Emergency medical services and its development prospects in Georgia

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Abstract

Background: The provision of primary medical care holds significant importance within the healthcare system, serving as a fundamental pillar of the overall framework. The significance of the matter resides in its comprehensive significance for nearly all nations across the globe. Every individual state is actively endeavoring to modify and enhance emergency medical care and primary health care services. Furthermore, the significance of emergency medical care has escalated as a result of global events that have transpired over the past two decades, particularly during a pandemic. Emergency care has emerged as the paramount means of preserving human life. Emergency medical care is required to address global challenges through a diverse range of approaches. For instance, it is imperative that one of these entities replicates the economic systems of developed nations and engages in resource transfer. The association of international organizations with a mesh ring has the potential to enhance the credibility of medical care. It can be asserted with confidence that the functionality of the system is contingent upon its success. Despite the frequent occurrence of controversy surrounding the present matter, there remains a substantial amount of content to be addressed. Consequently, in the pursuit of knowledge within this domain, it is imperative to incorporate multiple scientific sources that facilitate logical reasoning. Medical aid manuals for emergency situations are a highly valuable resource that provides comprehensive guidance to healthcare professionals, extending beyond their own scope. They play a crucial role in enabling individuals to acquire the necessary skills and knowledge needed to effectively respond to a diverse array of emergency scenarios. In accordance with the reviewed guidelines, it is imperative to emphasize the significance of effective communication and coordinated teamwork in the context of emergency medical care. Georgia's emergency aid framework is established through the collaborative endeavors of state and local authorities. The primary function of the Georgia Emergency Management and Homeland Security Agency is to effectively coordinate emergency response efforts, optimize resource allocation, and facilitate communication among diverse stakeholders.

Aim: This article seeks to examine significant findings pertaining to Ambulance (EMS) worldwide, the current state of affairs in Georgia, legislative measures, statistical data, and potential avenues for advancement.

Methods: A search was conducted on the PubMed database to identify articles published from 2005 using the keywords "Ambulance" and "Emergency medical services". Excluded from consideration were articles lacking an abstract and those whose titles were deemed irrelevant to the objectives of this review. We excluded manuscripts that were not written in English.

Result: A total of 3,398 manuscripts were identified. There were a total of 282 review articles, 9 books, 23 meta-analytic studies, and 169 randomized controlled trials included in the analysis. Legislation and manuscripts from Georgia were also utilized.

Conclusions: Further research is needed to clarify the ways to develop Emergency medical services in Georgia. (TCM-GMJ June 2024; 9 (1):P49-P56)

Keywords: "Ambulance", "Emergency medical services"

Introduction

Ι

nitially, it is advisable to commence the conversation by utilizing local illustrations, as this will facilitate a comprehensive understanding of the situation. Given the widespread lack of

From the ¹Iv.Javakhishvili Tbilisi state University, Tbilisi, Georgia. Received February 14, 2024; accepted May 10, 20224. Address requests to: Baratashvili Aleksi E-mail: lexomd@gmail.com Copyright © 2024 Translational and Clinical Medicine-Georgian Medical Journal knowledge regarding first aid among the majority of individuals in the state, it is crucial that this book is accessible to all. ""Timely arrival of medical help increases the chances of people's survival. Calling 911 is the most important thing you can do.

The human role in the EMS system includes 4 main steps:

- 1. Recognizing emergencies (understanding that help is needed).
- 2. Decision making.
- 3. Activation of the EMS system.
- 4. Taking care for the injured in the ambulance" ¹

The mentioned manual discusses the situation of Georgia and the statistics of how an ordinary citizen affects or can affect the victim and what function 112 performs for citizens. In addition to government agencies, community organizations play a critical role in emergency relief. For the whole point of it, it is really good that the topics discussed are provided by the Red Cross and the World Health Organization. Personally, people must know how to act in emergency situations when their health deteriorates. Guidelines help standardize emergency medical care protocols. They establish uniform guidelines for the evaluation, treatment, and management of various medical conditions and injuries. The essence of a state of emergency lies in the dynamics of crisis response. Individuals, communities and organizations facing an emergency must quickly mobilize resources and expertise. Effective crisis response involves coordination, communication, and the ability to adapt to evolving circumstances. First responders, emergency services and community members become integral components of the collective effort to reduce harm and save lives.

