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## The Role of Saudi Red Crescent Authority in Emergency Response

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### Abstract:

The Saudi Red Crescent Authority (SRCA) plays a pivotal role in emergency response both domestically and internationally. Established in 1963, the organization is tasked with providing effective and efficient emergency medical services, disaster response, and humanitarian assistance. In Saudi Arabia, the SRCA coordinates disaster response efforts during crises such as floods, fires, and mass casualty incidents. It ensures rapid deployment of ambulances and emergency medical teams, prioritizing the health and safety of citizens and residents. Additionally, the SRCA collaborates with various governmental and non-governmental organizations to enhance its capabilities, promote public awareness about first aid, and conduct training programs for volunteers. On the international stage, the SRCA extends its mission by providing humanitarian aid in conflict zones and areas affected by natural disasters. The organization actively participates in international relief efforts, deploying teams to assist with medical services, search and rescue operations, and the distribution of essential supplies. By fostering partnerships with global humanitarian organizations like the International Federation of Red Cross and Red Crescent Societies, the SRCA strengthens its emergency response strategies and expands its volunteer network. This commitment to readiness and collaboration underscores the SRCA's dedication to mitigating human suffering and promoting resilience in the face of emergencies.

**Keywords:** Saudi Red Crescent Authority, emergency response, humanitarian assistance, disaster response, emergency medical services, international relief efforts, public awareness, training programs, crisis management, collaboration.

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### Introduction:

Emergency response is a critical component of disaster management, serving as a vital mechanism for mitigating the impacts of natural and man-made catastrophes on communities. Various organizations worldwide play significant roles in ensuring the safety and security of affected populations, and among them, the Saudi Red Crescent Authority (SRCA) stands out as a pivotal institution in Saudi Arabia. Established in 1963, the SRCA has evolved to become an emblematic leader in both national and international humanitarian efforts [1].

The SRCA operates under the principles of the International Federation of Red Cross and Red Crescent Societies (IFRC), promoting humanitarian assistance and compassion during emergencies. Its core mission revolves around providing essential services to those in need, including medical care, evacuation, shelter, food, and psychological support. As the nation confronts a range of emergencies, including natural disasters such as floods and earthquakes, as well as large-scale health crises, the SRCA has been instrumental in orchestrating effective responses that align with both local needs and international humanitarian standards [2].

Central to the efficacy of the SRCA is its comprehensive organizational structure, which includes various divisions focusing on distinct areas of emergency response. These divisions encompass medical services, disaster management, risk reduction, and community engagement, each equipped with the necessary resources and expertise to navigate the complexities of emergency situations. The SRCA's emergency teams are composed of trained volunteers and professionals who are essential to its operations, ensuring that services are delivered efficiently and effectively during crises. Additionally, the Authority integrates advanced technological tools, such as Geographic Information Systems (GIS) and emergency response management software, to enhance situational awareness and coordinates efforts on the ground [2].

Collaboration with other governmental, non-governmental, and international organizations further amplifies the impact of the SRCA's emergency response initiatives. By forming strategic alliances with bodies such as the Ministry of Health, the Ministry of Interior, and various UN agencies, the SRCA assists in developing cohesive response strategies that cater to the specific requirements of different emergencies. These partnerships not only streamline resource allocation but also facilitate knowledge sharing, enabling the SRCA to remain at the forefront of national and regional developments in emergency management [3].

Despite its many strengths, the SRCA faces a variety of challenges in executing its emergency response mandate. Increasing urbanization, climate change, and socio-political uncertainties can complicate the dynamics of disaster response, leading to resource strains and logistical complications. Moreover, the urgent need for continuous training and capacity-building within the organization is critical to ensure that personnel are equipped with up-to-date skills and knowledge to respond in an ever-evolving landscape of emergencies. Addressing these challenges necessitates thoughtful planning and robust investment in human and material resources [3].

Furthermore, the effectiveness of the SRCA's emergency response can be measured through various initiatives employing a community-centered approach. Participatory programs that engage local populations in disaster preparedness training and awareness campaigns foster resilience and empower communities to take charge of their own safety.

Such initiatives are vital in shaping a culture of preparedness, enabling populations to respond more effectively when emergencies occur [4].

### **Historical Overview of Emergency Response in Saudi Arabia:**

The Kingdom of Saudi Arabia, a country with a rich historical heritage and a unique geographical landscape, has faced various emergencies and disasters throughout its history. These emergencies, ranging from natural disasters such as floods and dust storms to man-made crises including terrorism and industrial accidents, have necessitated the development of an effective emergency response system [5].

Historically, the Arabian Peninsula was characterized by a lack of centralized authority and established governance structures, leading to a reliance on community-based systems for disaster response. In ancient times, local tribes and communities would impart traditional knowledge and skills to combat the challenges posed by their harsh environment. For example, during periods of extreme drought or sandstorms, communal efforts were made to provide food, shelter, and protection for vulnerable populations [6].

