How to Cite:
Alanazi, S. A., Almanna, M. A., Alanazi, D. M., Enazi, S. M. A., Alaboush, K. S., Alaujan, B. S., Zamzami, B. A., & Alsaleh, W. A. (2023). Trauma-informed care in emergency medicine: The role of nurses, pharmacy, telehealth in providing care to patients who have experienced trauma. *International Journal of Health Sciences*, *7*(S1), 3371–3386. https://doi.org/10.53730/ijhs.v7nS1.15058

Trauma-informed care in emergency medicine: The role of nurses, pharmacy, telehealth in providing care to patients who have experienced trauma

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***Abstract*---**Background: The COVID-19 pandemic has accelerated the adoption of telehealth in healthcare, particularly in emergency medicine. The need to minimize physical contact and optimize resource allocation has led to the exploration of telehealth's potential in pre-hospital, inpatient, and post-discharge settings. Aim of Work – This review examines the utilization of telehealth and the role of physicians, nurses, and pharmacists in emergency medicine during the COVID-19 pandemic, highlighting its applications, benefits, and limitations. Methods – A comprehensive electronic search was

Manuscript submitted: 01 Jan 2023, Manuscript revised: 09 Jan 2023, Accepted for publication: 15 Jan 2023

conducted across six databases (PubMed, Web of Science, Scopus, MEDLINE, Cochrane Library, and Embase) up to 2018. The review focused on English-written, full-text articles that explored telehealth in emergency medicine. A total of 36 articles were selected for analysis. Results – Telehealth has demonstrated its value in pre-hospital care, emergency department (ED) management, and post-discharge follow-up. Key applications include remote patient monitoring, virtual consultations, and tele-triage. Benefits include reduced PPE usage, improved patient communication, and enhanced resource utilization. However, challenges include infrastructure limitations, technical issues, and ethical considerations. Conclusion – Telehealth holds significant potential to enhance emergency medical care, particularly in the context of infectious disease outbreaks. However, further research is needed to address existing limitations and optimize its implementation. Continued investment in infrastructure, training, and research is crucial to ensure the successful integration of telehealth into emergency medicine.

***Keywords*---**telehealth, emergency medicine, COVID-19, nurses, pharmacists, remote patient monitoring, virtual consultations, pre-hospital care.

Introduction

The COVID-19 pandemic, which has led to a dramatic surge in the number of individuals infected with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), poses a significant challenge to healthcare systems globally. During the COVID-19 pandemic, healthcare practitioners had the challenge of simultaneously treating a large number of people infected with a novel and extremely infectious disease, while also providing treatment to those with chronic illnesses, emergency situations, and other health issues, without risking their exposure to the SARS-CoV-2 virus [1].

Although preventive measures like immunizations have been successful, the emergence of fresh waves and indications of novel varieties of COVID-19 are still anticipated. Hence, it is essential to conduct a comprehensive analysis of the situation and derive conclusions based on the experiences gained over the whole duration of the epidemic. This will enable the development and implementation of novel and efficient remedies.

An outcome of the COVID-19 pandemic is the rapid integration of digital tools and technology, such as telemedicine and virtual healthcare, into healthcare systems. The phrases "telehealth," "mobile health" (mHealth), and "telemedicine" are sometimes used synonymously. Telemedicine is the provision of healthcare services at a distance utilizing information and communication technology. However, its main purpose is to assist long-distance clinical care, professional health-related education, public health, and health administration. Telehealth, also known as mHealth and eHealth, encompasses a broader range of healthcare services than telemedicine, which specifically refers to remote clinical services.

Telehealth includes services provided by healthcare professionals other than physicians, such as nurses and pharmacists. It encompasses clinical care services, educational programs for patients and clinicians, as well as public health or healthcare administration services [2].

Telehealth serves as a means to observe, identify, remedy, and advise patients in situations when face-to-face treatment is impractical, or when telehealth is more convenient or cost-effective. Despite being used for many decades, the COVID-19 epidemic has highlighted the numerous benefits and hitherto unimagined applications of telehealth. In addition, international organizations like as the World Health Organization [3] have advocated for the use of telemedicine during the COVID-19 epidemic. Several research have examined the use of telemedicine in Emergency Departments (EDs), and several articles have explored telehealth techniques and sought to ascertain the practicality of these systems in emergency environments [4]. Emergency departments (EDs) play a crucial role in the treatment of sudden and severe sickness and injuries, and hence provide access to the healthcare system. The overcrowding of emergency rooms is a significant global public health concern, while minimizing human interaction has emerged as a cost-effective and widely implemented strategy for controlling COVID-19. The convergence of the pandemic and the influx of patients beyond the capacity of emergency departments is a significant obstacle for the field of emergency medicine [5]. There is data indicating that the use of telemedicine speeds up the process of prioritizing patients, and also has a good effect on both patient care and cost savings in healthcare systems [6].