Although the emergency medical care institute has a longstanding history, ongoing advancements in this domain continue to shape its overall structure. The present guidance examines the role of air ambulances within the broader health and safety sector. It asserts that air ambulances offer expedited access to medical care compared to ground ambulances, particularly for rural, underserved, and geographically remote populations. "Air ambulances can provide more rapid access to medical care than ground ambulances for rural, underserved, and hard to reach populations." Air ambulances serve over half a million patients a year and have gained greater importance in the healthcare landscape as rural hospitals continue to close", "Additionally, the current Covid-19 pandemic has highlighted the need for rapid transportation of patients to medical care." ² Consequently, this paper explores the primary avenues for the development of air ambulances. The content of this resource can serve as a valuable reference for countries seeking to enhance their respective sectors.

"Measures taken by governments such as shutdowns of not only international borders but also borders within each country to isolate the hard-hit areas by the pandemic have remarkably reduced the spread of the virus". "The pandemic has affected almost every aspect of our lives, including geopolitics, health, economics, education and sociocultural events." ³ However, these measures have also placed the economies of these countries in a distressing state. By drawing upon the case of our own nation, it becomes evident that there is a pressing need for enhancement within this particular sector. The availability of the resource is limited and not evenly distributed across all regions. The primary objective should be to achieve high velocity, which is why transitioning from one region to another extreme region at the appropriate moment is challenging. Emergencies encompass a wide range of occurrences, encompassing natural calamities like seismic activities and inundations, medical crises such as myocardial infarctions or mishaps, and unanticipated incidents such as power disruptions or societal turmoil.

The UK NHS Ambulance Sector played a crucial role in coordinating, navigating, and ensuring medical services during the Covid-19 pandemic. It effectively delivered integrated emergency and emergency services in collaboration with other providers and system partners. "The integrated system has resulted in more efficient use of resources, better support for ambulance clinicians and a better experience for patients. It allowed for a more appropriate referrals, and patients were involved in that process. The overwhelming comments have been that patients have benefitted." ⁴

Furthermore, it is imperative to take into account the case of developed nations, in addition to our own country. The emergency medical care sector in the United Kingdom assumes a pivotal role in safeguarding the health and welfare of the general population during critical circumstances. In May 2004, the Department of Health invited Peter Bradley CBE, Chief Executive of London Ambulance Service NHS Trust, to become National Ambulance Adviser and to lead a strategic review of NHS ambulance services in England. And the research showed that ambulance services should continue to "improve the speed and quality of service provided to patients with emergency care needs." 5 Implementation of state-of-the-art information systems that facilitate smooth communication and data exchange among healthcare providers, emergency services, and hospitals. Implementing GPS technology in dispatch systems can greatly enhance the speed at which medical emergencies are responded to. In addition, as stated in the manual, it is recommended to augment the quantity of disciplinary trainings in order to effectively decrease the duration of assistance. When considering the aforementioned scenario within the context of our nation, Georgia acknowledges the significance of proactive strategies in effectively handling emergency circumstances. The government allocates resources towards public education and awareness initiatives aimed at enlightening the general population about potential hazards and the significance of being ready. These endeavors enable individuals and communities to proactively implement preventive measures and efficiently respond to emergencies.

It is crucial to implement cutting-edge information systems that facilitate smooth communication and data exchange among healthcare providers, emergency services, and hospitals. Implementing GPS technology in dispatch systems can greatly enhance the speed at which medical emergencies are responded to. In addition, as stated in the manual, it is recommended to augment the quantity of disciplinary trainings in order to effectively decrease the duration of assistance. When considering the aforementioned scenario within the context of our nation, Georgia acknowledges the significance of proactive strategies in effectively handling emergency circumstances. The government allocates resources towards public education and awareness initiatives aimed at enlightening the general population about potential hazards and the significance of being ready. These endeavors enable individuals and communities to proactively implement preventive measures

and efficiently respond to emergencies.

Emergency care encompasses varying levels of necessity.

"1. Life-threatening emergencies. Immediate medical assistance is required to protect the patient from a potentially fatal injury, disability, or death.