Moreover, as cities began to develop, particularly during the rapid urbanization that followed the discovery of oil in the mid-20th century, the need for organized emergency response mechanisms became increasingly apparent. During this period, informal networks among citizens began to formalize, leading to the establishment of rudimentary civil defense groups, which were often composed of volunteers working alongside local authorities in times of crisis [6].

The pivotal moment in the evolution of emergency response in Saudi Arabia came with the establishment of the Civil Defense Organization in 1952. Created under the Ministry of Interior, this organization was tasked with addressing various emergencies, including natural disasters, house fires, and other incidents that affected public safety. The Civil Defense Organization initially focused on firefighting and rescue operations and gradually expanded its role to include search and rescue, first aid, and disaster preparedness training [7].

During the 1970s and 1980s, civil defense efforts were further enhanced, largely in response to the increasing urbanization and industrialization of the Kingdom. The government recognized the necessity

of establishing a comprehensive emergency management framework that included effective planning, coordination, and response capabilities. Although the Civil Defense Organization played a crucial role in managing local emergencies, it largely operated independently, lacking a cohesive national strategy [8].

The significant influence of major disasters cannot be understated in shaping emergency response policy in Saudi Arabia. The most notable incident leading to reform in emergency management was the 1997 Al-Ahsa Theater fire, which resulted in 300 casualties. This tragedy exposed severe deficiencies in the country's emergency response capabilities, such as inadequate coordination among various governmental agencies and insufficient public awareness regarding fire safety [9].

In the wake of the Al-Ahsa tragedy, the Saudi government undertook initiatives to strengthen civil defense mechanisms. This included the establishment of updated safety regulations, comprehensive fire codes, and enhanced training for emergency personnel. Additionally, the establishment of the Disaster Management Center within the Civil Defense Organization in 2004 signaled a commitment to adopting a more systematic and integrated approach to disaster management [9].

As the global landscape evolved and new threats emerged, including terrorism and the effects of climate change, the Kingdom of Saudi Arabia pivoted towards a more coordinated national emergency management strategy. The most significant event that shaped this shift was the 9/11 attacks in 2001, which had a profound impact on global security policy, including in Saudi Arabia. In response to the increased threats of terrorism, the Saudi government implemented a series of reforms designed to secure public safety, including the establishment of the National Security Council and enhanced funding for emergency response initiatives [10].

By 2010, the Saudi government had promulgated the National Strategy for Disaster Management, which sought to foster a more integrated and holistic approach to emergency response. The strategy emphasized collaboration among various governmental agencies, non-governmental organizations (NGOs), and the private sector. The National Disaster Management Strategy encompassed not only responses to natural disasters

but also public health emergencies, infrastructural failures, and security threats [10].

In the last decade, the Saudi government has continued to modernize its emergency response strategies. The establishment of the Saudi Red Crescent Authority, which took on a more prominent role in emergency medical services and disaster response, exemplifies this modernization. Furthermore, as part of Vision 2030, Saudi Arabia aims to enhance national resilience against emergencies through substantial investments in technology and infrastructure [11].

Recent events such as the COVID-19 pandemic have underscored the importance of emergency preparedness and led to the rapid deployment of health resources and public safety measures. The health sector, in partnership with the Ministry of Interior and the Saudi Red Crescent, coordinated efforts to manage testing, vaccination campaigns, and emergency response protocols. This demonstrated the effectiveness of integrated emergency management frameworks, emphasizing collaboration and flexibility [11].

Today, the landscape of emergency response in Saudi Arabia is characterized by advanced technologies, improved public awareness, and intricate coordination among various entities. The Kingdom has adopted international best practices in emergency management, engaging in training exercises and simulations to prepare for potential crises [11].

### **Organizational Structure and Functionality of the SRCA:**

The Saudi Red Crescent Authority (SRCA), established under royal decree in 1963, has played a pivotal role in the domain of emergency medical services in the Kingdom of Saudi Arabia (KSA). As a humanitarian organization, the SRCA operates autonomously and is recognized as the principal entity for providing pre-hospital emergency medical services, disaster response, and medical transportation [12].

### **Organizational Structure**

The SRCA's organizational structure is reflective of its mission to provide efficient and effective emergency medical services. The authority is governed by a board of directors, headed by a president, who is usually appointed by royal decree. This board consists of various officials from different sectors, which ensures a broad perspective

in decision-making processes. The structure of the SRCA can be analyzed through various administrative levels, departments, and units that are responsible for the diverse functions the organization fulfills [12].

### 1. Board of Directors

The board of directors is the highest governing body within the SRCA. It oversees the organization's strategic direction, including policies related to emergency medical services, disaster relief, health education, and more. This body is instrumental in ensuring that the SRCA's activities align with national health and safety goals, international humanitarian standards, and the mission of the International Federation of Red Cross and Red Crescent Societies (IFRC) [13].

