



**Risk communication and community engagement in  
emergency preparedness and response during COVID-19  
pandemic in Palestine**

التواصل بشأن المخاطر والمشاركة المجتمعية في التأهب والاستجابة  
للحالة الطارئة خلال جائحة كورونا في فلسطين

By: Khaled Mohammed Omar Shiha

Supervisor:

Dr. Weeam Hammoudeh

Birzeit University

Palestine

2023



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Khaled Mohammed Omar Shiha

Date of the thesis defense: 07-09-2023

Supervisor:

Dr. Weeam Hammoudeh

Thesis defense committee member:

Prof. Motasem Hamdan

Dr. Rana Alkhatib

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Public Health at Birzeit University, Palestine.



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Dr. Rana Khatib

Dr. Motasem Hamdan

# ABBREVIATIONS

**RCCE:** RISK COMMUNICATION AND COMMUNITY ENGAGEMENT

**CE:** COMMUNITY ENGAGEMENT

**NGO:** NON GOVERNMENTAL ORGANIZATION

**NCDs:** NON COMMUNICABLE DISEASES

**MOH:** MINISTRY OF HEALTH

**MOSD:** MINISTRY OF SOCIAL DEVELOPMENT

**MOE:** MINISTRY OF EDUCATION

**CHWs:** COMMUNITY HEALTH WORKERS

**PHEP:** PUBLIC HEALTH EMERGENCY PREPAREDNESS

## **Preface**

As a pediatrician I could benefit greatly from pursuing a Master's degree in Public Health. It provides a thorough understanding of public health principles, epidemiology, healthcare management, policy formation, and other topics, as well as a well-rounded skill set that supplements me as a medical expertise.

The program's emphasis on interdisciplinary collaboration, leadership, and advocacy coincides with pediatricians' commitment to improving children's and families' well-being.

This study is centered on the risk communication and community engagement and how it was critical in dealing with public health catastrophes like the COVID-19 pandemic in Palestine. RCCE act as key links between authorities, healthcare institutions, and the general public, allowing for the correct and timely transmission of critical information, developing understanding, and encouraging adherence to preventive actions.

Trust is built through open communication and meaningful engagement, allowing for the smooth implementation of public health interventions and ensuring that the unique needs of diverse populations are met, ultimately improving the overall effectiveness of response efforts and contributing to the protection of public health and well-being.

## **Acknowledgment**

This Master's thesis is dedicated to my loving family, whose continuous support and encouragement have served as the cornerstone of my academic career. Your faith in me has been a constant source of inspiration, and I am grateful for the numerous sacrifices you have made to see me flourish.

I'd like to offer my deepest appreciation to my supervisor Dr. Weaam Hamoudeh for her tremendous guidance, mentorship, and belief in my abilities. Your insightful suggestions and encouragement have formed this thesis and pushed me to push my study to new heights.

I would like to express my heartfelt gratitude to my thesis defense committee Prof. Motasem Hamdan and Dr Rana Alkhatib for their invaluable guidance. Your expertise, insights, and constructive feedback have been instrumental in shaping this research.

Finally, I'd like to express my heartfelt gratitude to the special persons, whose presence in my life has brought joy, motivation, and a sense of purpose to every endeavor. Your unshakable confidence in my abilities has served as a beacon of light throughout this academic journey.

This accomplishment belongs equally to all of you. Thank you for being my rock of hope and inspiration.

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## Abstract

### Background

Risk communication is an interactive process in which individuals, communities, and institutions exchange information about and beyond risk. It is not restricted to giving risk information in the form of messages or opinions expressing concerns and responses, but it also provides actionable advice on how to prepare for, protect against, respond to, and recover from the risk. Community Engagement (CE) is defined as "the process of establishing relationships that allow a community and organizations to collaborate in terms of decision-making, planning, design, governance, and service delivery to address health-related issues and promote well-being in order to achieve positive health impact and outcomes.

### Objectives

The study aims firstly to explore the fundamental concepts that the Palestinian Authority adopted for risk communication and community engagement during COVID-19 pandemic. Second, the extent to which community engagement has been integrated into the COVID-19 pandemic's comprehensive preparedness and response programs. Finally, the study aims to explore in this context, the nature and dynamics of health communication between responsible authorities and the community.

### Methodology

This study employs qualitative research methodology, notably in-depth interviews. Qualitative method was chosen for its capacity to satisfy research objectives while also providing flexibility and depth in investigating different themes. Purposive sampling was

used to choose participants, allowing for the investigation of various points of view. A total of 23 interviews were conducted between March and October 2022, with an average duration of 40 minutes for each interview.

The ethics committee at Birzeit University's Institute of Community and Public Health approved the study's ethical considerations throughout. The analysis of the interviews was conducted using an inductive technique, which allowed themes to develop through repeated evaluation of the data for patterns and variances relevant to the study questions and themes.

## Results

The findings revealed several important ideas and concepts, including the government's perspective on RCCE during the COVID-19 pandemic, the planning process at the government, governorate, and community levels in Palestine, what actually happened regarding community engagement during the pandemic in Palestine, community engagement development during the pandemic and community priorities during the pandemic.

The data indicate a split in opinion about community involvement during the COVID-19 epidemic in Palestine. Despite efforts to incorporate the community through local and national committees, the government's vision for community participation and how the people would be involved was difficult to describe.

However, there were constraints on the community's ability to organize and express issues, maybe as a result of a top-down strategy. Although the government had difficulty

reaching all areas and meeting their needs. Transparency in information transmission was highlighted, leading to a drop in confidence.

These findings highlight the importance of a transparent and all-inclusive community involvement strategy during public health emergencies. Building trust and sustaining an effective pandemic response necessitates strengthening communication channels, actively including the community in decision-making processes, and catering to the unique needs of disadvantaged and vulnerable populations.

### Conclusion

Confusion arose as a result of unclear guidelines and implementation in the Palestinian pandemic response, promoting disinformation and distrust in the healthcare system. Inconsistent engagement of NGOs and international organizations hampered collaboration, while the extent of capacity-building impact remained unknown. The needs of vulnerable groups have been recognized, but the effectiveness remains unknown. Despite differing government positions, effective community involvement and clear communication emerged as critical. Planning concerns, changing judgments, and conflicting information eroded public trust. A coordinated stakeholder participation and a specified national framework for simplified risk communication and coordination among sectors and organizations are required for successful e

## الملخص

### المقدمة

التواصل من أجل المخاطر هو عملية تفاعلية يقوم فيها الأفراد والمجتمعات والمؤسسات بتبادل المعلومات حول المخاطر وخارجها. لا يقتصر التواصل على إعطاء معلومات عن المخاطر في شكل رسائل أو آراء تعبر عن مخاوف وردود، ولكنه يوفر أيضا نصائح قابلة للتنفيذ حول كيفية الاستعداد للمخاطر والحماية منها والاستجابة لها والتعافي منها. وتعرف المشاركة المجتمعية بأنها " عملية إقامة علاقات تسمح للمجتمع والمنظمات بالتعاون من حيث صنع القرار والتخطيط والتصميم والحوكمة وتقديم الخدمات لمعالجة القضايا المتعلقة بالصحة وتعزيز الرفاهية من أجل تحقيق تأثير ونتائج صحية إيجابية.

### أهداف الدراسة

تهدف الدراسة أولا إلى استكشاف الطرق والأساليب الأساسية التي اعتمدتها السلطة الفلسطينية للإبلاغ عن المخاطر وإشراك المجتمع خلال جائحة كورونا. ثانيا، مدى دمج المشاركة المجتمعية في برامج التأهب والاستجابة الشاملة للجائحة 19. وأخيرا ، استكشاف طبيعة وديناميات التواصل الصحي بين السلطات المسؤولة والمجتمع خلال جائحة كورونا .

### منهجية الدراسة

تستخدم هذه الدراسة منهجية البحث النوعي، ولا سيما المقابلات المتعمقة. وقد تم اختيار البحث النوعي لقدرته على تلبية أهداف البحث مع توفير المرونة والعمق في التحقيق في الموضوعات المختلفة. وتم استخدام أخذ العينات الهادفة لاختيار المشاركين، مما يسمح بالتحقيق في وجهات النظر المختلفة. بين مارس وأكتوبر 2022، أجريت 23 مقابلة يتراوح متوسط مدتها 40 دقيقة .

وافقت لجنة الأخلاقيات في معهد الصحة العامة بجامعة بيرزيت على الاعتبارات الأخلاقية للدراسة طوال الوقت. تم إجراء تحليل المقابلات باستخدام تقنية استقرائية ، مما سمح بتطوير الموضوعات من خلال التقييم المتكرر للبيانات، للأنماط والفروق ذات الصلة بأسئلة الدراسة وأهدافها.

### نتائج الدراسة

كشفت النتائج عن العديد من الأفكار والمفاهيم المهمة، بما في ذلك وجهة نظر الحكومة حول التعاون المجتمعي خلال جائحة كوفيد-19، وعملية التخطيط على مستوى الحكومة والمحافظات والمجتمع في

فلسطين، وما حدث بالفعل فيما يتعلق بالمشاركة المجتمعية خلال الجائحة في فلسطين، وتنمية المشاركة المجتمعية، وأولويات المجتمع خلال الجائحة.

تشير النتائج إلى انقسام في الرأي حول مشاركة المجتمع خلال وباء كورونا في فلسطين. وعلى الرغم من الجهود المبذولة لدمج المجتمع المحلي من خلال اللجان المحلية والوطنية، كان من الصعب وصف رؤية الحكومة لمشاركة المجتمع المحلي وكيفية إشراك الناس. كانت هناك قيود على قدرة المجتمع على التنظيم والتعبير عن القضايا، ربما نتيجة لاستراتيجية التواصل من أعلى إلى أسفل، مما أدى إلى مواجهة الحكومة العديد من المصاعب في الوصول إلى جميع الفئات وتلبية احتياجاتهم.

كما وتم تسليط الضوء في هذه الدراسة على الشفافية في نقل المعلومات وبناء الثقة. تسلط نتائج هذه الدراسة الضوء على أهمية وجود استراتيجية مشاركة مجتمعية شفافة وشاملة خلال حالات الطوارئ الصحية العامة، كما يتطلب بناء الثقة والحفاظ على الاستجابة الفعالة للآزمات الصحية تعزيز قنوات الاتصال، وإشراك المجتمع بنشاط في عمليات صنع القرار، وتلبية الاحتياجات الفردية للفئات المهمشة والضعفاء.

### الخلاصة

كان هناك أرتباك نتيجة عدم وضوح الإرشادات والتنفيذ في الاستجابة للجائحة الفلسطينية، مما أدى إلى تعزيز المعلومات المضللة وانعدام الثقة في نظام الرعاية الصحية. وأدى عدم تنسيق مشاركة المنظمات غير الحكومية والمنظمات الدولية إلى إعاقة التعاون، في حين ظل مدى تأثير بناء القدرات غير معروف ولم تتم تلبية احتياجات الفئات الضعيفة.

برزت المشاركة المجتمعية الفعالة والتواصل الواضح على أنهما أمران حاسمان وأدى عدم وضوح التخطيط وتغيير القرارات والأجراءات إلى تآكل ثقة الجمهور. ومن أجل المشاركة الناجحة مشاركة منسقة من أصحاب المصلحة وإطار وطني محدد لتبسيط الإبلاغ عن المخاطر والتنسيق فيما بين القطاعات والمنظمات..