2. Emergencies. Medical assistance is required to protect the patient from further complications.

3. Urgent care. A delay in immediate intervention and patient conveyance does not impact the medical outcome.

4. Crisis/disaster management. The number, severity, and diversity of injuries overwhelm local medical resources and require a cooperative, multidisciplinary effort."⁶

This study highlights the increasing importance of emergency response and efficient systems within the dynamic healthcare environment. In order to enhance the provision of well-informed and coordinated care, it is imperative that emergency operators, hospitals, and primary care providers are granted immediate access to patient information. Despite its relatively small size, the scientific journal presents novel prospects. Telemedicine can offer prompt assistance to individuals experiencing a crisis, while continuous surveillance of long-term conditions can aid in averting emergencies through proactive intervention. The comprehensive framework for emergency care is fostered through collaboration between government agencies and the private sector, as these books are closely linked to the Organization's priority activities, which encompass disease prevention and control, the development of equitable health systems based on primary health care, and health promotion for individuals and communities. "The essence of a state of emergency goes beyond the physical consequences and includes the psychosocial impact on individuals and society." 7 The current guidelines examine the notion that the malfunction of an emergency ambulance can result in significant psychological distress for the patient, which may prove insurmountable. This has the potential to adversely affect the patient's overall psychological well-being, posing an initial risk to his safety.

While emergency medical care can provide advantages to the injured individual, it can also entail potential hazards. Rapid and precise decision-making is crucial in the high-risk setting of a medical emergency. "To achieve quick responses to and from an incident site, ambulances often have to travel at high-speed using lights and sirens (L&S). Unfortunately, high-speed travel and L&S use increases the risk of ambulance accidents. Inevitably, this problem must be viewed with utmost seriousness as ambulance is a dedicated vehicle that is supposed to arrest the progression of the illnesses or injuries of patients and to deliver them safely into the healing hands of healthcare providers in hospitals." 8 The interior of the ambulance is equipped with rescue medical equipment. During the process of transportation, the occurrence of rapid acceleration, deceleration, or sharp turns has the potential to induce movement in equipment, thereby posing a risk of injury to both patients and emergency personnel. Unsealed equipment poses a risk to an ambulance in a restricted area. Emergency situations necessitate prompt and efficient action, thereby imposing considerable strain on emergency personnel. Furthermore, emergency medical personnel frequently endure extended and unpredictable work schedules, resulting in inherent driver fatigue. The foundation of global emergency response lies in humanitarian principles that give utmost importance to safeguarding life, mitigating suffering, and upholding human dignity. The principles guiding organizations and nations engaged in emergency response entail the provision of assistance in an impartial and non-discriminatory manner.

The coordination and delivery of emergency assistance worldwide are primarily facilitated by the United Nations (UN) and other international organizations. "Existing agencies such as the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the World Health Organization (WHO) and the International Federation of Red Cross and Red Crescent Societies (IFRC) work together to respond to crises and provide assistance to affected communities." "Two global pooled fund mechanisms have anticipatory action programs in place for heatwaves in several countries: START Ready for NGOs, and IFRC's Forecast-based Action by the Disaster Response Emergency Fund for National Red Cross/Red Crescent Societies and their partners. Efforts to capture and share learning within and between these funds should be accelerated, with a view to further building the case for early action and demonstrating good practice." 9 Global emergency aid integrates prompt response mechanisms and early warning systems to anticipate and address emerging crises. The prompt identification and prompt intervention have the potential to greatly alleviate the consequences of disasters, preserve human lives, and diminish the overall humanitarian load. Securing funding is crucial for promptly delivering assistance, reconstructing infrastructure, and addressing long-term recovery requirements. Multilateral financing mechanisms play a crucial role in ensuring the efficient allocation of resources based on the severity and urgency of a given crisis. Rapid international responses are prompted by health emergencies, such as pandemics or outbreaks of infectious diseases. Global organizations engage in collaborative efforts to enhance the capabilities of medical teams, facilitate the distribution of vaccines, and deliver vital health services with the aim of mitigating the adverse effects of health crises on populations affected by them. Emergency assistance frequently entails international collaboration, particularly in instances of conflict or displacement. In this scenario, prioritizing the enhancement of international organizations and fostering systematic cooperation assumes greater significance. International endeavors extend beyond the realm of immediate crisis response, encompassing initiatives aimed at enhancing capacity building and preparedness. The engagement of healthcare organizations in the context of national emergency response encompasses a complex endeavor that necessitates the harmonization of efforts, readiness, and dedication to safeguarding the health and welfare of the populace. Health organizations assume a pivotal role in the allocation and management of resources during emergency situations. This encompasses a range of comprehensive

approaches aimed at addressing medical equipment, pharma- ty. The Public Health Act serves as the foundational legislaceuticals, and staff training.