### 2. Executive Management

Reporting directly to the board of directors is the executive management team, which is tasked with the operational management of the SRCA. This team is typically led by a director-general responsible for implementing the board's directives and managing daily operations. Under the director-general, there are various departments managed by directors who specialize in areas such as finance, human resources, emergency response, training and development, and medical logistics [14].

### 3. Functional Departments

The functional departments within the SRCA include:

- **Emergency Medical Services (EMS) Division:** This division is the core of the SRCA, managing ambulance services, advanced life support (ALS), and basic life support (BLS) protocols. The EMS division coordinates responses to emergencies, ensuring that trained personnel are available 24/7 [15].
- **Disaster Management Division:** Focused on disaster preparedness, response, and recovery, this division conducts risk assessments and collaborates with local and international agencies to enhance community resilience to disasters and emergencies [15].

- **Health Services Division:** Responsible for public health initiatives, health education programs, and community health services, this division remains a critical component of the SRCA's mission. It implements preventive measures and provides health services, especially in response to outbreaks or health crises.
- **Training and Development Division:** This division focuses on the continuous education and training of staff and volunteers. It organizes programs to enhance skills in emergency medical care, rescue operations, first-aid training, disaster response, and psychosocial support.
- **Logistics and Support Division:** Managing the logistics of medical equipment, transportation, and resources, this division ensures that SRCA maintains high operational capabilities. It oversees the acquisition and maintenance of vehicles, medical supplies, and communication equipment [15].

### 4. Regional Branches

The SRCA operates through various regional branches across the Kingdom, enabling it to respond quickly to localized emergencies and engage in community-oriented health initiatives. These branches function independently but follow the guidelines established by the main headquarters. Each regional branch has its leadership team, which ensures coordination with the central administration while catering to the unique needs of their communities [16].

#### Functional Structure

The functional structure of the SRCA reflects its comprehensive approach to emergencies and community health initiatives. The organization integrates various functions to ensure a cohesive and effective response to emergencies, thereby fulfilling its humanitarian mission [16].

#### 1. Emergency Response and Assistance

Central to its operations, SRCA's emergency response is well-coordinated, involving a range of activities from dispatching ambulances to on-site patient care and transportation to medical facilities. The organization employs a standardized protocol to ensure all emergency calls are handled promptly and effectively, utilizing a sophisticated communication system to optimize response times [17].

## **2. Volunteer Engagement**

The role of volunteers is crucial within the SRCA. The organization recruits and trains volunteers who assist in various capacities, extending the reach of its services. Volunteers are a significant asset during large-scale emergencies, providing hands-on support in first aid, community awareness campaigns, and logistical roles [17].

## **3. Community Health Promotion**

Beyond emergency medical services, the SRCA is engaged in community health promotion activities. It conducts outreach programs aimed at raising awareness about health issues, preventive measures, and first aid education. This proactive engagement underlines the organization's commitment to improving public health standards and fostering a culture of preparedness within communities [17].

## **4. Collaboration and Partnerships**

SRCA's effectiveness is enhanced through partnerships with various national and international organizations, including governmental agencies, NGOs, and private sectors. These collaborations facilitate resource-sharing, expertise exchange, and coordinated disaster responses. Additionally, the SRCA actively participates in international humanitarian efforts, contributing to global knowledge and practice in disaster management and emergency services [18].

## **5. Information Management and Research**

The organization includes a functional arm dedicated to research and data management, analyzing trends in health emergencies and evaluating the effectiveness of its services. This function aids in strategic planning and facilitates evidence-based decision-making. [18]

### **Domestic Emergency Response Operations and Initiatives:**

In an increasingly unpredictable world, the importance of domestic emergency response operations and initiatives cannot be overstated.

Natural disasters, pandemics, urban crises, and terrorism require coordinated, effective responses to minimize harm to people and property. In the United States, a complex tapestry of organizations, policies, and initiatives work together to prepare for, respond to, and recover from emergencies [19].

Emergency response operations encompass a broad range of activities designed to protect lives, property, and the environment during and after disasters. These operations involve three main phases: preparedness, response, and recovery. The preparedness phase includes planning, training, and conducting drills to ensure readiness for various emergency scenarios. Response involves the immediate actions taken to secure safety, provide aid, and mitigate damage during an emergency. Finally, recovery focuses on restoring normalcy and rebuilding communities following a disaster [19].

The success of these operations relies on collaboration among federal, state, and local agencies, as well as non-profit organizations, private sectors, and volunteer groups. This multi-tiered approach often referred to as the "whole community" model, emphasizes the importance of every stakeholder in mitigating the impact of emergencies [20].