## Problem statement

On March 11, 2020, World Health Organization (WHO) declared COVID-19 outbreak as pandemic, it is the first pandemic in this century (1). Globally, since the beginning of this pandemic up to its end declared by the WHO on the fourth of May 2023, approximately 695 million of confirmed cases of coronavirus disease 2019 (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) have been reported (2).

This pandemic has posed challenges on governments around the world because of the necessity to prioritize the containment of this outbreak, and the ensuing socio-economic emergency (3). This raised the questions related to health system resilience, and the preparedness of health systems to manage and learn from shocks(4).

Emergency preparedness and response are considered cornerstones “to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade” as described in the International Health Regulations (2005) mentioned clearly in the Sustainable Development Goals (SDG Indicator 3.d.1: International Health Regulations (IHR) capacity and health emergency preparedness).(5).

Community engagement a fundamental part in controlling the disease and the campaigns targeting for containment and elimination of disease (6). This necessitates a dramatic change in the style of communication from one-way to two-way communication to ensure

community participation and engagement (7,8) as one of the crucial pillars of the emergency response and preparedness plan to this pandemic (9).

In early 2020 and before declaring COVID-19 a pandemic, the WHO raised concerns about the preparedness of the majority of countries in facing infectious threats and pandemics (10). In Palestine, the first covid-19 cases were diagnosed on March 5, 2020 which led to a quick declaration of a state of emergency by President Mahmoud Abbas and lockdown to limit the spread of coronavirus (11). The fragmentation of the health sector and the dependency on donor aid in the health sector, limited sovereignty, public distrust, and the challenges posed from the Israeli occupation of the Palestinian territory (13). An in-depth investigation the role of community engagement in COVID-19 pandemic and the approach adopted for communication as part of health sector preparedness and responsiveness is needed to understand how the situation has been managed and identify shortcomings and gaps regarding community involvement and adherence during the crisis.

## Objectives

This study seeks to answer the following questions in this regard:

- What are the standards and tools of risk communication and community engagement adopted by the Palestinian authority during COVID-19 pandemic in Palestine?
- To what extent did community engagement take place in the Palestinian preparedness and response during COVID-19 pandemic?
- What was type of communication approach was used by the Palestinian government to communicate with the community?



## Literature review

### Community engagement

Community participation is one of the fundamental principles of primary health care, as it is connected with some advantages such as the improvement of health outcomes, better accessibility, equity, quality and responsiveness (12). The role of communities is recognized as a key element that can be enrolled throughout different phases (anticipation, response and recovery) of a public health crisis (13–15). Community does not exclusively refer to at-risk groups, which maybe geographically or physically affected by certain public health emergencies, but also as those partners who are in certain way linked to the affected community and who could be able to mitigate the emergency (16). Community-based partners are groups, organizations, networks or platforms that could have influence on preparedness and response (17).

Community participation levels depend on the context, objectives drawn by the authorities and other considerations (18). Building trust is key in this operation; it is important in the preparedness phase of the emergency and can lead to strong relationships during emergency, as community stakeholders can provide guidance and support (19). Early mapping of community stakeholders includes the vulnerable and hard-to-reach at-risk groups. This will enable each stakeholder to work in their environment and use their own networks (20). Therefore, considering the community as a resource and partner for optimizing preparedness and planning will lead to fruitful collaboration. The informed at-risk community will increase the understanding of the challenges and adopt effective

preventive measures (18). Furthermore, by defining the community as a partner, communities will have the perception of shaping their own identities and roles in the emergency preparedness and response process. This will strengthen the feeling of the community as an essential partner and has a substantial role in preparedness and response actions during outbreaks (21).

Communities should be informed about every aspect of the public emergency in question as well as the preparedness and response plan designed by the competent authorities. Different means of communication and different messages should be used to target different communities and groups (22). There are four essential determinants for conveying health information efficiently to general public and characterizing messages effectively. These characteristics of effective messaging include the following: the messages conveyed should denote truth and honesty; be characterized by clarity and specified details; should reflect decision-making abilities clearly; and take into consideration the feelings of the community members (22-27).

**First**, it is crucial that what is known and unknown is stated freely and honestly and to adhere to the truth as much as possible. Within the context of a changing situation, we must also understand the temporality of 'reality'. Given new data relevant to the disease and its treatment, the information we have today will be revised and may change. The accuracy of the sources of this knowledge also need to be checked (23).

**Second**, there should be clear and specific details. Even if we understand that we do not know everything, it is important not to get lost in vagueness. Research on diseases have

shown that disease confusion, the inability of a patient to assess the significance of disease-related events, may be the product of ambiguity (conflicting, incomplete, or insufficient information), or difficulty (difficult to uncomplicated) (24,25).

The **third** characteristic is to reflect the ability to make decisions to build and sustain trust (26). In a situation characterized by ambiguity, trust (which is important to signal the capacity to feel secure in the situation) and integrity, it is necessary to display the ability to make decisions (26). From the point of view of health communication, healthcare professionals, scientists and politicians should be acknowledged as part of leadership process (26).

**Fourth**, there are feelings that should be considered. Anxiety and depression have been found to be correlated with instability in illness (27,28), all of which may contribute to fear and passivity, rather than the group working together to modify actions in ways that decrease the risk of COVID-19. Therefore, details should be empathic, expressing empathy and understanding the effects of the situation.

To strengthen communication with the community, authoritative information should be given through an official spokesperson, who must be trusted by the general public and all partners (29). Community-based partners should be included in all trainings regarding the development of the preparedness and response plans, once identified the skills and knowledge lacking (21). Moreover, community partners should have information on the ongoing provision of all the material needs such as protective equipment and supporting

information, by respecting the response principles: “What is needed? When is it needed? Where is it needed? How is it needed? Why is it needed? Who is needed?” (29).

### Information and communication

Communication in Public Health Emergency Preparedness (PHEP) and response is extremely important. In PHEP and response, communication has the purpose of building awareness across the health sector, promoting a robust and consistent approach by ensuring that all the stakeholders have the same information (30). Moreover, it has the scope of supporting best practice and implementation of all the measures by disseminating regular and timely guidelines. Lastly, it must have the ability to be two-way communication in order to obtain feedback on the effectiveness of the measures implemented (31).

PHEP plan must have different communication plans for each situation. Each plan has to outline the responsibilities and roles of each element of the team and to identify different resources and communication means to be used (32). Trust and accuracy are the most important components that should be kept into consideration while dealing with stakeholders, the public or media. A comprehensive communication plan, implemented in every stage of the public health emergency, is a key component of successful preparedness and response (33).

The communication strategy must define what messages and information may or may not be released. In addition, those who have been in charge, who have the authority to decide and who may speak on behalf of the emergency management team should be well defined

(34). Effective communication with the public, about specific health emergency, represents the key to successful crisis and emergency management. It helps in mitigating the risks, supporting the implementation of protective measures, and contributes to minimizing the negative impacts on social and mental health (35).

Characterizing the population, by behavioral factors and socio-demographic statuses, could be an effective approach to improve the ability of authorities to send targeted messages during the emergency (36). Sharing all the information between all the stakeholders who are managing the response will increase the coordination of resources, inform decision-makers, and facilitate the application of response measures. Public perception of the risk and the way they behave to face the risk will be shaped by efficient communication (37).

Communication with the public must have the purpose of enhancing their understanding of the emergency, engage them actively in emergency measures and guide the public management of the risk (37). These purposes are obtained by building public trust, passing messages of what we know, what we do not know, what we are doing and what the public can do. Public confidence can be built by keeping people well informed about the whole situation (38).

#### [Working with people vulnerable to Covid-19](#)

Vulnerable population groups are defined based on the disproportionate exposure to a specific risk (39). However, this definition is dynamic and can change according to emerging data. This means that depending on the policy response, an individual not

regarded as vulnerable at the beginning of a pandemic may be considered vulnerable later on (39).

The social determinants of health (SDH) are considered as important factors affecting people's wellbeing and inequalities which extend beyond the health field (40). The synergistic approach involving different stakeholders, mainly the social sector in the community, requires fundamentally covering all the related-SDH and more focus on pro-vulnerable and pro-poor to achieve the effective communication (40). Identifying those vulnerable groups is challenging because the likelihood of losing income or even lacking the social support accessibility suddenly can pose a difficulty in estimating such burden and so further difficulty in addressing these groups (39). The mechanisms of routine surveillance lack the ability to address such vulnerabilities which can be detected by following up the evidence of lived experiences (41).

During the COVID-19 pandemic, data regarding groups of population which recognized as vulnerable groups were limited, insufficient, or unavailable (41). Therefore, early identification and prioritizing marginalized and vulnerable groups are considered crucial and pre-requisite for further targeted actions within the COVID-19 response (41). For instance, non-health sectors should avoid economic and social disruption that could undermine the provision of the essential services and commodities and to keep under observation certain vulnerable groups in society that are more likely to suffer during emergency conditions (24).

Vulnerability can be examined in two broad categories (3,39). The first group is the medically vulnerable group, which includes people who are more likely to experience severe COVID-19 disease. Second, socio-economic related vulnerability, which includes those who are at increased risk for exposure, unable to get messages or follow the recommendations and preventive measures, or encountering inaccessibility of the demanded services which could be attributed to social, economic or even physical conditions (3).

### Operationalization of community engagement as a fundamental block during pandemic preparedness

It is highly recommended to consider standardized operational processes, which are also flexible at the same time, to guide community engagement in order facilitate its monitoring, and enable adjustment based on the context that emerged the epidemic/pandemic response (8). The lessons learned from the 2014-2016 Ebola outbreak in Sierra Leon showed that scaling up community engagement during such a crisis requires explicit guidelines and protocols aiming for a sustainable relationship between communities, first-line workers and preparedness and response authorities (8). Effective RCCE should be characterized by being community-led, data-driven, reinforcing capacity and local solutions, and being collaborative (3).

Responses which are community-led can be facilitated by improving risk communication and community engagement approaches. The drive here comes from the belief that each community should assess demands and take part in the process of analysis, planning,

designing, implementing, tracking progress and evaluating responses to COVID-19 locally (42). For instance, the situation regarding kindergartens' closing and re-opening in Norway, has been flexible to a great extent as people were considered to have the greatest expertise of their own place of residence. This approach enhanced the decision-making process at the local level and represented autonomy in planning at national level (43). Still there is no clear evidence regarding the impact of this approach.

Furthermore, religious leaders played a significant role in managing COVID-19 pandemic in the African Sahel region. In the Sahel, Islamic religious leaders –as central influencers- conducted extensive discussions prior to Ramadan 2020, drawing on Islamic guidance at time of outbreaks and diseases. This included emphasizing the spiritual religious values of avoiding harming oneself and the others and following the directions of health preventive measures. The engagement of those religious leaders occurred early enough and effectively endorsed key messages (44).

Another study, conducted in Kenya, shows how displaced people led the COVID-19 response. In each refugee camp in Dadaab, well-organized committees were formed, and included women, religious leaders, youth and others who aid and monitored the services delivery at time of crisis. Their duty included collecting the community members' feedback and the provision and updating of reports on routine daily basis (44). However, comparison studies have not been conducted regarding engaging displaced people, as a marginalized group of population, and the non-displaced people during COVID-19 pandemic in areas with similar characteristics.