low- and middle-income countries (LMICs). Many to most of medical interventions. the deaths from these conditions occur outside of hospitals, may deteriorate. In situations where resources are already limited, the workforce engaged in the sector must adapt and utilize the available resources. It is imperative to prioritize the resolution of education and training deficiencies in order to guarantee that emergency medical personnel possess the requimedical emergencies. Efficient coordination is essential for the most effective method to avoid. allocation of the budget in this process. Continuous coordination among multiple stakeholders, such as emergency medical simple, sustainable, practical, efficient and flexible. services, hospitals, and community health workers, is imperaness encompasses the strategic process of strategizing, instructing, and empowering individuals and communities to proactively anticipate and efficiently address unforeseen crises.

it is crucial to analyze it from a political perspective and comprehend the legal framework that governs it. "The health care diatric, adult medical and obstetrical emergencies." 13 legislation in Georgia encompasses various legal frameworks,

tion that governs the rights and obligations of individuals, Consensus exists regarding a standardized medical and healthcare professionals, and governmental entities in order to healthcare set of criteria, however, the issue at hand is whether attain the highest level of public health. State health laws typithe majority of states can conform to comparable standards. cally embody the entitlement of individuals to access funda-The current manual pertains to the primary regulations that mental healthcare services. These legislations frequently tackle have the potential to rectify the situation. "Injury and other matters pertaining to the availability of primary healthcare, medical emergencies are becoming increasingly common in emergency services, preventative measures, and specialized

Governments commit to guaranteeing the availability of necessitating the development of prehospital care. Prehospital health services to all citizens by incorporating the right of accapabilities are inadequately developed to meet the growing cess to health care into legal frameworks. "Significant sex and needs for emergency care in most LMICs. Objective. In order gender differences in both physiology and psychology are to better plan for development of prehospital care globally, readily acknowledged between men and women; however, this study sought to better understand the current status of data are lacking regarding differences in their responses to prehospital care in a wide range of LMICs" ¹⁰ It is worth not- injury and treatment and in their ultimate recovery and surviving that middle-income countries exhibit limited development al. These variations remain particularly poorly defined within in this particular domain. Middle-income nations frequently the field of cardiovascular resuscitation." ¹² This guide reveals face challenges related to limited resources, which impact their that state healthcare laws specify patients' rights, such as the ability to obtain adequately equipped ambulances, medical right to informed consent, confidentiality, and autonomy in supplies, and skilled personnel. Insufficient infrastructure has decision-making. The legislation guarantees that individuals the potential to impede the mobility of patients. Geographical are provided with information regarding their health condiobstacles, such as challenging topography and insufficient tions, treatment alternatives, and potential hazards, enabling transportation infrastructure, can hinder the expeditious con- them to make well-informed decisions regarding their veyance of individuals to healthcare establishments. The lack healthcare. Provisions pertaining to public health and disease of adequate access in remote regions presents a substantial control are frequently incorporated within state health laws. barrier to the prompt provision of prehospital care. Based on During periods of calamity, the global community unites to the circumstances in Georgia, our country lacks the economic offer immediate assistance, demonstrating a collective dedicapotential to consistently allocate new funds to the public tion to the welfare of mankind. Governments possess the auhealth budget. Hence, in such a scenario, the circumstances thority to implement strategies aimed at mitigating the transmission of communicable diseases, facilitating the administration of vaccinations, and addressing public health crises. The aforementioned legal instruments play a crucial role in safeguarding the well-being of the broader populace.

Injury is a prevalent factor contributing to premature morsite competencies to effectively manage a diverse range of tality and disability on a global scale. Primary prevention is the

"• An effective prehospital trauma care system should be

• Whenever possible, prehospital care should be integrated tive for the provision of effective prehospital care. Prepared- into a country's existing health-care, public health, and transportation infrastructures.