At the federal level, the Federal Emergency Management Agency (FEMA) plays a crucial role in managing disaster response efforts. Established in 1979 and incorporated into the Department of Homeland Security (DHS) in 2003, FEMA leads national efforts to prepare for, respond to, and recover from all hazards. The agency works closely with state emergency management agencies to coordinate resources and assistance [20].

State emergency management agencies are vital connectors within this structure. Each state boasts an emergency management agency responsible for forming disaster response plans tailored to specific risks that the region faces. These agencies work hand-in-hand with local governments, ensuring that response strategies are not only effective but also actionable and appropriate for specific communities [21].

Local emergency management offices also hold critical responsibility for managing responses to incidents within their jurisdictions. These offices are often the first to respond and play a pivotal role in collaboration with first responders, such as police, firefighters, and emergency medical personnel [21].

Additionally, non-governmental organizations (NGOs) like the American Red Cross provide essential services during emergencies, including shelter, meals, and mental health support. Community-based organizations are also integral, particularly in culturally and linguistically heterogeneous areas, as they are positioned to reach vulnerable populations [21].

The landscape of emergency response has evolved markedly over the years, driven by factors such as increased frequency of disasters, growing urbanization, and developments in technology. Significant legislative frameworks, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act (1988), provide a framework for federal aid in disaster situations. This act facilitates the declaration of disasters and allows for federal funds and assistance once a state or local jurisdiction has been overwhelmed [21].

The advent of technology has transformed how responses are coordinated and executed. Geographic Information Systems (GIS), for instance, enable responders to visualize disaster impacts and track resource allocations, while social media platforms serve as powerful tools for disseminating information rapidly during emergencies. Furthermore, increasing reliance on data analytics allows agencies to assess vulnerabilities preemptively, tailor responses to specific risks, and improve resource distribution [21].

In recognizing that communities best respond to emergencies when they are prepared and resilient, several initiatives have been developed to bolster community engagement in preparedness efforts. The Community Rating System (CRS), part of FEMA's National Flood Insurance Program, encourages communities to enhance floodplain management practices. Communities earn discounts on flood insurance premiums based on their proactive measures [22].

Another useful initiative is the "Ready" campaign, launched by FEMA, which promotes individual and community preparedness. The initiative provides resources and information to help people develop emergency plans, build disaster supply kits, and stay informed about local risks. Engaging citizens in preparedness education fosters a culture of resilience, ensuring that individuals know their roles in emergencies [22].

Moreover, FEMA's Local Mitigation Planning Program encourages communities to develop and

implement plans that identify risks and propose strategies to reduce vulnerabilities. Through these endeavors, the focus shifts from reactive measures to proactive risk management, fostering a sense of shared responsibility among residents [23].

Despite advances in domestic emergency response initiatives, several challenges remain. The fluctuating nature of disaster risks necessitates ongoing adaptation in strategies and resource allocations. Climate change exacerbates the frequency and severity of natural disasters, presenting new threats that emergency management systems must address. Moreover, lessons learned from past events are not always utilized effectively, which can result in repeated failures in response [23].

Equity in response is another critical issue. Vulnerable populations, such as those living in poverty or with limited access to resources, face disproportionately larger impacts during emergencies. Initiatives must continue to address these disparities, ensuring that marginalized communities are included in planning and response strategies [24].

### **International Humanitarian Aid and Disaster Relief Efforts:**

Humanitarian aid and disaster relief efforts play a vital role in addressing crises around the globe. Whether in the aftermath of natural disasters, armed conflicts, or complex emergencies, international humanitarian assistance aims to alleviate human suffering, provide essential services, and foster resilience among affected populations [25].

International humanitarian aid is guided predominantly by the principles of humanity, impartiality, neutrality, and independence. These principles not only ensure that aid reaches those most in need but also help to maintain the dignity of individuals who find themselves in vulnerable situations. The primary organizing bodies involved in humanitarian efforts include governments, intergovernmental organizations, non-governmental organizations (NGOs), the United Nations (UN), and international financial institutions. Each of these entities plays a unique role in the delivery of aid, whether through policy-making, funding, or on-the-ground operations [25].

A key framework for humanitarian action is the "Humanitarian Response Plan," which often emerges after a needs assessment in the aftermath of

a disaster. This plan details the scope, objectives, and methodologies of the impending humanitarian response, outlining how aid organizations will address immediate needs and long-term recovery efforts. Moreover, the coordination of aid efforts is essential to ensure that resources are used efficiently and effectively. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) often acts as a coordinator in these situations, bringing together various stakeholders to ensure a cohesive and comprehensive response [25].

Non-governmental organizations are pivotal in delivering humanitarian aid and disaster relief. Organizations such as Médecins Sans Frontières, the International Federation of Red Cross and Red Crescent Societies, and World Food Programme have established themselves as leaders in various aspects of humanitarian relief. Their agility, expertise, and ability to mobilize quickly in emergencies make them indispensable in crisis situations [26].