Another important characteristic of risk communication and community engagement is to be data-driven (3). This approach implies generation, analysis, and use of evidence about specific characteristics of the community such as: behaviors, perceptions, capacities and context (3). Using socio-behavioral data is an essential requirement for effective risk communication and community engagement in order to minimize exposure to hazards. For instance, in Africa, there were regional coordination platforms for risk communication and community engagement to collect, analyze and disseminate the feedback data from different subgroups from all over the continent (3). There was a high level of collaboration to analyze the trends at the national level, which was updated every two weeks to drive the actions dynamically in national COVID-19 responses. In addition, there was a focus on tele-education to share and coach people on relevant and requested topics as part of the capacity-building process for managing, coding and analyzing feedback to inform the social mobilization activities and operationalizing decisions (3,45). Furthermore, in Pakistan, the focus centered on behavioral and social data and reliance on feedback. This included monitoring of traditional and social media. The data collected was aggregated for further discussion with the Ministry of Health and disseminated in the media briefings of the ministry (3).

RCCE efforts require identification of local actors and partners as they are in a better position to involve communities. This places a demand for experts to mentor and enhance the RCCE through participatory approaches. This includes provision of technical support and sharing resources by determining needs and priorities, and consequently building capacity(3,46). For instance, capacity building is considered as one of the fundamental

pillars of the RCCE strategy in Venezuela (3). Local capacity has been reinforced through joining efforts reflected by their investment in sustainable impact by reinforcing their partners' capacities. It included training on Behavior Change Communication and workshops on understanding how to apply theories, exercising practically, strategies for communicating and using creative techniques to promote hygiene behaviors (3).

### Capacity building

Capacity is defined as organizational and individual ability to perform functions efficiently, effectively and sustainably. Capacity building is defined as a process to detect problems, enhance systems and improve capacity via assessment (47). The social level of capacity building targets the development and improvement of public administration capacity in order to improve the corresponding capacity and liability system (48). Comprehensive capacity building of the social institutions should strengthen the interactivity in public management to gain experience from previous measures (48).

During times of crisis, the resilient engagement of the community and the capacity of the actors involvement, during phases of preparedness, require an emphasis on the clarity about the tasks, roles and the remunerations via equipment and training provision and building a space for fruitful dialogue between community engagement actors, healthcare workers and even policy makers (49).

On the other hand, during the implementation stage of emergency action and response plans, capacity for community engagement is greatly interconnected with sustainable leadership (49). This means that capacity building in this regard includes extensive

training and planning and further technical support including intersectoral action, development of interventions as demanded, and measuring and improving the performance of community engagement by enhancing monitoring and evaluation (49).

Intersectoral collaboration is defined by WHO as a well-defined relationship between a couple of subjects or even multiple subjects which belong to various sectors of society. This relationship is founded to drive the actions, targeting a specific problem, in a manner characterized by being much more efficient, effective and sustainable, when compared to the efforts by a stand-alone sector such as the health sector, in order to achieve intermediate health outcomes or health results (50).

Public health emergency preparedness is characterized by its complexity, which requires a wide range of co-responsibility and involvement of various multilevel actors, including governments, the private sector, civil society, the researchers, healthcare professionals, citizens and communities (51). This mixture is important to developing a shared-cultural platform and minimizing the gaps of understanding, which are key to reaching a common perception and to set synergistic fields for intervention (51). Communication is one of the essential facilitating factors for effective inter-sectoral collaboration (52). Other factors include: strong relationship with partners, leadership, community engagement, and capacity building (52). All these factors imply communication as a major concept of each (52).

Practically, inter-sectoral collaboration supports the joint programming targeting shared purposes. This leads to reduction in the number of fragmented interventions and

programs, further integrated services and tasks, provision of training courses by including collectively all the related staff from the engaged sectors in order to disseminate the required information and boosting for networks construction (53)

## Methodology

This study employs a qualitative methodology, consisting primarily of in-depth interviews. Qualitative research methods are more suitable for the research objectives, especially in that the iterative design allows for flexibility to better address the objectives of the research project, as well as the ability to explore various topics in greater depth.

### Participants and setting

Sampling was conductive through purposive sampling, which allowed for shedding light on the experiences and opinions of different groups of people. Priori purposive sampling was used as it is better to explore the issue from several dimensions by determining in advance the characteristics of individuals who will be participants in this study and determine in advance the structure. Participants were selected from different sectors to highlight the variation in complex issues and experiences such as the issue of community engagement and communication during time of COVID-19 pandemic. The main groups of characteristics for the target population were:

- Policy- and decision-makers government.

- International organizations representatives (The United Nations Children's Fund (UNICEF), World Health Organization (WHO), UNRWA.
- Local communities' representatives, governorates.
- Universities academics.

Conducting interviews with these groups of participants is a critical step toward bringing about positive change. Government policymakers and decision-makers provide insights into the tactics and decisions that influence public health responses, assisting us in understanding the systemic approach. Representatives from international organizations such as UNICEF, WHO, and UNRWA provide a global perspective and discuss best practices that might inform local efforts. Moreover UNRWA is one of the main health and social services providers in Palestine mainly in refugee camps in Palestine. Representatives from local communities at the governorate level share their on-the-ground experiences, shining light on the real issues and opportunities that exist within communities.

Finally, researchers at universities contribute a scholarly perspective, contributing to the academic conversation on these vital topics, and some of them had been engaged as member of different committees formed to face the pandemic. By interviewing all of these stakeholders, we tried to generate a comprehensive narrative that is critical for strengthening risk communication and community involvement initiatives.

A total of 23 interviews were conducted between March, 2022 and October, 2022. Interviews lasted 40 minutes on average. The characteristics of the sample are

summarized in Table 1: Sample Description. Three interviews out of the 23 interviews were conducted relying on phone call interviews and one interview was conducted via Zoom due to restrictions on movement imposed by the Israeli military and the researcher's inability to reach the Gaza Strip. Another five candidates declined the invitation for the interview; one was from the public sector in Gaza Strip and the other four were from the West Bank, one of them is a deputy minister and the others were employees of municipalities.

Of the total number of interviewees, one interviewee resided in Gaza and the remaining interviewees were from the West Bank. However, the interviewees from international organizations spoke about both the Gaza Strip and the West Bank.

In the interviews, we inquired about the involvement of the Palestinian government (Ministry of Health and other relevant ministries such as Ministry of Social Development and Ministry Of Education) and other organizations, such as UNRWA and non-governmental healthcare providers, in engaging local communities. Through the interviews, we tried to shed the light on the principles adopted by the Palestinian authorities to fully engage the community in order to face the COVID-19 pandemic and its consequences.

Furthermore, the interviews try to explain the role of community participation in facing the COVID-19 pandemic and how it evolved during different stages. Questions were also asked regarding the identification of vulnerable groups, communication approaches, transparency and confidence-building during the pandemic (annex 1,2).The interviews

were conducted until saturation of the answers regarding the questions and themes was reached. The main researcher of the study conducted the interviews.

*Table 1: Sample Description*

Interviewee	Date of interview	Gender	Professional Position	Sector of work
1	11.08.2022	M	Director- Doctor	International organization
2	25.08.2022	M	Journalist	Private
3	13.09.2022	M	Public Health	Former public sector, currently NGO
4	22.09.2022	M	Director MOSD	Public Sector
5	09.08.2022	M	Director-MOH Gaza	Public sector
6	18.08.2022	M	Journalist	Public TV
7	07.07.2022	M	Academic	University
8	05.07.2022	M	Doctor	Public sector
9	28.07.2022	M	Director -Doctor	Local NGO
10	13.10.2022	M	RCCE Responsible	International Organization
11	19.05.2022	F	Educational advisor-MOE	Public Sector
12	19.05.2022	M	Director-MOE	Public Sector
13	19.05.2022	F	Health services - MOE	Public Sector
14	21.04.2021	F	Public Health	International Organization
15	29.05.2022	M	Deputy Minister	Public Sector
16	07.04.2022	F	Public Health	International Organization
17	13.03.2022	M	Public Health	Former government officer
18	09.04.2022	M	Public Health	Local NGO
19	21.07.2022	F	Academic	University
20	28.07.2022	F	Academic	University
21	08.08.2022	M	Responsible Community Affairs	Local Authority-Governorate
22	21.04.2022	F	Primary Healthcare-NCDs doctor	Public Sector
23	05.10.2022	F	Doctor	International Organization

## Ethical considerations

Ethical approval was obtained from the ethics committee at the Institute of Community and Public Health, Birzeit University (annex 3). Ethical considerations include:

anonymity, confidentiality. Confidentiality will be maintained by not mentioning the names of the participants and not sharing their personnel information. Every effort will be done to avoid harm to the participants. Data collected from the participants will be maintained confidentially throughout data collection, analysis, documentation and dissemination.

Participation in the study was voluntary, where participants provided verbal informed consent and were given a detailed consent form (annex 4). In addition, participants had the right to refuse or withdraw from the interview. The findings and information will be disseminated back to the participants later on via e-mail or online session, as this can also strengthen the relationship and build trust between the participants and the researcher.

## Data analysis

The overall approach to the analysis was inductive (Inductive content analysis is gathering and analyzing information without regard for preconceived categories or beliefs. This flexibility enables the data to guide the researcher's study, allowing them to find emergent patterns, themes, and concepts)(54), with the focus on allowing themes to arise through repeated reading and analysis, and looking for similarities and differences among the data based on the research questions and themes. The main researcher of the study analyzed all the data of the interviews manually. The study methodology included



a multi-step analysis of the data. The objectives and theoretical frameworks of the study were revisited to ensure clarity.

The audio recordings of each interview were transcribed verbatim to provide a complete and accurate representation of the interviews. The data was coded and a codebook was created to ensure consistency and reliability in the analysis. To ensure accuracy and ease of analysis, words or parts of words were used to flag ideas in the transcript. This allowed for the grouping of information around specific themes, with the themes being sorted into thematic groups based on similarity. The end result of this process was a compilation of numerous text segments for each theme in coding sorts. These were then presented and written up as themes.

## Results

The interviews revealed that the government and international organizations had different views on community engagement during the COVID-19 pandemic. Some respondents highlighted that the government's strategy for community engagement was unclear; although there was an expectation for the community to play a role in the pandemic response, it was unclear how such involvement would take place. Others said that interviewees noted that the government intended to engage with the community by involving the governorates and local councils in educating the population, respecting the closure policies and helping in the containment of the pandemic.

During the pandemic, the government's approach to community participation did not actively incorporate the community in decision-making and planning processes. The government assumed that community should take a larger role in assuming responsibility for various issues such as adhering to prevention measures and commitment.

### Government's perspective regarding RCCE during COVID-19 pandemic

Perspectives on community engagement during the COVID-19 pandemic were mixed among the government and international organizations. Some interviewees noted that the government had a perspective of engaging with the community, while others suggested that there was a gap between the government and the community in terms of engagement. It was also noted that the government's vision for community engagement was not entirely clear, and there was an expectation for the community to play a role in the response to

the pandemic, but it was not clear how that involvement would take place. There was also a need for a model for partnership to ensure a quick response in certain areas such as the safe return to schools and the implementation of exams. Local bodies, like governorates and municipalities, were seen as necessary partners in spreading awareness and promoting adherence to government measures to limit the spread of the virus.