Aim of Work

Nevertheless, there is a disparity in the preparedness of healthcare practitioners and consumers for the widespread use of telehealth solutions. It is necessary to make organized attempts to evaluate the abilities required from telehealth/telemedicine personnel and to modify their education and training. This narrative study aims to demonstrate the potential use of telemedicine in pre-hospital, inpatient, and post-emergency departments during the pandemic and in the future.

Utilization of Telehealth in Emergency Medicine

Traditionally, emergency departments have used telehealth for the purpose of conducting consultations from a distance. As the pandemic progressed, further applications of telehealth services have been recognized, particularly in emergency medical systems. One emerging field is the provision of telemedical assistance to paramedics and ambulance nurses, which plays a crucial role in delivering good prehospital emergency treatment. This is particularly significant in light of the change from conventional on-scene physician missions to missions assisted by telemedicine, which has been prompted by the pandemic. Telehealth solutions may be applied in several situations, including prehospital/pre-ED settings, ICUs and Emergency Departments, post-ED discharge, and education.

Telehealth services provided before a patient arrives at the emergency department or receives prehospital care

Telemedicine has the potential to improve the quality of prehospital emergency medical services by strengthening distant prehospital consultations, facilitating urgent patient transfer, and improving the monitoring of healthcare workers. The influx of patients into emergency rooms during the early stages of the pandemic constituted a significant problem. Patients exhibiting symptoms of COVID-19 or those being investigated for COVID-19 who visit emergency departments (EDs) pose an elevated risk of transmitting the virus to other patients. These experiences highlight the need of effective coordination between prehospital and emergency department services in order to effectively serve communities under unforeseen circumstances arising from the COVID-19 pandemic. Utilizing telehealth services may enhance the coordination of emergency systems, hence enhancing the overall efficiency of the healthcare system.

Several research in the fields of emergency medicine and telehealth have examined the use of telemedicine in prehospital and pre-emergency department (ED) settings [7-10]. An evident surge in the number of patients admitted with SARS-CoV-2 infections was seen in the first phase of the COVID-19 pandemic, suggesting challenges in accessing medical assistance at the onset of the pandemic, prior to the introduction of pre-hospital teleconsultations. Tele-triage lowered treatment waiting time and alleviated congestion caused by input variables [9,10].

A limited number of publications document the use of telemedicine for the remote assessment of patients prior to receiving treatment on-site. These evaluations are not only performed by emergency department personnel, but also by medical students, nurses, and doctors [11,12]. Telemedicine has the capacity to enhance the quality of prehospital emergency medical care by focusing on triage and collaborating with local and governmental emergency service providers [13]. Pre-hospital telehealth solutions have been created to provide expedited and more effective medical attention to COVID-19 patients, ensuring they are sent to the right level of care. Various advanced technologies such as mobile units, telemedicine, and wearable technology have been used to enhance and streamline this procedure [12].

The primary interventions in prehospital and pre-emergency department (ED) settings were assessing and examining patients before they reached the ED, as well as engaging in communication with patients prior to their arrival at the ED. Some nations have established specialized call centers for COVID-19, and have increased the number of call takers, including volunteers. This has enabled the regular emergency dispatchers to prioritize ordinary emergency calls. Collaboration with national emergency medical services organizations in some nations during the onset of the COVID-19 pandemic seems to have aided in the mitigation of disease transmission. This was accomplished by facilitating the avoidance of hospitals and community clinics by individuals suspected of having COVID-19, and by overseeing the management of minor instances of the virus at home, so freeing up hospitals to attend to more severe cases.

Paramedics in ambulances often engage in telemedicine conferences with doctors to expedite pre-hospital diagnosis and minimize treatment delays in cases of progressive respiratory failure in COVID-19 patients [16]. Telehealth facilitated improved decision-making for patients in the emergency department who were awaiting transfer to intensive care units or other hospitals [17]. Tele-triage, which refers to a videoconference between emergency medical services and emergency departments (EDs), has only been addressed in a single publication [18].