NGOs often work alongside local communities to provide aid that is culturally appropriate and contextually relevant. They play a significant role in rapid assessments, identifying communities' needs, and ensuring that the most vulnerable populations, including women, children, the elderly, and disabled individuals, are prioritized in aid distribution. Furthermore, they often advocate for marginalized voices within the humanitarian landscape, pushing for a more inclusive approach toward relief efforts [26].

International organizations like the United Nations are also crucial players. They bring together countries and foster alliances that enhance the scope of humanitarian response efforts. The UN offers resources, funding, and coordination that are necessary for disaster relief—the World Health Organization, for instance, provides critical support in health-related emergencies, while UNESCO focuses on education in times of crisis [27].

While the framework for humanitarian aid is well-defined, the complexities associated with its implementation present significant challenges. One major obstacle is the security situation on the ground. Humanitarian workers often face threats, including violence, kidnapping, and active conflict environments. Such conditions can restrict access to affected areas, jeopardize the safety of both aid workers and beneficiaries, and create an environment of fear and distrust [28].

Another challenge is the issue of funding. Humanitarian crises have become increasingly protracted, leading to funding shortages as donor fatigue sets in. Many international organizations rely on voluntary donations from governments and the public, and these sources can diminish over time, especially amidst multiple concurrent crises. A lack of sustained financial resources can inhibit long-term recovery efforts, leaving communities without essential services, infrastructure, and support beyond immediate relief [28].

Coordination among numerous actors can also prove to be difficult. With various NGOs, local organizations, and government agencies involved in aid efforts, discrepancies and overlaps in service delivery might occur. This can lead to inefficiencies, wastage of resources, and a lack of accountability, underscoring the necessity for an improved coordination structure within the humanitarian sector [29].

Despite these challenges, best practices have emerged in both preparedness and response phases of humanitarian aid. Firstly, effective preparedness can mitigate the impacts of disasters when they occur. This involves risk assessments, disaster risk reduction initiatives, and building local capacities to respond to emergencies. Communities that are well-prepared can react more swiftly and effectively, emphasizing the importance of resilience-building [29].

Secondly, involving affected communities in the planning and implementation of humanitarian efforts fosters ownership and ensures that responses are more attuned to local needs. Participatory approaches engage beneficiaries not just as recipients but as active contributors to their recovery, facilitating greater sustainability in the support provided [29].

Additionally, the use of technology in humanitarian efforts has transformed the landscape of disaster relief. Advancements in communication technologies, data analytics, and geographic information systems have improved the efficiency of aid delivery and addressed logistical challenges. For example, mobile apps can help coordinators track deliveries in real-time and gather feedback from recipients regarding their needs and experiences [30].

Finally, the integration of humanitarian assistance with development efforts (often referred to as the "humanitarian-development nexus") is gaining

traction. This approach promotes a holistic strategy that addresses immediate humanitarian needs while laying the groundwork for long-term recovery, economic development, and stability [30].

### **Collaboration with Governmental and Non-Governmental Entities:**

In an increasingly interconnected world, the ability to effectively respond to emergencies—be they natural disasters, public health crises, or man-made catastrophes—requires a collaborative approach. This cooperation often manifests itself between governmental agencies, non-governmental organizations (NGOs), and various community stakeholders. The cooperative synergy established through these partnerships can significantly enhance the efficiency, effectiveness, and reach of emergency response efforts. The complexity of modern emergencies demands a multifaceted response that integrates diverse expertise, resources, and community engagement, highlighting the crucial roles played by both governmental and non-governmental agencies in this equation [30].

Governmental agencies typically possess the authority, funding, and resources necessary to manage emergency situations on a broad scale. In the United States, for instance, agencies such as the Federal Emergency Management Agency (FEMA) and the Centers for Disease Control and Prevention (CDC) are charged with developing and implementing strategies for disaster preparedness and public health responses. These agencies are responsible for coordinating action among multiple stakeholders, providing operational guidelines, and deploying critical resources during emergencies [31].

On the other hand, NGOs often fill gaps that governmental agencies might not address effectively, particularly in terms of specialized expertise, localized knowledge, and community outreach. Organizations such as the Red Cross, Doctors Without Borders, and various local charities play an essential role in emergency responses by providing immediate aid, specialized services, and long-term recovery efforts. They often operate on the grassroots level, allowing for a more tailored approach that respects local contexts and cultural nuances [31].

### **The Significance of Collaboration**

The importance of collaboration between governmental and non-governmental entities cannot

be overstated. Government agencies often have the logistical capabilities and funding necessary for large-scale operations, while NGOs tend to have deeper connections within affected communities. This unique positioning allows NGOs to efficiently mobilize volunteers, resources, and local knowledge, making their contributions invaluable during emergencies [31].