The Ministry of Health's assessment of community engagement during the COVID-19 epidemic revealed mixed results. One interviewee stated that the government viewed the community as a partner and relied on their participation in responding to the pandemic. This perspective, however, differed depending on the partner involved, influencing the extent of help provided for detecting COVID-19 cases and other response-related issues. Conversely, another MOH interviewee, , stated that the government lacked a clear plan from the start, which hampered community engagement and increased pressure on the Ministry of Health during the epidemic.

*"In my opinion, the government did not have a clear picture from the beginning. This was reflected in the fact that it affected the participation of the community, otherwise the work pressure would not have been on the Ministry of Health during the pandemic"*

*(Interviewee 22)*

One of the International Organizations representatives believes that there already was a strong partnership between the Ministry of Health and international organizations.

*"We are always partners with the Ministry of Health."*

*(Interviewee 1)*

One journalist suggested that historically, the only sector that engaged in mobilization and community engagement was the political sector through political factions. Other sectors, including both governmental and civil society bodies, were not as involved in CE compared to political factions who were more capable of mobilizing the. Moreover, he said that the health sector did not actively involve society in anything, and that there is a gap between the government and the community in terms of engagement. This suggests a lack of awareness and understanding of the importance of community engagement in service sectors, and a need for increased awareness and efforts to promote community engagement across all sectors. According to the interviews provided, it appears that the government's vision for community engagement during the pandemic was unclear. Additionally, despite that the interviewees noted that there was an expectation for the community to play a role in the response to the pandemic, it was not clear how that involvement would take place.

*..... This means, as I believe, that historically not only the Ministry of Health and the health sector, but all sectors have not involved society with anything. The only sector that used to do mobilization was the political sector (political factions) in one way or another, but other societal and governmental systems had no hope for Community Engagement work."*

*"I think that at the beginning of the pandemic and continuously during the two years in which the response was made, it was very clear how the health institution in Palestine, whether represented by government agencies or NGOs sectors, does not have a real connection with the society in which they work .....*

*(Interviewee 10)*

Ministry of Education interviewees expected society to play a role in the safe return to schools and the implementation of the general secondary exam. A partnership model was deemed necessary for a quick response. However, the interviewees did not provide any indication of the government's vision for implementing community engagement mechanisms during the pandemic or a plan for partnership.

*"Now, as the Ministry of Education, we had an expectation for the role of society to contribute to the safe return to schools and the implementation of the general secondary exam at the time."*

*(Interviewee 13)*

#### Planning regarding CE during the pandemic in Palestine

#### Planning regarding CE during the pandemic in the West Bank

According to the interviewees, there was a shift in the government's approach towards community engagement during the pandemic. Despite the absence of actively involving the community in decision-making and planning processes alongside government and other partners, the government relied on the community to play a larger role in taking responsibilities for various issues such as: making sure that the population is following the prevention measures and commitment to the governmental instructions. This implies that the government primarily viewed the community as a passive recipient of instructions and directives, rather than as an active partner in responding to the pandemic. By not involving the community in the planning process from the outset, the government missed

out on possibly valuable insights and perspectives that could have helped to shape the pandemic response in a more effective manner.

*It is assumed that in any emergency, we talk about health. The Ministry of Health is the leading (the one who leads). But when talking about emergency, everyone must be involved (i.e. all the people in the country). We saw this at the level of ministers where they were meeting, and also at the level of the Ministry of Health. But in these committees, to what extent was the civil society involved and to what extent did included all groups, or did they hear the discussions? Actually, I don't know. But if these committees do not have representation from civil societies, this means that there is a missing component. Therefore, we have a gap because work is at the government level, while in the end, when implementing and communicating with society, we will see a gap.*

Interviewee 10

#### At the government level

At the government level, according to the interviewee from ministry of education, there was a lack of national policy for RCCE in the event of an epidemic, which likely contributed to the difficulties in effectively engaging with the community. The decision-making process during the pandemic was hierarchical, with the Prime Ministry as the head of the supreme committee against COVID-19, being the primary source of decision-making authority.

*Most of the decisions that were issued from above, and every institution and every party, should adapt to it.*

(Interviewee 13)

An interviewee (23) working in an international organization highlighted that the State was not operating according to a well-established plan or policy, and this is consistent with the previous interviewees describing it. As one interviewee put it: “It is known that the state is improvisational.” (Interviewee 23)

On the contrary, from the Ministry of Social Development’s point of view, the interviewee mentioned that the meetings used to be held with all historical (long-term) partners, already established partnerships before the pandemic as international organizations, to discuss and define the plan for providing assistance.

*We - as the Ministry of Social Development - were meeting with all the historical partners and discussing and defining the plan regarding how the assistance was carried out, as it was not arbitrary.*

*(Interviewee 4)*

At the governorate level:

At the governorate level, planning for community engagement during the pandemic was a collaborative effort involving citizens, institutions, local bodies and councils, and the private sector. Stakeholders were involved in decision-making, making them an essential part in confronting the pandemic. However, at the governorate level, there was vagueness regarding planning for community engagement during the pandemic as it was characterized by a lack of clear guidelines or protocols. The lack of clear guidelines or protocols resulted in a need to involve all stakeholders, including citizens and institutions,

in decision-making in order to address the situation effectively. The quartet committee<sup>1</sup> formed in the Gaza Strip aimed at ensuring clear cooperation and defining the roles of each of the participating ministries, which had a positive impact on the management of the pandemic.

*(From governorate point of view): They –the local community in its various formations - were part of the plans that were set and they were part of the committees that were formed.....*

*(Interviewee 21)*

#### At the community level

At the community level, the planning for community engagement during the pandemic lacked community partnership and was not successful according to the interviewee. There were no standardized procedures. And the question which had been raised was “How” to effectively involve communities in the response. There was a disconnection between the citizens and the implementers of health policies. This was due to a lack of trust between the various parties involved, as each party did not understand its own role or the role of others. The lack of real integration between different parties and institutions was evident, and there were strange attacks and errors, some of which were systematic.

*They –the government represented by the health institution- wanted the society to be a part of the response. Just the question was “How?”*

*(Interviewee 10)*

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<sup>1</sup> Quartet committee in Gaza: formed from Ministry of Health, Ministry of Social Development, Ministry of Education and Ministry of Interior Affairs.



*However, as for decision-making, there was no community partnership on this level. We can say that we did not have the 100% successful model, and there were no standardized procedures, as there was definitely a flop.*

*(Interviewee 14)*

*But what happened was that there was a gap between the decisions and what was actually happening on the ground because there was no trust and each one did not know its role or the role of the other.*

*(Interviewee 22)*

Planning for community engagement during the pandemic involved the formation of committees and sub-committees at both a national and local level (by the prime ministry office and governorates, respectively) with the goal of devising and implementing a comprehensive plan that targeted marginalized communities. However, the community was not actively engaged and involved in the planning process alongside the government and other partners.

*Committees were formed, including the Supreme National Committee to Combat Corona, headed by the Ministry of Health, of course, and the minister personally. Additionally, there were the sub-committees in all governorates. There used to be periodic meetings and the plan has been devised.*

*(Interviewee 9)*

Additionally, a journalist emphasized that there was a lack of clear distribution of tasks, which resulted in a blurry situation that involved a lot of personal efforts. And an interviewee working in an NGO indicated that this led to a situation where each person was imposing themselves, and there was a need for a roadmap to help distribute tasks and

roles from the beginning. However, it was only in the later stages that some tasks were set for some institutions (without specifying), but this was seen as important for showing everyone their role and what they could do.

A second journalist suggests that there is a lack of comprehensive planning in Palestinian society and that activities are usually reactive rather than proactive. The interviewee believes that this lack of monitoring and inability to turn actions into achievements leads to individuals retreating to their previous positions and hinders the development of community organizations and institutions. The interviewee believes that this lack of monitoring and inability to turn actions into achievements affects the emergence and development of other bodies in society that can help organize people's lives and act as intermediaries between people.

#### Planning for CE during the pandemic in the Gaza Strip

Regarding the Gaza Strip, interviewees indicated that the pandemic arrival had been delayed by several months compared to the situation globally, which provided a plenty of time for the preparations and enhancing the local community readiness for dealing with this pandemic. However, it was not noted whether the community engagement during the pandemic was planned or been part of a plan.

*Due to the peculiarity of Gaza, the pandemic entered the Gaza Strip later than the rest of the world, by about 7 or 8 months. By the grace of Allah, this had a fundamental role in dealing better with this pandemic and among the preparations during and also to the period of the pandemic. This means strengthening the local community's readiness to deal with this pandemic.*

*(Interviewee 5)*

In the Gaza Strip, interviewees indicated that there was a clear effort to establish role clarity during the pandemic in the Gaza Strip. A quartet committee was formed at the leadership level, comprising representatives from the Ministries of Health, Interior Affairs, Social Development, and Education. This committee was established in the Gaza Strip and was aimed at ensuring clear cooperation and defining the roles of each of the participating ministries. According to the interview (5), this had a positive impact on the management of the pandemic.

#### [What actually happened regarding community engagement during the pandemic in Palestine?](#)

Interviewees' accounts of what actually happened regarding community engagement during the pandemic in Palestine are mixed and depend on their positions and degree of active involvement. On one hand, there was the national emergency committee headed by the Prime Minister and the National Epidemiological Committee chaired by the Ministry of Health that included different NGOs, international organizations and universities. At the level of the governorates, an emergency committee was formed through the Council of Ministers, representing all governmental and private institutions and the local community.

An interviewee of the UNRWA said that they were represented in the different committees through an UNRWA representative, and a family health team committee in the camps that discussed COVID-19 prevention and treatment. Moreover, the efforts to engage with the community and provide them with information were made through

meetings with community leaders and municipalities. These meetings were held to discuss the response to the pandemic and ensure that everyone was on the same level of awareness.

*At first, there had been a national committee of Epidemiology in which we took part in via an UNRWA representative (disease control). He used to attend all the meetings and intervene according to the situation and the demands during the pandemic. Regarding the camps, there had been family health team committees where we were continuously discussing COVID-19 prevention and treatment. Exchanging the meetings' outputs with the Ministry of Health had been facilitated by our representative in the national committee of Epidemiology.*

*(Interviewee 1)*

Others mentioned that there was also a gap between the rhetoric of community partnership and its application on the ground.

*Despite the talk about community partnership at the political level, but there was a gap between what is said and what is being applied and what is happening on the ground.*

*(Interviewee 22)*

From a journalist's point of view, the community was not part of the decision-making process or the policies for COVID-19 response. On the other hand, another journalist described the community's response to the pandemic as one characterized by cooperation and concern. People were worried about the situation thus they were very concerned about everything that came out of the government or the MOH and accepted the strict measures imposed by them, to the point of self-isolation. The journalist noticed a great commitment and partnership in the community, with everyone being keen to report any suspected cases

of infection. The interview shows that the local councils played a significant role in community partnership, while religious leaders and organizations had a modest impact. The local community even created self-organizations to complement the role of the official level, such as controlling entry to certain cities and providing basic materials to villages.