Emergency medicine physicians have used telemedicine to oversee nurse practitioners and general practitioners in long-term care homes or skilled nursing facilities. The primary objective of these interventions was to facilitate the proper categorization of patients who are at risk of contracting COVID-19 and to address the shortage of medical resources [19]. Telemedicine may aid in facilitating prehospital decision-making for diagnosis, life-saving procedures, and determining hospital destinations. Telemedicine is crucial for optimizing the use of healthcare resources by ensuring its efficient and effective usage.

Telehealth services are used in intensive care units (ICUs) and emergency departments to provide remote medical care

The application of telehealth within Emergency Departments encompasses several distinct areas of interest: (i) conservation of personal protective equipment (PPE); (ii) evaluation and remote monitoring of patients in the ED and ICU; (iii) collaboration between specialist services and ED physicians, including emergency consultations and interactions with patients; (iv) remote oversight of trainees by attending physicians; and (v) facilitating patient communication with "virtual visitors".

Telehealth programs and virtual communication reduce the risk of COVID-19 transmission to patients and emergency department (ED) workers by minimizing direct contact and, thus, reducing the need for personal protective equipment (PPE) [20]. In order to minimize the risk of COVID-19 transmission in emergency departments (EDs), several hospitals promptly implemented telehealth software originally designed for communicating with ED inpatients, to provide communication with all patients, independent of their admission or discharge status. Consultants and hospitalists were able to remotely contact patients using their devices and conduct assessments [21-24]. Additionally, while dealing with patients who speak a different language, the healthcare professional may easily request the presence of a qualified translator to facilitate better communication. Emergency departments have also used telemedicine as a means of screening acute care requirements to minimize the risk of staff and patient exposure to the virus and the utilization of personal protective equipment (PPE).

Despite its expensive price, remote patient monitoring (RPM) has gained significant attention since the onset of the coronavirus (COVID-19) pandemic [25,26]. Tele-ICU systems, equipped with audio and visual virtual solutions, have been created to meet the growing need for critical care services and the lack of intensivists. The use of tele-ICU has potential benefits and enhances the efficiency of delivering critical care during catastrophes or pandemics. Research has shown that risk prediction algorithms, smart alarm systems, and machine learning

techniques may enhance traditional coverage and perhaps enhance the quality of service [27]. In addition, RPM programs not only enable more thorough patient monitoring, but also provide insights into the clinical progression of COVID-19 that may have otherwise gone unrecognized [28]. Steinberg et al. noticed a decrease in emergency department (ED) visits, hospital admissions, and intensive care unit (ICU) use after implementing an RPM (Remote Patient Monitoring) program to monitor and prioritize patients who tested positive for SARS-CoV-2 [29].

Many medical facilities without competent Remote Patient Monitoring (RPM) systems used a mix of nurse phone calls, telemedicine visits, and other remote contact means to reduce the transmission of the infection. Even the most advanced virtual ICU care systems and remote patient monitoring technologies lack the necessary clinical decision support capabilities needed to appropriately treat critically sick patients. Therefore, specialized consultations are frequent and crucial in emergency medical practice. They impact the movement of patients. The growing number of patients with both COVID-19 and non-COVID-19 conditions has led to an increasing need for consultations from specialists in internal medicine, anesthesiology, radiography, trauma surgery, pulmonary, and critical care medicine. The scarcity of human resources and the need to minimize healthcare worker exposure has led to an increasing use of telemedicine consultations in several emergency departments. Therefore, during the COVID-19 pandemic, telemedicine was used by emergency department doctors for contactless patient assessments [30]. Virtual talks were conducted with patients discussing discharge planning or follow-up, as well as with healthcare practitioners regarding patient care plans. Tele-supervision of low-risk surgeries and disposal planning were also carried out remotely [31].

In order to reduce the danger of COVID-19 exposure for senior medical practitioners, some procedures have been implemented. One such strategy is the introduction of virtual supervision for residents and non-advanced practice providers [32]. This is done to mitigate the heightened risk of illness and death among these healthcare professionals.

Emergency doctors infected with COVID-19, who were in a condition to work remotely but not yet recovered enough to resume physical work, used telehealth services [33]. Virtual hospitalist programs have enhanced the capacity to address the difficulties posed by the COVID-19 crisis in the most affected areas and have also improved the methods for training and assisting novice hospitalists in delivering and expanding healthcare services. A virtual hospitalist program included an enhanced system to educate and assist newly trained or inexperienced hospitalists in delivering and expanding palliative care services [34]. The COVID-19 infections have prompted a multitude of safety concerns. Access to visitors/family members in ICUs was limited for both COVID-19 and non-COVID-19 patients in order to adhere to infection control protocols. Therefore, a new field of research has evolved to study virtual visits in hospital wards, given the severe regulations on physical contact. Critical care units would replace in-person visits with virtual visitation systems, such as video chat, in order to alleviate stress on patients and family members and enhance communication [35].