1. **Resource Optimization:** Collaborating allows for sharing of resources such as personnel, financial support, and material goods. For example, during Hurricane Katrina in 2005, various NGOs worked closely with FEMA to maximize the delivery of assistance to affected areas, combining governmental logistics with nonprofit outreach to vulnerable populations [32].
2. **Holistic Preparedness:** Emergencies can strain resources and expose vulnerabilities within the community. By working together, agencies can create comprehensive preparedness plans that incorporate diverse perspectives. Governmental agencies can provide formal frameworks while NGOs can offer community insights, leading to more effective messaging and training in disaster preparedness.
3. **Data Sharing:** Successful emergency response depends on accurate and timely information exchange. Collaborative efforts permit entities to share critical data regarding the scope of the emergency, resource availability, and the needs of the affected population. This allows for a more rapid and directed response and prevents the duplication of effort often seen when agencies work in silos.
4. **Capacity Building:** Partnership between governmental and non-governmental entities can foster capacity-building initiatives that empower local communities. By training local volunteers, sharing best practices, and leveraging local leaders, both types of agencies can enhance community resilience and self-sufficiency.
5. **Psychosocial Support and Recovery:** Many emergencies not only disrupt services and infrastructure but also take a toll on the mental health of affected



individuals. NGOs are often equipped with social workers and mental health professionals who can provide crucial support and services in the aftermath of a disaster, complementing the physical recovery efforts led by government agencies [32].

### Challenges to Cooperation

Despite the obvious advantages of cooperation, challenges remain. Inter-agency communication can be hampered by bureaucratic red tape, differing organizational cultures, and resource competition. Government agencies may prioritize efficiency and adherence to protocol, while NGOs often prioritize compassion and rapid response—these different approaches can lead to tension and conflict [33].

1. **Misalignment of Goals:** Governmental entities may focus on regulatory compliance and large-scale logistic management, while NGOs might be driven by a mission to provide direct relief without the constraints of policy or funding requirements. Aligning these goals is crucial for effective cooperation.
2. **Information Misinformation:** The dissemination of misinformation during emergencies can lead to mistrust among agencies. Establishing transparent communication channels can help mitigate this issue by ensuring that all parties share accurate, consistent information.
3. **Capacity Limitations:** While NGOs often work in resource-limited environments, governmental agencies can sometimes struggle to match the speed and flexibility of non-profits. Each agency must recognize its limitations and strengths and work strategically with partners [33].

### Best Practices for Effective Collaboration

To overcome challenges and create a productive partnership, both governmental and non-governmental agencies can implement certain best practices:

1. **Establishing Clear Communication Protocols:** Effective collaboration begins with open lines of communication. Agencies should create formal communication strategies that specify

roles, responsibilities, and points of contact during an emergency [34].

2. **Joint Training Exercises:** Regular joint training helps to foster a spirit of teamwork and enhances understanding of each other's operational frameworks. Simulation exercises can improve coordination efforts and prepare all agencies to work together in real situations.
3. **Creating Multi-Agency Response Plans:** Developing inclusive emergency response plans that involve input from both governmental and non-governmental agencies can streamline efforts and ensure everyone is on the same page during crises.
4. **Emphasizing Community Engagement:** Ensuring that local voices are heard in the planning phase of emergency response efforts can enhance trust and effectiveness. Involving local communities helps identify specific needs and ensure messaging is culturally relevant.
5. **Post-Disaster Evaluation:** After an emergency has been resolved, conducting thorough evaluations of the collaborative response can identify strengths, weaknesses, and areas for improvement, which can inform future efforts [34].

### Training and Capacity Building for Volunteers and Personnel:

In an increasingly unpredictable world, the need for trained emergency workers and volunteers is more crucial than ever. Natural disasters, public health crises, and social upheaval require a rapid and effective response, one that often relies heavily on individuals who are willing to step forward and assist in emergency situations. Thus, the systems put in place for training and capacity building for these volunteers and emergency workers are of paramount importance [34].

The initial and foremost reason for instituting rigorous training programs for volunteers and emergency workers is to enhance effectiveness during crisis situations. Trained individuals are equipped with the skills necessary to make quick and informed decisions, operate emergency equipment, and provide first aid, all of which can save lives. For instance, a well-trained volunteer can provide immediate medical support to a victim, stabilize a situation, or manage evacuations

effectively, whereas an untrained individual might exacerbate the crisis [34].

Furthermore, effective training contributes to a sense of confidence among volunteers. When individuals are trained, they are more likely to engage actively and take responsibility during emergencies rather than retreating due to fear or uncertainty. This empowerment not only benefits the response efforts during crises but is also instrumental for the mental well-being of the volunteers themselves. Training reduces anxiety, builds competence, and fosters a sense of community and collaboration among volunteers and emergency workers [34].