• Effective systems for prehospital trauma care will form the foundation for all emergency care wherever they are estab-When examining the economic aspects of the current field, lished and will also quickly be tasked with the responsibility of addressing a broader range of health concerns, including pae-

In the context of emergency medical care, physicians freincluding the Constitution of Georgia, international treaties quently encounter the need to execute a range of surgical proand agreements, this law, and other legislative and subordinate cedures. The aforementioned article is examined through the normative acts. In Georgia, citizens are entitled to access med- lens of the significance of emergency surgical support. ical assistance through state health care programs that have "Surgical intervention is necessary during an emergency bebeen approved in accordance with established regulations. cause it often has the greatest impact on a person's life. Al-These programs are administered by a legally recognized medi- most half of the adverse events in hospitalized patients in incal entity, irrespective of ownership or organizational-legal dustrialized countries are related to surgical treatment". 14 structure." 11 The provision of affordable and high-quality While surgical interventions generally lead to the restoration of healthcare is an essential element of a fair and equitable socie- an individual's health, it is important to acknowledge that they

can also have adverse effects. "While surgery for humans is prevalence of advanced emergency response systems is inment."

healthcare systems. Adopting a proactive stance towards glob- out to their patient and provide aid. al health can contribute to the establishment of a healthier humanity.

nation is becoming more interconnected in order to address confidently express our opinions on various events. global health challenges. The field of global health extends single or few interactions with uninfected hub."¹⁶

element of international relations. "Expanding demands on considering its scope. global health diplomacy require a delicate combination of technical expertise, legal knowledge, and diplomatic skills that different types of registers. "Studies consistently highlight the have not been systematically cultivated among either foreign importance of completeness of cancer registry data. At this service or global health professionals." 17

plications. As we approach the beginning of a new era, the completeness include linking data to multiple sources, such

typically conducted in hospitals, it is also performed in ambu- creasing in the majority of countries worldwide. The implelances, requiring the use of advanced technology and equip- mentation of telemedicine within emergency systems signifies a fundamental change in the approach healthcare practitioners Global disparities in healthcare access and outcomes pre- adopt when evaluating and addressing medical emergencies. sent numerous obstacles for individuals worldwide. While Definition of telemedicine by The World Health Organizacertain areas possess sophisticated healthcare infrastructure, tion: "the provision of health services by health professionals, others encounter substantial obstacles that result in substan- where distance is a critical factor, using information and comtial decreases in life expectancy. "While global priorities and munication technologies to exchange valid information for opportunities for research funding vary, there is a need to the purposes of diagnosis, treatment and prevention of disdevelop research infrastructure and expertise in the interna- ease and injury, research and evaluation, and to facilitate the tional emergency medicine community to be successful in an continuing education of health professionals, with the aim of increasingly competitive research environments." 15 Any state safeguarding the health of individuals and communities". " with limited health resources will encounter difficulties in co- For the health system, in particular for primary health care, ordinating endeavors. The imperative of addressing global which is facing a significant shortage of family doctors, telehealth challenges necessitates the imperative collaboration medicine services can present an innovative opportunity to among nations, international entities, and non-governmental address the population's needs for health care and health serorganizations. Strategic allocation of resources towards health vices in general." 18 While emergency medical care and teleinfrastructure and workforce development is imperative. The medicine may appear distinct domains, they may share certain allocation of specific resources by the state is imperative in similarities. For instance, in situations where an individual order to establish stability within the emergency and requires immediate assistance, a physician can promptly reach

"Health systems and clinics across the world are additionstate. Global health and emergency care are interconnected ally rapidly deploying a telemedicine approach for primary components of the collective duty to safeguard the welfare of care, mental health, OBGYN, and many other outpatient specialty appointments to reduce exposure risk." ¹⁹ Artificial intel-Global health is a complex and interrelated concept that ligence algorithms have the capability to analyze large dasurpasses geographical borders and prioritizes the overall wel- tasets, enabling the identification of patterns and facilitating fare of individuals and communities on a global scale. Every prompt and precise decision-making. Research enables us to

