How Community Paramedicine Will Change in the Next Two Decades

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Introduction

Community paramedicine (CP) is an evolving model of community health care program in which paramedics are serving outside their custom emergency response. The transport role in which paramedics facilitate the community with more effective emergency response is clearing the way for access to emergency response to populations that are medically underserved. CP programs are developing in most countries in different ways. These programs are designed for specific community problems by taking advantage of development in emergency medical services (EMS) and other social welfare agencies (Okoh et al., 2023).

During the past few years, these programs have improved substantially to provide improved access to quality care services while keeping the costs low. Previously, CP and EMS were focused on providing emergency services for patients in these communities suffering from critical health issues and providing transport to hospitals' emergency departments. They also served to provide transport to people with injuries or accidents.

The nature of Community Paramedicine makes it more critical and expensive than other types of health care services. They must handle a wide group of scenarios and unpredictable issues that occur unexpectedly and need specialized treatment from professionals because these issues are sometimes life-threatening. Because of this critical nature, the cost associated with the field of CP is very high, and special training and equipment are needed to be used in critical situations. The cost concerns related to special health care have become a topic of discussion in the past few years. Increased efforts are made to ensure optimal emergency care for the patients. However, as the majority of CP services rely on fire and rescue departments and are funded by public agencies and not the local government, the CP services have to look for other benefactors for increased financial requirements, which are required to ensure the best provision of emergency services, increased primary care for underprivileged areas, and enhanced opportunities for emergency situations training and development.

Evolution of Emergency Medical Services

The origin of EMS and CP dates back to Ancient Roman history when old or wounded soldiers were evacuated from the war and provided medical aid on the battlefield. The term paramedicine evolved when health care services started being performed by non-physicians as assistants to doctors.

Community paramedicine was initially referred for health care services performed outside the hospital, although it was not restricted to emergency situations only. The modern concept of paramedicine began in the 1960s in California, with the alarming increase in the outside-the-hospital death rate. The project started in 1970 Los Angeles County and defined emergency paramedics' responsibilities and areas of practice (Kenneth, pp.5).

The emergency healthcare system is rapidly changing because of the efforts made to control healthcare costs, improvements in the quality of healthcare that occurred by revising the methods of information technology, and the implementation of the Affordable Care Act. The widening gap in the services of Community paramedicine and the supply of physicians in the hospital requires attention. The number of physicians who graduated from medical schools hasn't increased in recent years. Some nations have such low production of paramedics and emergency care specialists that a quarter of total paramedics will be out of service in the next five years (Shannon et al., 2022).

Development of Community Paramedicine

To close the gap between the demand for services and the available workforce, it is essential to revise training methods and techniques of the community para medicine field. More must be done to integrate the services and increase the number of available physicians. In paramedicine, expanding roles in an underprivileged community needs increased leverage given to paramedics to encourage them to do their best in healthcare (Shannon et al., 2023).

In recent years, the field of community paramedicine has developed through the introduction of programs that help paramedics set their goals outside their traditional emergency response. These programs are implemented all over the U.S., mainly in Colorado, Minnesota, Texas, and other countries like Canada, Australia, and the United Kingdom. These programs differ in the methods of financing and delivery of healthcare. However, these programs are more active in rural underdeveloped areas than in urban cities (Kenneth, pp.7).

Community Paramedics are used in expanded roles as they are already trained to work in stressful conditions, perform quick assessments of patients, and make decisions in life-threatening situations. They are trained to provide services 24/7 and are widely trusted in their work.

Advancements in Community Para Medicine

Health services in many countries are affected by population growth, an increase in the number of chronic diseases, and a shortage of available health workers. Finding ways to reduce the risk factors increases the need for an improved healthcare system. More emphasis is needed on rural areas and more people are needed in the paramedic services. Community paramedicine programs are flourishing in all countries, and their implementation is necessary as a successful program builds a structure that is used to create legislative changes and make a financially stable healthcare delivery

system.