*.. but as a direct communication or community role, the community should be part of decision making or part of the policies, whether directly or indirectly. From my point of view, I think this was not the case (in Palestine).*

*(Interviewee 2)*

*Through my work –as a journalist-, I noticed that there was a lot of concern about everything that came out of the government or the Ministry of Health and other official bodies, and the community accepted it with its strictness, to the point of self-closure. I mean, there was no need for military patrols to force people to close.*

*Even the local community was creating self-organizations within the community that are complementary to the role of the official level. These bodies have taken it upon themselves, for example, to close some cities, control entry, provide basic materials to villages for homes.*

*(Interviewee 6)*

Moreover, the academics interviewed had different perspectives on community engagement during the pandemic in Palestine. One academic (7) has a positive view of community engagement, stating that the role the community was given was better than in previous experiences. They credit this improvement to the formation of the National Epidemiological Committee, which had participation from various societal bases including universities and health service providers.

On the other hand, another academic (19) believes that there was a delay in accepting the intervention of academic institutions and the community. They believed that if there had been timely intervention, the outcome would have been more positive. They view the intervention as having come too late; indicating that they believe there was a lack of early involvement of the community and academic institutions.

Another academic (20) indicated that there was a lack of involvement of individuals and grassroots organizations in the response effort, and their participation was absent in the early stages of the pandemic. The involvement of NGOs was also limited and selective, and some organizations reported feeling excluded from the response effort. It was noted that there was a lack of holistic and inclusive approach in the early stages, and that the information provided to the public was formal and unconvincing.

*... if there was a timely intervention from the community and the academic institutions before we were asked to intervene, which was too late according to me, it would definitely have positive consequences. There was an obvious delay in accepting the intervention of the academic institutions in particular and the community in general.*

*(Interviewee 19)*

*Some NGOs complained that they were absent. It is not taken into account that it was not given a role and was not consulted. Although the need was urgent for the approach to be holistic and inclusive. It is based on what stages, what developments will happen, it was based on who is close to us, procedurally, transactionally, and so on.... This is at the level of NGOs. As for the community level, individuals and grassroots organizations were completely absent.*

(Interviewee 20)

On the other hand, it was acknowledged that certain civil society organizations, such as the Palestinian Red Crescent Society, Al-Juzour Foundation, and others that work in the field of (RCCE), were more involved and proactive. It was suggested that this was due to the allocation of their own funding for their work in this field, which allowed them to justify their activities, such as publications, information, meetings, and training.

*As for NGOs, they are fully aware of the weak point of the MOH. Therefore, there is another system - if this term is permitted to be used - that is more aligned with each other than MOH with regard to risk communication. I think it preceded the MOH because it is funded - so that we can be honest, frank and clear -. For example, Al-Hilal, Al-Juzour Foundation and many civil society organizations that work in this field (the RCCE) because they are allocated funding.*

(Interviewee 23)

One of the NGOs representatives reflected that there was a coordinated effort between various organizations and institutions, including the MOH, to educate and motivate communities to get vaccinated, with a focus on marginalized communities. The formation of committees and the comprehensive national plan were likely part of the implementation of community engagement and risk communication during the pandemic.

*The government, especially the Ministry of Health, played a very important role. Since the beginning of the pandemic, it started coordinating with non-governmental organizations and national institutions that are related to health. The coordination was awesome. Committees were formed, including the Supreme National Committee to Combat Corona, headed by the Ministry of Health, of course, and the minister personally. Sub-committees in all governorates. It used to be periodic meetings.....*

*But little by little, and after a comprehensive national plan was put in place to also target communities, especially marginalized communities, the picture became clearer. And everyone started working to educate and motivate communities to let's say get vaccinated.*

*(Interviewee 9)*

However, an interviewee from an international organization mentioned that one of the main problems, in the West Bank, was the lack of decision-making authority at the level of representatives of the government in the RCCE. The person –attending the meetings– had a seniority that was not high, which made it difficult for them to effectively address the situation. Also, there was the reluctance of delegates from the MOH to accept new issues or propose solutions based on the information available to them. This was a challenge for the International Organization in the West Bank, who faced difficulty in getting the Ministry to act on the information they had about the situation.

*It was in part of the main problem with the official authorities that the person who was representing the government in this RCCE is a person who is not a decision-maker and does not have a decision. It means being a person with a seniority that is not high, and this was one of our main problems. The other problem with regard to community work - for us as is that it was difficult for the delegates from the ministry to accept the new issues or even to propose solutions based on the information in the ministry because the Ministry of Health has the information and knows where the pockets are and where the problems are, so comments always came.*

*(Interviewee 10)*

Another interviewee from a private institute mentioned that the government took the responsibility for announcing lockdowns and precautions. Issues such as unemployment resulted from the lockdowns had necessitated the community's response on their own. It



was felt that the government was not fully aware of their involvement in responding to the socioeconomic demands of the people during the pandemic.

*As we noticed, the government took the responsibility for announcing the lockdowns and the precautions. Additionally, the government sets the regulations and the instructions to be followed by the public at the same time to what extent the public had been engaged in setting these instructions? There are many question marks in this regard. It has been obvious that the community has been pushed to deal with several (emerged) issues, such as the unemployment and who can deal with the harsh economic situation as a result of the lockdowns. However, regarding to the point of “to what extent was the government aware to this issue or had took the consideration the community engagement”, I do not think that it was clear enough.*

*(Interviewee 3)*

Moreover, findings show that local communities played an important role in facilitating and supporting the efforts to manage the pandemic. The communities helped in determining who to communicate with and facilitated communication with schools and institutions. They opened the way for providing logistics and were a main supporter in providing necessary things and requirements, including rehabilitation of isolation places, furniture, medical devices, medicines, and food. Community partnership relied heavily on donations, and individuals and institutions cooperated to provide what they could and put their capabilities at the service of the situation. As the pandemic progressed, the focus shifted to addressing the economic and educational repercussions of the pandemic.

*In addition, the community partnership was the main supporter for providing many of the needs of the local community (whether needs related to the rehabilitation of isolation places and the provision of necessary things and requirements, whether they were furniture, medical devices, medicines, or food).*

*(Interviewee 21)*

One of the MOH interviewees (8) describes how the events during the pandemic necessitated the involvement of various sectors. The government insisted that everything be under the management of the Council of Ministers, and the official briefings were coming out of the Prime Minister's office. However, the interviewee mentioned that the MOH worked with various other sectors, such as the Ministry of Education, Ministry of Social Development, medical services, and the Ministry of Information, including Palestine TV and radio stations, to manage the situation. However, the leadership of the Ministry of Health was challenged during this event, which may have impacted the effectiveness of the community engagement efforts. This may indicate that there was some difficulty in coordinating the efforts of various sectors.

*However, the event necessitated the involvement of other sectors, of course, under the umbrella and leadership of the Ministry of Health.  
However, in this particular event, leadership was a challenge.*

*(Interviewee 8)*

Actually, the findings also suggest that there was a lack of adoption of the nationally-led standard of the RCCE during the pandemic. According to the interviews, there was a need for a unified and organized national framework to deliver services faster and to avoid duplication and conflicting efforts. However, there was a power struggle among the different government agencies, such as the Ministry of Education, the Ministry of Health, and the Directorate of Health, who would decide to close schools, leading to confusion. Furthermore, there was a lack of a clear central authority to take the initiative in managing the crisis, and the absence of a body that could collect data and make arrangements caused

a real problem in the mandate. The work during the pandemic was based on a mandate linked to the work before the pandemic, which created difficulties in managing the crisis at the national level.

*If all of these efforts were unified within an organized national framework, the service would be delivered faster, and there would be no duplication in it, and there would be no paradox between one and the other.*

*(Interviewee 4)*

*There was a power struggle. Who would decide to close in a particular country or in a particular school? Is it the Minister of Education, the Directorate of Health, the Minister of Health, etc.? Things were not clear and there was 100% confusion.*

*(Interviewee 14)*

The Ministry of Social Development was working in two directions: first, with the committee in the executive council in the governorate and the emergency committee, second, with issues related to those registered with social development, the less fortunate, those with limited sources of income and those exposed to the pandemic. They have a codified and governed data system that includes information about the number of beneficiary families and their priorities. The institutions were divided based on their areas of concern, with some targeting children and others targeting people with disabilities.

*We made an inventory of the households who - in the beginnings - were in contact with the infected in isolation sites. We focused more on people with disabilities, the elderly and children.*

*We had to divide the institutions in terms of their concerns, for example, some of them targeting the childhood and others targeting the people with disabilities.*

*(Interviewee 4)*

Another interviewee (22) working in the MOH acknowledged that the majority of the work was on the MOH and to a lesser extent on the security services. However, there was a failure in educating the public clearly and explicitly, which resulted in people not doing their part and thinking that the pandemic was like any other disease. This could be attributed to the failure of the media or of the government to involve people in this issue. According to the Ministry of Health's representative in the Gaza Strip, it appears that there was cooperation between various government agencies, including the Ministry of Health, the Ministry of Interior, the Ministry of Youth and Sports, and the Ministry of Social Development in dealing with the COVID-19 pandemic. These agencies worked together in a harmonious manner, with the Ministry of Health being open to the media and using it as a tool to provide updates and follow-ups on the situation. It also appears that traditional partners, such as universities, NGOs, and UNRWA, as well as some experts, were involved in the response to the pandemic.

Regarding the Ministry of Education, the findings suggest that during the COVID-19 pandemic in Palestine, the Ministry of Education relied on the support of non-government organizations (NGOs) to provide remote psychological support and assistance to students and families.

*So all the work and psychological support, whether for students or for the families that we provided, was remotely. Many NGOs helped us. And we allowed them to enter through this mechanism.*

*(Interviewee 11)*

In the Gaza Strip, the findings show that there are already existing and licensed institutions in the health sector with a clear societal role. These institutions have a

widespread presence and knowledge of the community, making them ideal partners for providing services to citizens during the pandemic. The Ministry of Health has a database that is utilized in working with these institutions. In the Gaza Strip, the local community played a key role in providing private quarantine places and was directly communicating with the MOH. During the pandemic, the local community created self-organizations within the community that were complementary to the role of the official level.

*.... existing and licensed institutions in a practical way, and they have an establishment along clear branches.*

*(Interviewee 5)*

*The local community –in the Gaza Strip- played a key role in providing private quarantine places for those in hotels, institutes, institutions, or apartments.*

*Even during the pandemic, the Ministry gave the private sector and the civil sector great importance in dealing with this pandemic, to the extent that many private institutions were directly and clearly communicating with it through the process of following up on the isolated and the infected in their homes and the contacts.*

*(Interviewee 5)*

#### Community engagement development during the pandemic

Based on the interviews, community engagement development was inconsistent during the pandemic. There was an initial sense of solidarity and cooperation, with local councils playing an important role in coordinating efforts. However, due to a lack of faith in governmental authorities, policies, and economic backing, the degree of services delivered and community partnership diminished over time. Findings suggest that the beginning of the pandemic response was different from the middle and the end, and that

those who studied the pandemic and provided feedback needed to consider this difference.

*However, those who study the pandemic and provide feedback must consider that the beginning differs in a way from middle and differs from its end.*

*(Interviewee 12)*

According to the interviews, at the beginning of the pandemic, the most common type of community partnership was through local councils, and the local councils played a significant role in coordinating with health committees in issues such as closing the village, distributing food, and placing barriers. There was more interest in community partnership at the beginning, with more support and services provided faster. The first wave was characterized by a level of trust in the government or official bodies, who played the role of the leader in dealing with the pandemic, and society's response was almost complete.