The findings indicate that the use of telehealth in emergency departments (EDs) and intensive care units (ICUs) resulted in many benefits. These include reduced exposure to the virus for both patients and staff, conservation of personal protective equipment (PPE), enhanced contact between patients and healthcare professionals, and improved communication between patients and their families [7, 18, 35].

Telehealth services for patients after being discharged from the emergency department

The study investigated the possibility of expanding emergency department (ED) care by using remote patient monitoring (RPM) in post-ED discharge telehealth. This RPM system would be used either at home or in long-term care institutions [36]. Remote patient monitoring involves the transfer of physiological data from the home to physicians and is often used to treat chronic illnesses like diabetes or hypertension [37]. Mobile health solutions that are appropriate for monitoring patients after they are discharged from the emergency department allow for regular follow-up of COVID-19 patients outside of the hospital. During the pandemic, this measure also mitigates the transmission of diseases and averts the overwhelming of healthcare systems. Several RPM programs have been lately mentioned in the literature. However, only a small number of these programs were specifically designed to cater to individuals with coronavirus illness [38,39]. Research conducted in New York equipped released patients with pulse oximeters, thermometers, and a symptom reporting application. The software's acquired data may aid in safeguarding certain people who may benefit from early intervention. Additionally, it can be used to track the progression of COVID-19, allowing for evidence-based diagnosis of the infection's course. Additionally, there are mobile-based respiratory rehabilitation programs available for those recovering from COVID-19. Research findings suggest the need of creating novel education and training initiatives that prioritize the multidisciplinary rehabilitation of individuals suffering from post-COVID-19 syndrome.

The pandemic has resulted in a decrease in the accessibility of inpatient rehabilitation services for non-COVID-19 patients, such as those recovering from strokes, leading to various repercussions. Telerehabilitation leads to substantial patient improvement while also addressing the issue of transportation, which is often identified as a significant barrier to accessing inpatient treatment [40,41]. Additional investigation is required to comprehend the effectiveness, expense, potential hazards, and consequences of using Remote Patient Monitoring (RPM) in both the immediate and subsequent stages of COVID-19, as well as for other medical conditions.

Distance learning

The COVID-19 pandemic has significantly impacted medical education by disrupting the traditional methods of educating students, future healthcare providers, medical staff, and their ongoing medical education. It has also affected postgraduate medical education and patient health education. [42,43]. Training healthcare staff has been a major logistical difficulty during the COVID-19 epidemic. A variety of teaching and learning methodologies were used, including

technology-enhanced learning (TEL), simulation-based learning, technology-based clinical education, mobile learning, and blended learning [44].

Healthcare workers were able to acquire the essential skills and carry out various procedures, such as donning and doffing personal protective equipment (PPE) or operating ventilator services, through video tutorials that provided interactive instructions. These tutorials, part of the COVID-19 and SIM Program, enabled step-by-step learning and practice (COVID-19 and SIM Program Trains for Proper and Efficient Use of PPE) [45]. Studies have shown that using in situ simulations to enhance the efficacy of personal protective equipment (PPE) in COVID-19 resulted in enhanced collaboration and individual team member performance.

A major obstacle posed by the COVID epidemic was the scarcity of medical personnel and the need for recently educated clinicians/health care students to join the field without sacrificing the fundamental learning objectives. Several trial projects were established to enable students to remotely participate in COVID-19 ward rounds using videoconferencing. The virtual bedside rounds were used to effectively include students in the process of learning about the diagnosis and treatment of COVID-19 [46,47].

Notwithstanding the pandemic, tele-OSCEs (Objective Structured Clinical Examinations) were conducted with meticulous preparation, consensus formation, and evaluation of technological readiness. Tele-exams were crucial in maintaining the influx of healthcare students into the industry throughout the epidemic [48].

Distance learning has several advantages and serves as a crucial instrument in medical education. Nevertheless, it is essential for medical students and medical personnel to cultivate clinical, practical, hands-on medical examination abilities, as well as effective communication skills [49]. Therefore, even the most exceptional tele-education cannot substitute conventional methods of obtaining practical skills.