"The World Health Organization and the International beyond conventional healthcare approaches by incorporating Telecommunication Union (ITU) are responsible for the dea more comprehensive viewpoint that takes into account the velopment of services and standards. And the European social, economic, and, as expected, environmental factors that Commission determines the policy and strategy of the Euroinfluence health outcomes. The global prevalence of infec- pean Union, as well as implements multibillion-dollar financtious diseases poses a persistent threat, prompting many ing of scientific and innovative research through scientific countries to develop specific measures to address this poten- framework programs, for example the global situation of digitial issue. "Despite the low interaction between discrete hubs, tal health." 20 NHS England's disaster management plan ofthe disease can jump to and spread in a susceptible hub via a fers clear leadership pathways to effectively and efficiently manage crisis situations. The attainment of a successful state While this may not initially appear applicable to emergency in digital health is contingent upon the expansion of its global medical care, the majority of researchers believe that the es- presence. "Emergency care is an integral part of the health tablishment of a well-structured medical care system is crucial, care system, and the quality of emergency care plays a critical even in the context of mitigating pandemic risks. Further- role in determining patient health outcomes. Emergency care more, the escalating prevalence of non-communicable ail- systems act as part of a larger healthcare ecosystem and can ments, such as cardiovascular disease, diabetes, and cancer, is only be as effective as the system as a whole." ²¹ Globally, imposing a growing strain on worldwide health. The promo- emergency care systems are progressively incorporating techtion of cooperation between states can be facilitated through nology to enhance their efficiency. The examination of data diplomatic endeavors that prioritize health as a fundamental pertaining to emergency care is most effectively conducted by

For emergency medical care, it is also necessary to have point, research has shown that incomplete data compromises The significance of emergency detection is increasing due the accuracy of cancer incidence and hinders the ability to to the growing prevalence of first aid systems in practical ap- conduct reliable epidemiological research. Efforts to improve as pathology reports, hospital records, and mortality data." ²² The key to success in the business world is to collect and analyze data. Some experts believe that data and its analysis are very valuable, but this is not always the case. It would be helpful if these experts critiqued this problem more widely, because the conclusions drawn from the data are not always based on personal opinions, but are even more inclusive. When it comes to data collection, the government has a kind of monopoly on this process. This project specifically focuses on ways to process information related to data.

Regarding the state of Georgia in this context, it is evident that our nation is experiencing significant progress within the confines of its current circumstances. "The goal of the program is to reduce complications and lethal outcomes during emergencies by providing free emergency medical assistance to the population. Beneficiaries of the program are citizens of Georgia, persons permanently residing in Georgia and persons living in the occupied territory of Georgia." ²³ The policy takes into account the resource management method to develop emergency response protocols. Public policy establishes the legal and ethical framework for emergency care. Clear regulations, licensing standards, and ethical guidelines ensure that emergency care professionals follow the highest standards of practice, fostering trust and accountability in the healthcare system.

The sequential process of a total emergency involves local authorities and citizens identifying the required resources for first aid and transportation. A significant issue in both professional and total care domains is the insufficient educational methods, which adversely affects all areas and fields of medicine. Only a limited number of states offer adequate financial support for emergency services. Public policy serves as a guiding principle that establishes the extent, criteria, and allocation of resources for emergency response, thereby facilitating a coordinated and comprehensive approach to safeguarding the public's welfare. Public policy plays a crucial role in ensuring fair and equal access to emergency services.

Simultaneously, emergency medical care is delving into the legal framework concerning personal data. "Personal data refers to any information relating to an identified or identifiable natural person (data subject); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person"²⁴ It is imperative for medical personnel to safeguard such data. Following the provision of medical services, physicians possess a diverse array of patient information. The significance of doctors maintaining a high level of professionalism lies in their adherence to the Code of Ethics and Service, which mandates the avoidance of divulging personal information. Preventive measures are promoted through public policy initiatives that prioritize public health education and awareness.