*It was as if everyone had poured out what they had in the first confrontation in the pandemic, and after that we could not continue with the same things we started with.*

*(Interviewee 4)*

However, in the later waves, as the pandemic progressed, these partnerships seemed to dissipate and the level of services provided declined. The development of community partnership was hindered by a lack of trust in official authorities and the government's performance and a feeling that their policies were not addressing the needs of those negatively affected by the pandemic. Some interviewees is mentioned that there was a lack of acceptance of the behaviors and policies of the various lockdowns in the second,

third, fourth, and fifth waves, which suggests a decline in community engagement. This is attributed to the government's failure to provide real economic solutions to people negatively affected by the pandemic.

*This was normal at that time because there were people who were hungry.*

*(Interviewee 4)*

According to interviewees, the response started with only the government institutions, such as the Ministry of Health, handling the isolation and quarantine measures. Over time, civil institutions became involved in the process and provided support in dealing with those who were isolated and quarantined. The government and health institutions relied on partnerships with civil society organizations to provide support to those in quarantine or isolation. This development was a result of the severe hardship that the health sector experienced during the pandemic and the need for additional support from the private and civil sectors.

*The health sector would not have met all these needs without the private sector and the civil sector.*

*(Interviewee 5)*

An interviewee working in an International Organization suggests that community engagement reached its peak when the government realized that vaccinations could not take place without a real community partnership.

Furthermore, the interviewees reported a lack of clear development in community engagement during the pandemic and expressed concerns about the decline in community partnership over time. The beginning of the pandemic was characterized by a sense of

unity and a high level of concern about the situation, but this gradually dissipated over time possibly due to a lack of alternative plans and a feeling of coexistence with the virus. Some interviewees mentioned that civil society organizations only started to intervene after receiving funding from international institutions. The response to the vaccination campaign was seen as an example of the decline in community partnership, as local authorities and municipalities felt that it was imposed on them. An interviewee working in an International Organization indicated that the absence of clear standards and measurement tools was identified as a factor that contributed to the decline in community engagement. There is also a lack of systematic institutionalization in order to sustain and evaluate community partnership efforts. Additionally, the Ministry of Local Authorities and the MOH were responsible for the indicators, but that there was no proper organizational structure in place to manage the process.

On the other hand, one of the governorates representatives mentions that the development of community engagement during the pandemic was characterized by partnerships and improved delineation of responsibilities. The interviewee mentions that decisions were revised based on feedback from citizens and partners, indicating that there was active communication and collaboration between different stakeholders. An example was given of a modification to a closure decision in response to feedback from companies, demonstrating the importance of taking into account the perspectives and needs of the local community.

*For example, when, at one stage of the pandemic, an entire area in the governorate was closed, it found, on the second day of the closure,*



*that the main warehouses of all companies are located in this area.  
Therefore, the closure was modified so that the goods could be  
supplied.*

*(Interviewee 21)*

Additionally, in the beginning of the pandemic, there was a sense of alarm and urgency as the number of infected cases was low and each case was considered a disaster. The focus was on protecting the country and mitigating the spread of the virus. However, despite the pandemic continuing and the increase in the number of cases, the focus shifted to the economic, educational, and local community repercussions.

The government's performance and their efforts to institutionalize the vaccine against Covid-19 played a significant role in the development of community engagement. However, these efforts and the process of institutionalizing were not described.

According to interviewee 4, who works at the Ministry of Social Development, the government's performance was below the required level in terms of logistics and fairness at the early stages of the vaccination campaign, which led to the accumulation of mistrust and contributed to the lack of acceptance of the behaviors and policies of the various lockdowns. Interviewee 15, who works at the Ministry of Education, emphasized the need for organization and administrative procedures that include accountability for all partners, such as teachers, school principals, students, parents, municipalities, and civil society institutions. This would have helped to govern the social interventions and frame partnerships with relevant institutions.

Interviewee 20, who is an academic, stated that the community partnership was developing according to the circumstances and data in the field at every stage. This

highlights the importance of being flexible and adapting to the changing circumstances during a pandemic. According to a journalist, the media played a role in strengthening the partnership in the development of community engagement during the pandemic. However, the role played by other organizations was considered formal and nothing more or less.

According to interviewee 23, who is working at an international organization, it seems that community engagement has improved during the COVID-19 pandemic in Palestine due to the exceptional nature of the situation and the need for a coordinated response. However, the interviewee also mentioned that coordination between institutions and NGOs was not effective and that there was a solo performance by many actors, even if they appeared to be working together. It is suggested that the long duration of the pandemic and the focus on infection and prevention control may have contributed to this development in community engagement.

From the Ministry of Education's point of view (11), there were already established partnerships with certain institutions prior to the pandemic, but the focus shifted to specific needs and topics related to psychological support during the pandemic.

From an academic's point of view, the development of community engagement during the pandemic changed over time. Time was considered a necessary factor for the university to be able to carry out tests and conduct research in cooperation with the community.

An interviewee, working in the MOH, believed that the government was not able to provide adequate support to the MOH, and that the staff was overworked without

adequate support. Additionally, the interviewee believed that the media's depiction of the government's efforts was not accurate and was more of propaganda than a reflection of reality. The interviewee suggested that there was a lack of development in terms of community engagement during the pandemic, and that the government was not able to effectively support the efforts of the MOH.

*There was no government support for junior employees. It was a media propaganda that did not correspond to reality.*

*(Interviewee 22)*

### Community priorities during the pandemic

An interviewee working in another a medical NGO highlights several priorities. The first priority was to educate the communities about the virus and how to prevent its spread. Another priority was to obtain sterilization materials and provide them to schools, institutions, councils, and municipalities, as they lacked the funds to purchase them. Additionally, the MOH tried to support schools, but could not keep up with the huge demand for protective materials. This means that the overall priority was to provide support for those infected with COVID-19 and to provide protective materials.

Finally, educating people about the vaccines available in the country and addressing the resistance to vaccination. The interviewee states that they were able to convince 40% of the people to receive the vaccine, but only to a small extent. Another interviewee working in a Palestinian NGO mentions that the plan regarding community priorities was clear on

the prevention process, with a focus on providing the vaccine to all people in the required doses, in four phases.

From the Ministry of Social Development point of view, there was a concerted effort to gather information and document the needs of individuals and communities. The interviewee referred to the use of an online form to collect information about what people needed, such as basic supplies and medicine. The information was then documented and used to allocate resources and ensure that everyone was receiving the services they needed. The process was systematic and not arbitrary, and reports were submitted to ensure that everyone received equal access to services.

*The needs were determined in more than one way. We were taking information and dealing with the council and cooperating with the committees*

*(Interviewee 4)*

Interviewees working in the Ministry of Education referred to several issues when asked about the community priorities during the pandemic. They highlight the difficulty of adapting to and even training on remote work, which was not planned or prepared for. One of them mentions that there has been a shift in focus at the government level towards the pandemic, with many government employees mobilizing their efforts towards addressing the pandemic. This shift in focus has come at the expense of other aspects. The interviewee suggests that this shift has resulted in a prioritization of the pandemic over other areas of concern for the government. Moreover, Another one describes the

difficulties faced by students in target areas such as (Areas C) close to the separation wall and settlements, who were unable to access internet services for education and had to drop out of school or take on other forms of work.

*...The areas close to the wall and the settlements, which were termed Areas (C). They were considered target areas. We used to notice in these areas that the people are unable to provide internet service.*

*(Interviewee 12)*

According to an academic interviewee (20), the community's priorities during the pandemic were shaped by the responses of external donors. The government sector was heavily influenced by donors in its response to the pandemic. The academic suggests that the presence of occupation also played a role in restricting how the government dealt with the pandemic, especially regarding the arrival time of the vaccines, the type of vaccines and restrictions on certain vaccines from entering the country.

*The response has been donor-driven.*

*(Interviewee 20)*

One public health expert (interviewee 17) highlights that there may not have been a clear prioritization of specific groups during the COVID-19 pandemic. The interviewee mentions that cancer patients, hypertensive and diabetic patients, mentally ill patients, non-communicable diseases and drug addicts all faced negative impacts because of the pandemic. The clinics did not open, which led to many of these patients not receiving the care they needed. The interviewee also mentions that the health situation of many of these groups deteriorated as a result of the closures. Additionally, the economic situation for

many people worsened as a result of the pandemic. There does not seem to have been a clear response from the MOH or any other organization to address these issues.

The interview with the international organization representative (23) highlights the challenges faced in determining the community priorities during the COVID-19 pandemic. The representative mentions that there was a lot of aid, but it was difficult to identify the needs of the people and prioritize them because of a lack of records and confusion.

The representative also mentions that the selection of priorities was influenced by political considerations, which resulted in an unclear and confusing situation. Despite the global shortage of essential medical supplies, such as vaccines and swabs, the representative mentions that the donations received were not necessarily based on need and were influenced by political reasons. The representative also points out that there was a lot of mismanagement during the pandemic, with shoddy products being passed and black market activities taking place.

This is aligned with another NGO interviewee's (18) opinion. They were uncertain about the process by which the government set priorities for working with local communities during the pandemic and believed the the government should have conducted studies and taken action based on their results, which have not taken place in reality. However, an interviewee working in the MOH indicated that there were limitations to the implementation of plans and strategies due to the exceptional reality in Palestine. For example, the obstacles faced in setting priorities were described as "thorny" and difficult

to implement due to the limited capabilities of the government and the exceptional reality in Palestine. One of the interviewees stated that there were obstacles beyond their control, such as the movement of workers inside the Green Line, which led to a difficult epidemiological situation in the country. Another public health expert who works in a private Institute interviewee (3) highlights the high level of improvisation in response to the pandemic, with a focus on serving the needs of the community.

### Vulnerable and marginalized groups' priorities

According to an interviewee (23) working at an international organization, there was an identification of marginalized and vulnerable groups during the pandemic as it was present at the level of research and discussion. However, there were challenges in addressing the needs of these groups in a comprehensive and equitable manner. The situation in the overcrowded refugee camps in the Gaza Strip highlighted the importance of providing clear procedures and instructions for marginalized groups. The issue of outreach, such as vaccination and access to healthcare, was also raised as a concern, with questions regarding the coverage and equitable distribution of aid to vulnerable groups.

*The reason is that there are painful margins. The data is in the camps in the Gaza Strip, and because of the overcrowding there were clear procedures, instructions and other matters pertaining to the marginalized. This may not include taking care of all groups*

*(Interviewee 23)*

The interviewee noted that while there were societal social movements that arose in response to the pandemic and aimed to assist those in need. These movements were not

driven by political considerations or geographic boundaries, but rather they were a reflection of Arab culture.

*There were purely societal social movements that had nothing to do with either the political system or geography, but rather this symbiosis that had to do with Arab culture.*

*(Interviewee 23)*

An interviewee (7) who is working in an NGO highlighted the issues faced by marginalized and vulnerable communities in Palestine. People with chronic ailments, pregnant women, refugees, and those living in camps in Area C were among those who faced medical, economic, and political marginalization. The pandemic response was primarily focused on immediate requirements, resulting in the closure of vital health services for these groups, resulting in extreme deprivation and limited access to necessary care. The lack of national programs for vulnerable populations such as the elderly and those with disabilities worsened the problem, with some initiatives from civil society organizations attempting to fill the gaps.