However, the tools, methods, and learning resources linked to these distance learning strategies have the capacity to enhance learners' knowledge and performance. This is achieved through their access to online learning resources such as Massive Open Online Courses, virtual clinical cases, or blended courses. However, the long-term effects of these learning strategies on medical education are still uncertain.

Perspectives on the Use of Telehealth

Telemedicine has the potential to greatly assist in emergency medical practice and is being used more often in the field of emergency medicine, as shown by studies. Utilizing remote monitoring devices that can collect physiological data from a distance, together with the development of a risk score generated from machine learning, may aid in the assessment and prioritization of outpatients with COVID-19 and other medical conditions, as well as in emergency circumstances. This is especially appropriate for medical crises, since any delays in treatment have a negative impact on the patient's clinical results. Ambulance nurses/paramedics

often serve as the first point of contact for those seeking treatment during emergency situations. The first apps were created to transmit live video in order to ease communication between prehospital healthcare professionals and regional medical support (RMS) for ambulance service [50]. Utilizing live imaging enables the attainment of a mutual agreement on the patient's present medical care requirements and enhances the perception of heightened patient security inside the ambulance. Therefore, video consults are expected to become common in ICUs, Emergency departments, and prehospital settings in the future [51,52].

While many emergency departments (EDs) have some previous exposure to telehealth, the COVID-19 epidemic has expedited the use of telemedicine. Utilizing telecommunications technology reduced the chances of virus infection, lowered the number of visits to the emergency department, preserved personal protective equipment, and enhanced the efficient use of human resources. Following the conclusion of the epidemic, the use of RPMs in emergency departments (EDs) will see an increase in frequency.

Individual hospitals, EDs, or emergency management departments should evaluate various factors when implementing telehealth technologies, especially in light of potential future waves of COVID-19 or other disasters/pandemics. One of the options is providing medical telehelp in different languages, a challenging task that requires speedy implementation but is necessary in a global environment. Patient safety may be affected by technical and infrastructural challenges while deploying software solutions. Hardware integration is a persistent concern. Healthcare institutions should prioritize the acquisition of a reserve inventory of affordable, verified gadgets that can be adapted for other uses as required. Hospitals and emergency departments should create staffing strategies that include retired doctors, medical students, and technological support to support the implementation of new telehealth initiatives. It is crucial to evaluate the potential interaction between new technology and established protocols, as well as its impact on load balancing across numerous systems.

It is essential to prioritize the accessibility of all telehealth services, including not just those specifically addressing the consequences of SARS-CoV-2 infections. Telehealth has several benefits, particularly in the context of an infectious disease epidemic. Nevertheless, there is a disparity in the preparedness of healthcare practitioners and consumers for the widespread use of telemedicine. Therefore, it is evident that a necessary modification to medical education is imperative in all fields of specialization. In the aftermath of the COVID-19 pandemic, it is imperative for all healthcare practitioners to be equipped and ready to provide medical services remotely.

Certain educational advancements that were introduced during the COVID-19 pandemic will continue to be upheld after the epidemic has ended. Online learning enhances the understanding of both patients and healthcare practitioners, making it a significant addition to health education and ongoing medical education for staff. Undoubtedly, tele-education and virtual training components will not fully substitute hands-on, in-person clinical practice. However, they may complement conventional methods by providing more participant-focused and accessible information. Continued study is necessary to

evaluate the elements that might influence the adjustment of healthcare practitioners and patients, as well as the quality and clinical results linked to the use of telemedicine in various health sectors, including emergency medicine.

Constraints of Telehealth Utilization

The COVID-19 pandemic led to a significant change in the way healthcare is provided, as telemedicine became universally used. Certain scholars emphasize the pivotal importance of digital technologies in advancing public health, particularly in the context of the pandemic [53]. Nevertheless, telehealth is subject to significant constraints. Existing research identifies many obstacles such as lack of financial resources, limited time availability, inadequate infrastructure, insufficient equipment, lack of necessary skills, or a preference for in-person consultations. Older individuals with little education or finances, who have minimal or no access to computers or cellphones, are less inclined to use telehealth and communication portals that provide video capabilities. Furthermore, some ethical concerns have been brought up, including autonomy, beneficence, non-maleficence, justice, and professional-patient interactions [54].