The pilot programs started by different countries that are expected to change the field of Community paramedics are described below:

Canada's Community Paramedicine Program

Canada has revised its healthcare and emergency services system for the past few years. The recent community paramedicine program of Nova Scotia was developed for two isolated islands. This program provided nurses and physicians responsible for the two islands' community paramedic services 24/7. They were assigned to check the community's blood glucose level and wound care, practice antibiotics, perform routine blood tests, and organize sessions to take steps in emergencies. Paramedic services could be requested by community members or after proper physician inspection of the patient. If any situation goes out of hand in the practice of paramedics they are immediately referred to the lead physician and given the proper care. This program resulted in a 23% reduction in emergency visits from these islands (Kelly, pp. 255-260).

Another program implemented in Toronto focused on health promotion and wound prevention. They have also introduced an additional system of referring patients to additional healthcare services if they need additional care and the situation is critical. This program caused a 50% reduction in emergency situations and a 65% reduction in targeted patient visits to hospitals (Wray)

United Kingdom's Paramedic Practitioner Program

United Kingdom introduced Ambulance systems in the province of B.C. by placing ambulance service stations all over the province. Many ambulance service stations were placed in rural areas with limited facilities. Transporting patients to the hospitals was a major challenge in rural areas because hospitals are an hour's distance. Transferring patients to the hospitals was difficult as emergency response resources were already limited and if they were engaged in an emergency condition the remaining goes out of emergency response coverage, which caused a lot of deaths and complications in the past. This problem was overcome when the province was provided with ambulance service stations that had ready-to-go vehicles and skilled teams that responded to emergency situations in a matter of minutes and patients were given the best healthcare and were transported to hospitals if the situation was more critical (Lethbridge-Cejka)

Technological Advancements in Emergency Service and Para medicine

Technology is improving every aspect of life including emergency services and para-medicine. New

ways are introduced in emergency services that help paramedics perform their job effectively and respond to an emergency call as soon as possible. Research is done on changing the concept of emergency services and patient care in both rural and urban areas.

Below are some of the best advancements in the field of emergency services.

Fast Heart attack response using a smartphone:

Dr. Nicolas Lalor and his team did research by observing hospital routes, and they introduced WhatsApp to communicate with ambulances and doctors. They devised a way to bypass the emergency department by notifying the cath lab in advance, which notified the hospital of the patient's emergency situation and was immediately sent to the exact department.

Air Ambulance service:

It is the latest concept in the paramedicine in which an airplane or helicopter is used to evacuate people. People are stuck in high buildings in disaster and fire situations. And evacuating patients to hospitals in traffic situations.

Conclusion

These advancements in Community para medicine are expanding access and service to patients. They offer a potentially promising solution to recover health gaps in para medicine and patients. Like the above-mentioned advancements in emergency medical services, reach in this field must be implemented in all countries to ensure perfect patient service in an emergency. However, this field still needs development in rural and underdeveloped areas. The programs implemented in Nova Scotia and the B.C province of the UK are examples of countries' efforts in improving community para-medicine service, and they should be acquired in all countries as community service represents a successful nation and the care of its people (Currier et al., 2023).

References

Okoh, C. M., Moczygemba, L. R., Thurman, W., et al. (2023). An examination of the emerging field of community paramedicine: A national cross-sectional survey of community paramedics. *BMC Health Services Research, 23*, 516. https://link.springer.com/article/10.1186/s12913-023-09537-x

Shannon, B., Eaton, G., Lanos, C., et al. (2022). The development of community paramedicine: A restricted review. *Health & Social Care in the Community, 30*(6), e3547–e3561. https://pmc.ncbi.nlm.nih.gov/articles/PMC10087318/

Shannon, B., Baldry, S., O'Meara, P., et al. (2023). The definition of a community paramedic: An international consensus. *Paramedicine, 20*(1), 4–22. https://journals.sagepub.com/doi/10.1177/27536386221148993

Currier, J., Wallace, N., Bigler, K., O'Connor, M., Farris, P., & Shannon, J. (2023). Community paramedicine in Central Oregon: A promising model to reduce non-urgent emergency department utilization among medically complex Medicaid beneficiaries. *JACEP Open, 4*(3), e12988. https://onlinelibrary.wiley.com/doi/full/10.1002/emp2.12988