*There have been some procedures such as delivering medicines to them through certain mechanisms, providing the opportunity for treatment, and using telephone and electronic communication to a certain degree.*

*(Interviewee 7)*

The occupation context also played a role in the healthcare response for excluded groups. As a result, stronger evaluation criteria and strategic planning were required to satisfy the needs of these vulnerable populations during pandemics.



*.... the authority here is under occupation and its control is limited to all aspects of life, even in areas (A). Let's be honest with ourselves. This context must frame all our answers on this topic.*

*(Interviewee 7)*

On the other hand, interviewee 6 mentioned that the Waqfet Izz fund <sup>2</sup> and the way it was distributed caused confusion and a lack of trust in official institutions. There was a lack of transparency within these institutions, which further compounded the problem.

Interviewees (8 & 22) working in the MOH suggest that the health sector was greatly affected by the pandemic. This led to unintended shortcomings in the provision of health services to the citizens rendering it as not satisfactory, with most efforts being focused on addressing the emergency event. Certain groups, such as pregnant women and people with disabilities, were not distinguished by special services during the pandemic. NGOs attempted to address this issue, but they were not successful in providing adequate services to these groups.

The second academic emphasized that the pandemic affected women's health and reproductive health services, leading to increased unmet needs in family planning. Difficulty of accessing healthcare services might be due to fear of infection, and the services provided by midwives were disrupted. The lack of planning and a strategic

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<sup>2</sup> The Wakfet Izz Fund was established on 4/2/2020 with the aim of focusing national efforts to contribute to facing the repercussions of the spread of the Corona virus in Palestine and its economic, social and health dimensions. Strengthening solidarity through the participation of all institutions, companies and businessmen and individuals inside Palestine and the diaspora, to mitigate the effects of this crisis. Fund donation is limited in directing support to the Ministry of Social Development so that it can help needy families affected by the crisis.

dimension during the pandemic reveals the fragility of the healthcare system's response to the needs of marginalized groups.

From the Ministry of Education (MOE) point of view, the interviews reveal the challenges faced by marginalized and vulnerable groups during the COVID-19 pandemic. The interviewees mention that the MOE treated all students as one category without discrimination, but faced difficulties in communicating with children with hearing disabilities. The MOE made efforts to include sign language in their awareness and psychological support videos. The efficiency of e-learning was not initially effective and there were challenges faced by families with multiple students needing to attend virtual classes at the same time. Some efforts were made to address these challenges, such as providing students with laptops and internet access, using sign language interpretation and Braille paper for students with hearing and visual impairments, and creating special procedures and programs for students with chronic diseases, but it was not mentioned whether these efforts were successful in overcoming the challenges.

The MOE studied the needs of marginalized and vulnerable groups, including children with disabilities, and worked to integrate them into the schools. However, there were difficulties in dealing with students with mild, moderate, and severe mental disabilities, as well as those with visual and hearing impairments. A subprotocol was created for these students to secure their return to schools, but it faced challenges due to the varying nature of Palestinian society.

There was also a category of individuals who suffered from phobia and were afraid for themselves, their children, and the elderly at home. The MOE attempted to have these

students attend classes remotely, but it faced challenges and did not work in all schools. Some mothers had to withdraw their children with autism from school because they did not know how to deal with the procedures and protocols during the pandemic, which resulted in the children losing their educational progress.

Findings from the interview of the Ministry of Social Development's (MOSD) representative indicate that there was a focus on the marginalized and vulnerable groups during the pandemic. The MOSD worked with a United Nations organization to understand the effects of the pandemic on these groups and to determine the impacts through a questionnaire that measures multidimensional poverty. The questionnaire covers various aspects, including economic, educational, health, security, relationships, and social orientations. The Ministry of Social Development used to conduct field visits to assess the needs of these families, but these visits were suspended during the pandemic. The Ministry also provided emergency aid to families in need, although they could not be added to the monthly aid program. The situation for marginalized groups during the pandemic was complex, and the worker mentions that the problems that existed before the pandemic became more complex during the pandemic as the number of families in need has become higher as a result of the deterioration of economic situation during the pandemic.

*...the same issue before the pandemic has become complex in light of the pandemic.*

*(Interviewee 4)*

Furthermore, an interviewee working in an International Organization highlights the lack of systematic and effective policies and services to support vulnerable and marginalized groups during the pandemic, particularly those with chronic diseases, such as dialysis patients, who faced transportation challenges. The MOH had taken some steps to provide services to vulnerable and marginalized groups during the pandemic, but these efforts were not systematic and were only carried out when people ask for help. There is a lack of a clear policy for people with chronic diseases, who make up a large percentage of the population. The efforts to secure medicines for them are inconsistent and vary between governorates. Moreover, the UNRWA's efforts to establish isolation homes for vulnerable people in camps did not succeed and were not sustainable because of the high cost and lack of effectiveness.

Findings suggest that the efforts of the relief agencies helped in providing essential services and support to the vulnerable and marginalized groups during the pandemic. However, the health cluster activities stopped due to a financial deficit at the end of December 2021. Medical Relief and the MOH worked together to make home visits to the elderly, pregnant women, people with disabilities, and those who were infected or affected by the virus. They also employed psychosocial workers to support those who were affected by the pandemic. The policy of making home visits was successful in reaching a large number of people, especially those in marginalized groups. UNRWA, as a relief agency serving refugees, continued to provide services, even though the services provided were reduced to basic care such as routine vaccination and care for pregnant women and patients with disabilities. The agency also delivered medicines to those with

chronic diseases who had to stay at home. In addition, a mobile health team was deployed to reach remote areas and a health cluster was established to coordinate the work between different institutions.

The findings of the interview with an academic (7) suggest that there were limited attempts to address the mental health impacts of the pandemic. The focus was mainly on the physical and clinical aspects of Covid-19, and the psychological effects of the pandemic were neglected. There was panic in the early stages of the pandemic, which was later replaced by indifference. The academic believes that people diagnosed with mental illness were not given adequate attention and support during the pandemic, and were treated as part of the general population with chronic diseases, despite their unique needs. The interviewee highlights the need for a more systematic approach to addressing the mental health needs of individuals during the pandemic.

The findings from the interviewee of the Gaza Strip indicates that the population pyramid in Palestine is dominated by young age groups, so the elderly, people with chronic diseases, and the economically marginalized were most at risk. The high poverty and unemployment rates in the Gaza Strip, along with high rates of anemia in children and pregnant women, indicate that these groups received significant attention from the Ministry of Health.

The MOH worked with UNICEF to identify and provide aid to these groups. They provided lists of citizens over the age of 40 years to the UNICEF, which organized field visits and sent educational messages to these citizens to encourage them to take

preventive measures and get vaccinated. The interviewee highlights the effort of the UNICEF in the provision of the necessary aid to these groups in the Gaza Strip.

### Methods of communication during the pandemic

An interviewee representing the Ministry of Social Development states that in the early stages of the pandemic, the governorate set all the decisions related to closures. As the situation started to ease up, decision making in Ramallah Governorate started holding meetings and sessions to address the issue of the COVID-19 pandemic. These meetings were attended by various key government officials and representatives, including the Director of Health and the Director of Civil Defense, as well as representatives from the government departments, municipalities, and civil society institutions. The purpose of these sessions was to discuss and coordinate efforts to manage the COVID-19 situation in the governorate.

*In the beginning, of course, we adhered to all decisions, like closures..... But after things started to ease up a bit, we used to hold meetings and sessions in the governorate.....put forward the idea that we are in the governorate, how can we manage the affairs of the Corona issue.*

*(Interviewee 4)*

An interviewee working in an International Organization (23) indicated that in the beginning, communication was one-way, with information flowing only from the official source of information (such as the daily press conference) where the statistics regarding the number of new affected persons and the number of deaths were given to the public. As the pandemic spread over time, communication evolved into limited two-way

communication, with a more interactive relationship between the government and specific sectors of the society, namely commercial and economic groups.

Two-way communication was particularly more evident in the refugee camps compared to other societies, due to the presence of various forces at play (different actors involved), including camp committees, UNRWA clinics, camp mayors, influential people, and political organizations. The presence of multiple representatives from different sectors of the population allowed for a more diverse and representative exchange of information, which the interviewee considers a key component of successful communication during the pandemic and suggests that this approach could be adopted as one of the RCCE criteria for effective communication during a crisis.

An interviewee in the Gaza Strip noted that decision making during the pandemic was controlled by the government in developing countries. The citizens did not have much influence in the policy making process regarding the pandemic. The communication methods used during the pandemic were limited to the voices of institutions, meetings, and community seminars for decision-making purposes. The interviewee mentions that this is the reality of the third world and that citizens in these countries are used to and forced to implementing decisions and are afraid of the consequences if they do not.

*Therefore, this is one of the points in our societies that the citizen may not have a clear influence on drawing up policy and dealing with this pandemic directly. We are part of the third world. We used to pray to wait for the instructions to implement them, and we did not accept them. And times we were forced to implement it.*

*(Interviewee 5)*

This is partially aligned with an academic interviewee, who noted that the communication methods during the COVID-19 pandemic have not effectively conveyed the voice of the general community (7). Another two interviewees who work in an International Organization and another academic interviewee indicate that there was a lack of two-way communication between the ministry of health and the communities. The communication was one-way, with messages being delivered from the ministry to the communities. For instance, the MOH provided informative reports about the number of people infected with the virus, which gave people an idea of the situation. Despite the informative reports from the MOH, the voice of the people was not heard (16). An interviewee working in the MOH perceived the communication method as being a one-way flow of information from the political level to the community, without receiving any reaction or response from the latter (22).

*Honestly, I did not see any development in the method of communication, but it remained one-way communication all the time*

*(Interviewee 20)*

*The communication was one way from the political level only and they did not get a reaction from the community.*

*(Interviewee 22)*

The interviewees note that there was a lack of feedback from the community level and the absence of any opportunity for the communities to express their thoughts, fears, needs and concerns, respond and to provide feedback or ask questions. This resulted in a lack of engagement and participation from the communities and may have contributed to a feeling of disconnection between the ministry and the communities.



*Communities were not given an opportunity to express what they wanted to respond to. The messages were placed by the ministry only.*

*(Interviewee 18)*

Also, this agrees with the NGO interviewee who suggests that there was a lack of effective communication during the pandemic. Different decision-makers, such as mayors, school principals, and governors, issued opinions and decisions, but these were not well coordinated and led to confusion among the public. The absence of real communication caused chaos and contributed to the ineffective management of the pandemic and described the situation as the following:

*Therefore, there was complete chaos.*

*(Interviewee 17)*

These interviewees did not specify the time or whether there is a change in the communication methods during the different stages of the pandemic. According to the academic interviewee, the community communication during the COVID-19 pandemic was mainly focused on organized groups that had a vested interest in preserving their interests, such as hotel owners, wedding hall owners, and some merchants. While there were individual voices from journalists and thinkers, the voice of the ordinary people was not heard as it should have been. This corresponds to the journalist's interview as findings show that communication during the pandemic has shifted towards two-way communication (from his point of view). An example of this shift was seen in the story of merchants who, after facing economic destruction, requested to open their businesses and sought methods and mechanisms for doing so. The decision-makers in Palestine responded by opening businesses on certain days or under certain controls to ensure the

implementation of necessary health measures, such as wearing masks and using sterilization tools. This shift from top-down communication to bottom-up communication reflects the changing needs of people and the importance of responsive decision-making.