### Components of Effective Training Programs

An effective training program for volunteers and emergency workers typically includes several key components:

1. **Foundational Knowledge:** This involves educating volunteers about emergency management systems, the nature of different types of disasters, and the associated risks. Understanding the theoretical framework provides volunteers with a solid base upon which to build practical skills [35].
2. **Practical Skills Training:** Whether it involves first aid certification, search and rescue training, or crisis communications, practical skills are essential. Hands-on training using simulation exercises can significantly enhance readiness by providing volunteers with realistic experiences.
3. **Soft Skills Development:** Beyond technical skills, effective communication, teamwork, and leadership qualities are vital in emergency response settings. Training should include exercises that help volunteers develop these interpersonal skills, as they will often have to collaborate with diverse teams under duress.
4. **Continuous Education and Drills:** Given the ever-evolving nature of crises, ongoing training is necessary. Regular drills, feedback sessions, and updates on new techniques and methodologies keep volunteers prepared and informed.

5. **Mentorship and Peer Support:** Connecting new volunteers with experienced emergency workers fosters a learning environment where knowledge exchange can occur. Mentorship programs can reinforce skills while also providing emotional support during stressful situations [35].

### Methodologies for Training Programs

Training methodologies can vary greatly, depending on the specific context, resources, and objectives of the training program. Some of the widely-used methodologies include:

- **Classroom-based Instruction:** Traditional lectures provide theoretical frameworks but should be supplemented with practical applications [36].
- **Online Learning:** Given the digital shift, many organizations are utilizing e-learning modules that can be accessed remotely. This approach allows volunteers to train at their own pace and convenience.
- **Simulation Drills:** Realistic simulations help volunteers practice learned skills in a safe environment, preparing them for real-life scenarios.
- **Community Engagement:** Involving the community in training through workshops and awareness events can help volunteers understand local risks better and foster stronger community ties.
- **Cross-Collaboration Training:** Training across different organizations and sectors can enhance teamwork. For instance, police, fire, and medical personnel can benefit from joint exercises that simulate multi-agency responses [36].

### Challenges in Training and Capacity Building

Despite the importance of training, there are considerable challenges associated with the training of volunteers and emergency workers:

1. **Resources and Funding:** Securing sufficient funding for comprehensive training programs can be challenging, particularly in resource-strapped organizations. Training materials, facilities, and qualified instructors require investment [37].

2. **Retention of Volunteers:** While attracting volunteers might seem easy, retaining them can be a struggle. Many volunteers may have to balance their commitments with jobs and family, leading to gaps in training and participation.
3. **Variance in Skill Levels:** Volunteers often arrive with diverse skill sets and experiences, so instructors must design programs that are accessible to all. This diversity can complicate training efforts if not managed properly.
4. **Sensitivity and Inclusivity:** In crisis situations, emergency workers often encounter vulnerable communities. Training programs must be sensitive to issues of diversity, equity, and inclusion to ensure they serve all segments of the population effectively.
5. **Technological Advances:** Staying updated with the latest technologies can be a significant challenge. Emerging tools and systems must be integrated into training programs without overwhelming trainees [37].

### Future Directions in Training and Capacity Building

The future of training for volunteers and emergency workers is likely to be shaped by various emerging trends:

1. **Integrated Approaches:** A movement towards integrated training that connects various stakeholders in emergency management—government, NGOs, and local communities—is gaining traction. Greater collaboration can lead to more cohesive and effective responses to crises [38].
2. **Emphasis on Mental Health:** There is an increasing recognition of the psychological toll that emergency work can take on volunteers. Training programs are beginning to incorporate components focusing on mental resilience and trauma care [38].
3. **Utilization of Technology:** The rise of virtual reality (VR) and augmented reality (AR) offers exciting new opportunities for immersive training experiences that can

prepare volunteers for the unpredictability of real-life scenarios [39].

4. **Data-Driven Approaches:** Leveraging data analytics can also lead to more targeted and efficient training programs. By analyzing past emergencies, organizations can better prepare volunteers for likely scenarios [39].
5. **Global Learning Networks:** An increase in global networking among emergency response organizations can facilitate sharing of best practices and learning opportunities. Organizations can pool resources and develop standardized training modules that are adaptable to local contexts [40].

### Challenges and Future Directions in Emergency Response:

Emergency response systems are critical to the well-being of communities worldwide. As natural disasters, health crises, and other emergencies become increasingly frequent and complex due to climate change, urbanization, and globalization, it is imperative to examine the challenges these systems face and the potential future directions for improvement [41].

### Challenges in Emergency Response

#### 1. Resource Allocation and Logistics

One of the most significant challenges in emergency response is the efficient allocation of resources. Whether in the context of natural disasters such as hurricanes and wildfires or public health crises like pandemics, the availability and distribution of resources—such as medical supplies, personnel, and shelter—are crucial to effective response efforts. The unpredictability of events often leads to either overstocking or understocking of necessary supplies, resulting in waste or severe shortages. Furthermore, logistical issues such as transportation routes, accessibility, and local infrastructure can impede the swift delivery of assistance to those in need [42].