The findings of the study elucidate the necessity of precise data in the context of emergency medical care. Efficient organization, documentation, storage, and accessibility of research data enable real-time verification of its accuracy, thereby ensuring the acquisition of the highest quality data. Given the significant impact of emergency care data on patients' medical histories, it is logical to expect that its scope should be expanded. The convergence of emergency care and public policy plays a pivotal role in enhancing the robustness and adaptability of healthcare systems. "All ambulance services can be mapped into two broad categories of assets: (i) control center and (ii) fleet and equipment; as well as four broad categories of related activities: (i) own, (ii) develop/maintain, (iii) operate, and (iv) regulate. Arthur D. Little has developed his proprietary "Triple A" (Ambulance Asset and Activity) framework, which enables development of a strategically aligned and efficient operating model."²⁵

Human safety in emergency situations relies heavily on effective coordination and communication between emergency providers, first responders and health care facilities. In the academic work "Repositioning of emergency medical care" emergency medical care in the regions of Georgia is discussed. The current situation in the direction of the functioning of emergency medical care before and after the creation of the service under state control is described." 26 The article explores the integration of the rapid medical care system to ensure the efficient operation of medical care, including hand hygiene protocols, issues, and the inclusion of completed service projects. These examples serve as illustrative cases for consultation. The international surveillance of medical care delivery plays a crucial role in ensuring the provision of emergency medical care. For this study, a survey was administered to individuals between the ages of 18 and 65 residing in various regions of Georgia. Information was collected through the establishment of four focus groups, where participants were chosen based on factors that could be accurately captured. According to the survey, most participants concurred on the significance of prompt response. Private providers, in addition to the state, offer emergency medical services.

"The state provides the population with a free emergency medical aid system. Urgent and emergency primary prehospital medical care in Tbilisi is carried out by "Emergency Medical Aid Center" LLC." ²⁷ This division of responsibilities amplifies the significance of the issue, as if the state institution can redistribute the responsibilities, the urgency of the issue will increase. The experiences of various states demonstrate that similar cases exist in most European countries as well. Medical centers empower patients to maintain control over their own health at all times.

In addition to the fact that emergency medical care plays a big role globally, it is also important for individual cases. Global strength does not exist without local achievements, so it is necessary to consider its local experience as well. "The legal entity under public law of the Tbilisi City Municipality - Tbilisi Emergency Medical Center (hereinafter referred to as the Center) is a legal entity under public law under the governance of the City of Tbilisi Municipality, created in accordance with the legislation of Georgia." ²⁸ Of course, it is necessary for Georgia in general that the emergency Medical care should be developed for all regions, however, with the intervention of the local mayor's office, it is necessary that medical care

should be developed more at the local level, because it is easier to find emergency care. for example. When a person is in a bad situation, help should be provided immediately. For this, the logistical side should be taken into account, the states should provide more funds in order to bring in more emergency medical teams and vehicles.

"The average response time for emergency medical assistance in challenging terrain and geographically remote areas is 30-40 minutes, which is 4-5 times longer than the recommended 8-15 minutes." ²⁹ In 2018, the paramedic institute was established in Georgia's EMS system. Currently, there are 100 paramedics employed in the ambulance service, but their role, quantity, and proficiency are still restricted and require further expansion and enhancement." ²⁹

The Emergency Situations Coordination and Emergency Assistance Center in Georgia provides funding for the training of paramedics. "The project aims to train 3,000 paramedics, although this does not imply a 3,000-person staff shortage. The proposed plan entails the annual training of 100-110 paramedics, which is deemed to be the minimum requirement for addressing the annual staff turnover and current vacancies. The training of this contingent spans over a span of multiple years. Following their retraining, these individuals are subsequently employed at the center."³⁰

Methods

The research process employs various methods, including search, collection, systematization, description, comparison, and analysis, in accordance with the established goals and objectives.

Results and discussion

Further research is needed to clarify the ways to develop Emergency medical services in Georgia.

Conclusion

This literature review primarily aims to identify and analyze prevalent topics, trends, and patterns in the literature that address the challenges and knowledge gaps in Emergency medical services in Georgia. We emphasize the factors that contribute to these barriers and propose solutions to overcome them. In conclusion, it is imperative to implement reforms in the emergency medical services of Georgia that align the field with global trends. It is crucial to promptly seek medical assistance, as one of the key principles of international protocols and guidelines is to achieve such expediency. This should be supported by scientifically validated evidence. The medical field cannot progress autonomously without additional resources and facilities.

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