of videoconferencing make it possible to objectively and reliably record information, provide a guarantee of reliability and the possibility of illustrative confirmation of the research results.

Results and discussion

Based on the study of the issue of conducting the remote interrogation of PWDs, we developed a SWOT - analysis (table 1).

Table 1.SWOT - analysis of the remoteinterrogation of PWDs

Strengths	Weaknesses
 Implementation of the principle of increased protection of the health status of PWDs in view of minimising their participation in pre-trial proceedings. Exclusion of PWDs being 	 Lack of "live" contact between the investigator and PWDs. The absence of a developed special curriculum, materials for training law enforcement agencies.
in a stressful situation, receiving a mental trauma	Opportunities
during investigation. 3. Convenience of the appearance of PWDs who are to be interrogated at their location to facilitate the process and obtain effective results	 Disclosure finformation constituting an investigative secret. Cybersecurity issues.
of investigative actions. 4. Due to the physiological processes of the memory of PWDs, the immediate conduct of remote interrogation will allow the latter not to forget the necessary information on the case under investigation.	Tendency 1.Digitalisation. 2. Optimisation of the investigation.
5. The possibility of capturing the entire interrogation process, re-performing it to establish the ethics of the relationship between the participants in the process (clarification of the circumstances of the testimony reliability and occurred event).	3. Implementation of the Legal Policy Concept of the Republic of Kazakhstan until 2030.

Conclusion

The research results indicate that the conducting of the remote investigation of PWDs using scientific and technical means in video mode is an integral element in the system of criminal procedure and forensics. Further study of this issue will allow to develop new proposals for improving criminal procedural legislation. In this regard, the following conclusions were made:

- 1. Obtaining testimonies from PWDs during remote investigation implements the principle of increased health protection due to the minimisation of their participation in pre-trial proceedings. Emphasis should be placed on the unique psychological and communication needs of persons with disabilities. It should be noted that today the Criminal Procedure Code does not reflect the methods of remote interrogation of severely ill people with disabilities.
- 2. Development of remote interrogation, taking into account the individual characteristics of PWDs, is conditioned by practical necessity. Thus, the psychological and physical abilities of the deaf, dumb, blind and deaf-mute who take part in investigative actions, are little known to law enforcement officers. This requires their training through scientific and methodological support in development or the development of educational programmes to acquire the relevant knowledge and practical competencies for assessing the psychophysical needs and abilities of this category of persons.
- 3. Performance of investigations involving PWDs at their location will facilitate the process and obtain effective results of investigative actions.
- 4. Determination of a category of PWD acting as a witness or accused, whose participation in remote interrogation is not recommended if they, according to a doctor's medical report, have a severe degree of mental or physical illness.
- 5. During the interrogation of PWDs the definite environment is created to exclude distraction of their attention to extraneous things and sounds, which will positively influence their mental activity in the implementation of a successful investigative action.
- 6. Obligatory participation of the required specialised consultants: a sign language interpreter, a speech therapist, a psychologist, etc. during the remote interrogation of PWDs, as well as a legal representative in order to realise their full participation as a witness or accused (in conditions of establishing favourable psychological contact with the interrogated person, overcoming distrust, irritability and fear in order to

achieve an accurate explanation of the course of events and conduct an effective pre-trial investigation).

7. The main requirements for the accessibility of PWDs to participate in interrogation is the mandatory availability of a ramp or a lifting device in accordance with building codes and regulations. However, the indicated inclined platforms are not installed everywhere, serving to enter the front door, intended to replace the stairs, or platforms are constructed in violation of the installation rules. Introduction into the Law of the Republic of Kazakhstan "On Social Protection of Disabled People in the Republic of Kazakhstan" the mandatory compliance with the principle of functional accessibility for PWDs during the construction of all types of facilities.

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Conflict of interest

There was no conflict of interest among the authors of this academic research. We declare that we have no financial or personal relationships that could influence the interpretation and publication of the results obtained. We also assure ensure that we always comply with ethical standards and scientific integrity at all times, in accordance withfollowing the guidelines established by the academic community and those dictated by this journal.

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