An inherent challenge in remote consultations is the absence of a physical examination, which might potentially result in misdiagnosis or delayed diagnosis [55,56]. Furthermore, the absence of a direct physical examination diminishes the patient's inclination towards virtual consultations in subsequent instances [57]. Ramaswamy et al. conducted a retrospective observational cohort research to compare in-person visits and video visits before the COVID-19 pandemic with in-person visits and video visits during the COVID-19 pandemic, respectively. After conducting adjusted analyses, it was shown that both video visits and the COVID-19 period were linked to increased patient satisfaction. Remarkably, a correlation was shown between being younger and being female with worse patient satisfaction [58]. Studies conducted across several medical specialties consistently reported a significant degree of satisfaction with telehealth. However, it is worth noting that emergency care was not included in any of these research studies [59]. The absence of viewpoints from emergency department patients may stem from the challenges associated with assessing patient contentment in a scenario when one's life is at immediate risk. Due to the COVID-19 pandemic, health care practitioners have swiftly transitioned from conventional in-person sessions to conducting consultations by telephone or video under difficult situations.

Prior to the COVID-19 epidemic, the adoption and use of remote consultations were hindered by technical hurdles, professional skepticism, and many ethical, economical, administrative, and regulatory constraints. As a result, remote consultations only constituted a small part of patient consultations [58,60]. The overall evaluation of mHealth by patients and the medical personnel is indeterminate. Telemedicine was seen more convenient by some clinicians and patients, who highlighted advantages such as enhanced safety from COVID-19, elimination of travel requirements, and decreased waiting periods. This was particularly applicable to those who were at ease with expedited verifications, medical prescriptions, or administrative questions, or for those patients who had challenges in attending their scheduled appointments. Nevertheless, several

healthcare practitioners, particularly physicians, have voiced concern over the potential abuse of telemedicine, since it may prioritize money and time savings above the well-being of patients. No publications reflecting the viewpoint of doctors have been discovered. An essential advantage of a face-to-face appointment is the creation of a doctor-patient connection. The shift in patients' perceptions about health systems is noteworthy. The notion of the passive patient is antiquated and has been superseded by the idea of a patient who is more proactive and engaged in all procedures. Additional comprehensive statistics on the long-term effectiveness, safety, and financial implications of eHealth are required.

Healthcare practitioners lack the necessary knowledge and abilities to safely and effectively utilize digital technologies, according to reports from health experts. Telehealth practice standards have been issued by governments, mandating specific patient agreement for remote consultations to take place [61]. Medical ethical principles, which include professional norms for safeguarding patient privacy and confidentiality, must be obligatory, adhered to, and followed. Implementing appropriate training programs, using improved documentation templates, establishing clear communication rules, and adhering to information management laws may help mitigate the risks and challenges often associated with remote consultations.

The incorporation of telehealth into the curriculum for nursing and medical students differs across study programs. The proficiency of medical personnel in using telehealth technologies to provide treatment and handle particular conditions also varies [62]. Regulatory hurdles and poor reimbursement rates provide significant challenges to the broad use of telehealth. Insurers and politicians should evaluate suitable payment systems, reimbursement rates, and funding options for telehealth sessions, since telephone or video contacts possess comparable duration, substance, and quality to in-person consultations. It is important to note that cybersecurity and safeguarding personal health information are often neglected but are extremely important in telemedicine research. Security risks, confidentiality issues, and unauthorized access to medical data are significant concerns in this field [63].

There is still a need to explore and examine many unknown areas before completely implementing telehealth solutions in EDs. Various internal and external variables influence the sustainability of telemedicine in acute care settings, particularly in cases involving trauma, unanticipated emergencies, or pandemic management. The results of several research on pandemics provide data-driven insights into potential strategies for using telemedicine to enhance the resilience of healthcare systems in the face of future health emergencies.

Summary

The emergence of telemedicine represents a significant transformation in the field of emergency care during the COVID-19 epidemic. The primary objective of telemedicine during the COVID-19 pandemic has been to minimize in-person interactions in order to mitigate the spread of the virus and safeguard healthcare personnel. This approach aims to maintain excellent standards of treatment and

therapy for both COVID-19 patients and other individuals. Various endeavors have been made to use emerging technology in prehospital settings, intensive care units (ICUs), hospitals (such as remote patient monitoring), and emergency medical services after patients are discharged from the emergency department. These efforts aim to address the challenges faced by healthcare systems during the COVID-19 pandemic. Although telehealth has several benefits, it also has certain drawbacks. Nevertheless, among the COVID-19 epidemic, it became evident to patients, healthcare professionals, administrators, and legislators that the telemedicine approach is effective. This action is irreversible. Telehealth services will become a standard and essential component of regular and integrated service supply, medical training, and professional activities in the 21st century.

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