#### 2. Communication Barriers

Effective communication is essential in emergency response, yet it often poses challenges that can compromise the efficacy of efforts. Vulnerable populations may lack access to reliable communication channels, leading to misinformation

or disinformation during an emergency. Additionally, the complexity of emergency response coordination between various agencies, including local, state, and federal authorities, can result in fragmented information dissemination. In crisis scenarios, where timely and clear communication can save lives, these barriers can lead to confusion and mismanagement [43].

### **3. Training and Preparedness**

The preparedness of emergency responders is paramount for efficient handling of crises. However, training programs often face issues such as lack of funding, insufficient frequency of drills, and the need to adapt to new technologies and evolving methodologies. Response teams may also be primarily focused on specific types of emergencies, leading to skill gaps when faced with novel situations. Furthermore, the psychological toll of emergencies on responders can affect their performance, underscoring the need for mental health support and resilience training [44].

### **4. Inter-agency Coordination**

Another major challenge is the coordination among various agencies involved in emergency response. Multiple entities, ranging from government bodies to non-profit organizations and volunteer groups, often work in silos, which can hinder effective collaboration and resource-sharing during emergencies. The lack of a unified command structure and overlapping jurisdictions can lead to duplicative efforts or essential services being overlooked altogether [45].

### **5. Equity and Inclusion**

The ongoing disparities in emergency response outcomes based on socioeconomic status, race, and geographic location present another significant challenge. Marginalized communities frequently face barriers in accessing critical resources during emergencies, whether due to systemic inequalities or historical neglect. This inequity not only leads to uneven impacts during emergencies but also undermines public trust in emergency management agencies [46].

### **Future Directions in Emergency Response**

Addressing the aforementioned challenges requires a multi-faceted approach that incorporates innovative technologies, enhanced training protocols, and a commitment to equity. Below are

several potential future directions for improving emergency response systems [47].

#### **1. Leveraging Technology**

The integration of technology into emergency response systems can significantly improve decision-making and resource allocation. Geographic Information Systems (GIS) can aid in mapping affected areas, determining resource needs, and identifying vulnerable populations. Additionally, mobile applications and platforms can facilitate real-time communication between responders and citizens, allowing for more streamlined information dissemination. Drones and artificial intelligence could also play a pivotal role in search and rescue operations, damage assessments, and logistical planning [48].

#### **2. Enhancing Training Programs**

To ensure that emergency responders are adequately prepared for a range of scenarios, continuous training and professional development must be prioritized. Simulation exercises that mimic real-life emergencies can improve readiness while also allowing responders to practice interdisciplinary coordination. Equally important is the inclusion of mental health support in training programs, which can enhance resilience and coping strategies for personnel subjected to high-stress situations [49].

#### **3. Fostering Inter-agency Collaboration**

Establishing formal mechanisms for inter-agency collaboration can enhance coordination during emergencies. Regular joint training exercises, shared communication platforms, and clear command structures can facilitate collaborative efforts among agencies. Creating multi-disciplinary response teams with representatives from various sectors can also ensure that comprehensive expertise is brought to bear on emergencies [50].

#### **4. Promoting Equity and Inclusion**

To build trust and ensure effective response efforts, emergency management agencies must prioritize equity and community engagement. Involving local leaders and community organizations in preparedness planning and response efforts can help ensure that the unique needs of marginalized populations are addressed. Additionally, targeted outreach efforts can improve access to resources for underserved communities [51].

#### **5. Focusing on Climate Resilience**

As climate change continues to intensify the frequency and severity of emergencies, it is essential for emergency response systems to adopt a proactive stance that emphasizes climate resilience. This includes investing in infrastructure improvements, promoting sustainable practices, and encouraging adaptive community designs that reduce vulnerability to disasters [52].

### Conclusion:

In conclusion, the Saudi Red Crescent Authority (SRCA) plays a vital role in enhancing emergency response capabilities both within the Kingdom of Saudi Arabia and on the international stage. By providing comprehensive medical services, initiating disaster preparedness programs, and facilitating humanitarian aid, the SRCA not only addresses immediate crises but also contributes to long-term community resilience. Its collaborative efforts with local, national, and international organizations further enhance its effectiveness and reach during emergencies.

Despite the significant achievements and advancements made by the SRCA, challenges remain, including the need for continuous training, resource allocation, and the integration of new technologies. Moving forward, it is essential for the SRCA to adapt to evolving emergency scenarios and to embrace innovative strategies to optimize its response efforts. By reinforcing its commitment to humanitarian principles and fostering partnerships, the SRCA can continue to be a beacon of hope and support for individuals affected by disasters, ultimately striving toward a safer and more prepared society.

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