*This is an expression of that it was, in fact, in the beginning, it was from above to below, and then it became in apostasy, i.e. from below to above and from above to below and there are people who have their needs.*

*(Interviewee 6)*

According to two interviewees working in different relief agencies, it seems that the method of communication during the pandemic was from top-down, meaning that information and directives were being disseminated from higher authorities to the community, rather than being a two-way communication where the community was able to actively participate and provide input. This top-down approach may have led to a limited ability for the community to raise its voice and have its concerns heard in an organized or systematic manner.

*In the beginning, we used to teach people, and in the end we found that this method was almost a failure or unacceptable.*

*(Interviewee 9)*

The interviewee (1) suggests that it would be beneficial to adopt a more participatory approach, possibly based on recommendations from organizations such as the World Health Organization or Centers for Disease Control and Prevention, in order to better address the needs and concerns of the community. While the other agency, according to the interviewee (9) had actually changed its approach and started to hold open discussion groups with the population when it was possible and permitted. This new approach was

more successful as it provided a platform for people to express their thoughts and feelings, and to feel reassured, thus creating a more effective communication process. The change in communication methods seems to have had a positive impact on the effectiveness of the relief agency's efforts as it was successful in convincing a significant percentage of people to take vaccinations.

According to an International Organization, it appears that initially, there were problems with one-way communication, due to the lockdown, with decisions being made in closed rooms and lacking feedback mechanisms. However, as the pandemic progressed, UNICEF and other organizations were able to adopt more effective communication strategies, such as using social media and involving volunteers from the same communities in their campaigns. This helped to address some of the misinformation and confusion that was circulating, and allowed for a more two-way communication process with the community. Another effective strategy includes their participation in weekly or bi-weekly meetings of the RCCE committee, which provided feedback from other institutions based on their work with communities. However, the interviewee acknowledged that there was no real two-way communication with the community through an active hotline (10).

Findings according to an academic attribute the lack of community voice to a combination of factors, including the absence of community organizations capable of conveying the voice of ordinary people and the fact that the most vocal groups were those with interests, such as merchants, trade unions, and chambers of commerce. The interviewee also highlights the economic pressure faced by many sectors of the public during the

pandemic, which led to impoverishment and a lack of compensation, and the fact that decisions were often influenced by the pressure of lobbies.)

While the interviewee (10) believes in the importance of having flexibility in decision-making to act according to specific circumstances, the interviewee emphasizes the value of direct field follow-up and decision-making, as he notes that there was an exaggeration in the use of flexibility during the pandemic, which had negative consequences citing an example of the political parties that had nothing to do with administrative decision intervening. According to the interviewee, the decision-making process was viewed as a purely administrative in nature.

*Unfortunately, during the pandemic period, we noticed parties that intervened, even though they had nothing to do with the administrative decision, such as clans, organizations, and forces. Knowing that the decision is an administrative decision, not a tribal or organizational decision, etc.*

*(Interviewee 15)*

Moreover, bilateral communication was emphasized and coordinated between the Ministry of Education and the international institutions such as UNICEF and UNRWA, as well as with civil society organizations.

### Transparency and trust during the pandemic

A journalist (6) believed that there was a high level of transparency in terms of the information being published such as the numbers, distribution of needs and treatment, which was demonstrated by the commitment of the public to the information. The

interviewee noted that there was a state of fear and terror among the public at the beginning of the pandemic, which led people to be more receptive to information and seek ways to escape the disease.

*There was great public confidence in the information being published.*

*(Interviewee 6)*

According to the interview with one of the relief agencies in Palestine, the interviewee (9) concluded that the trust and transparency in the pandemic response were influenced by the level of accessibility and availability of services and information. The relief agency had a strong reputation and trust with the communities they serve due to their long-standing presence and provision of quality services. On the other hand, the government was limited in its ability to reach all communities and provide all of their needs, leading to a slight decrease in trust and confidence. However, the relief agency acknowledged that the government was limited in their ability to raise awareness due to their focus on detection and treatment, and the limited number of staff available for field work. Nevertheless, the representative noted that additional staff have been appointed to address these challenges.

*We have 42 years on the ground and work with all these communities.*

*Thus, trust building, quality services, and arrangement took place.*

*Everything was available and we improved and developed the services over time. This trust was built years ago. People have been dealing with us for years. Therefore, anything new that we put forward, they accept it because there is trust and there is no hidden matter and all the information is revealed.*

*(Interviewee 9)*

Another interviewee working in another relief agency (1) indicates that there was confusion at the start of the pandemic due to the newness of the pandemic issue and the constantly changing decisions. This lack of stability led to a decrease in confidence in the decision makers, but the interviewee acknowledges that the situation was unprecedented and that the World Health Organization and other organizations were also changing their decisions frequently. The interviewee acknowledges that they were not experts in this new situation and therefore could not blame those responsible for making decisions.

*Decisions changed from day to day and week to week. So this undermined confidence. I do not blame whoever issues the decision...  
We were not experts in this new situation.*

*(Interviewee 1)*

Additionally, the interviewee noted that the spread of misinformation and conflicting messages through social media caused a lack of trust and transparency in the handling of the pandemic. Conflicting information and decisions that changed frequently resulted in confusion and further undermined confidence. A journalist described the issue of trust and transparency as being the most complex and suggested that there were significant challenges faced in trust and transparency. The interviewee mentions that there were some decisions that were "flops" and abuses that contributed to confusion and distrust among citizens. The interviewee believes that the lack of planning was a clear factor in the challenges faced in trust and transparency, and that some of the decisions taken were not in place. The interviewee also suggests that the local confusion may have been part of a larger global confusion.

*The issue of trust and transparency is one of the most complex issues that we have experienced.*

*(Interviewee 2)*

*I imagine that part of the confusion that occurred locally is part of the global confusion.*

*(Interviewee2)*

According to an interviewee working in a relief agency, the issue of vaccines was marred by conflicting information and an unequal distribution of the vaccine, leading to a lack of confidence. Additionally, the unequal distribution of the vaccine contributed to a lack of confidence in the handling of the pandemic (interview 1). This corresponds to the findings from a journalist interview (2) which suggest that there was a high level of distrust and confusion due to the suspicion of a deal involving expired or near-expired vaccines from the Israeli occupation and the prevalence of rumors that turned out to be facts, which further fueled distrust among the public.

*The issue of trust and transparency is one of the most complex issues that we have experienced. I think some of the decisions involved some flop.*

*(Interviewee 2)*

An interviewee working in private institute noted that this led to question marks about the governance of the pandemic response and made people reluctant to believe future information and receive vaccines. There was a lack of integrity in giving vaccines to those in need within the medical protocol, leading to a loss of trust in the bodies responsible for managing the pandemic.

*The second issue is the issue of the emergence of lack of integrity in giving vaccines to those who need it within the medical protocol (chronic patients, the elderly, etc.). Not adhering to this agenda, as people saw on the media, led to a rift of trust.*

*(Interviewee 3)*

Regarding the vaccine problem, a journalist (6) discussed the issue of vaccine distribution, which came in stages. The first stage was when the vaccines were distributed to a specific party at a certain level in society, which led to a decline in public confidence. The vaccine stage was the trial stage, and the interviewee stated that Palestine was one of the few countries in the Arab world to have taken the full vaccine, and people were still looking for additional doses. The interviewee noted that the matter of vaccine distribution was exposed, which brought the public back to a state of fear.

This corresponds to the findings from an interview (13), who works in the Ministry of Education, in terms of vaccine issues. This includes concerns about forced vaccinations and confusion about the priority groups for receiving the vaccine. The representative also pointed out that there was a lack of clear and explicit information provided to the citizens, which led to further confusion and mistrust. Overall, the representative indicated that the government's handling of the pandemic has damaged trust and transparency, and called for a more scientific, organized, and transparent approach in the future.

An interviewee working in the Ministry of Social Development notes that the social sector is a sensitive sector and requires transparency in order to maintain trust and highlights the importance to be clear and straightforward when communicating with the public. Therefore, the validity of information and data is crucial for the success of the sector.



False hope and deceit should be avoided in order to maintain trust. There was a committee in place to review applications for assistance.

*It is important to be clear, stand on solid ground, and know how to talk to people without deceiving them and giving false hope for the future. All this contributes to achieving a large part of transparency.*

*(Interviewee 4)*

An interviewee (5), who is in the Gaza Strip, noted that the National Epidemiological Committee, of which the representative was a member, issued daily reports with transparency to provide accurate information on the number of COVID-19 cases, quarantined, deaths, vaccine recipients, and complications during the pandemic. This level of transparency helps to build trust among the citizens and provide clarity in decision-making by the authorities. Despite the recent waves of the pandemic, which were considered to have a higher spread of the virus, the impact on society was less severe, and this can be attributed to the transparent and clear communication of the Committee.

*This means the real numbers of the injured, quarantined, deaths, vaccine recipients and complications, even if the citizen s' records are through official platforms of the MOH. This thing can give transparency to the services provided by the decision makers. On the other hand, we can be given comfort and clarity in dealing with the recent third, fourth, fifth and sixth waves, which are considered to have less impact on society despite the higher epidemiological spread compared to the first wave.*

*(Interviewee 5)*

Moreover, according to the interview, the low turnout for vaccines in the Gaza Strip, compared to the world and even the West Bank, was a real problem faced during the

pandemic. The spread of false information and mistrust of vaccines through social media may have played a significant role in the low vaccination rate. Despite efforts to enforce vaccinations for government workers and linking the vaccine to government services, the desired goal of achieving community immunity was not met.

*It may be that the social media and sources of false information that were available to citizens played a major role in refusing to accept these vaccines, to the extent that at one stage we imposed vaccinations by force. This means that it is obligatory to receive the vaccine for those who work in government jobs and linking the vaccine to the various government services for the citizen.*

*(Interviewee 5)*

An academic interviewee (7), said that the level of transparency regarding the handling of the pandemic in Palestine was incomplete. The National Epidemiological Committee, which the interviewee was a member of, was careful to provide citizens with all the necessary information to make informed and independent decisions. However, the interviewee acknowledges that the government was not the main influencer in shaping citizen awareness and that social media played a larger role in shaping public perceptions. Despite attempts to communicate accurate information about the pandemic, there was a high volume of media misinformation that contributed to public mistrust in the government and the information being provided by the National Epidemiological Committee and the MOH. Additionally, some erroneous practices within the handling of the pandemic also shook the public's confidence in the information and opinions provided by the government.

Another academic made similar arguments to the previous academic and indicates that there were several major challenges related to trust and transparency during the pandemic. Firstly, there was a significant issue with infodemics, or the spread of false or misleading information, which contributed to the overall sense of uncertainty and confusion about the situation. The interviewee felt that the government could have done more to address this issue by creating a program for a daily dialogue between an expert from the Ministry of Health and the public.

*Regarding the issue of infodemic, what happened was a great disaster. There was no control over it and no warning of the wrong information being transmitted.*

*(Interviewee 20)*

*The issue of dealing with the infodemic was a fiasco.*

*(Interviewee 20)*

Additionally, there was a lack of transparency in the records and statistics related to the pandemic. The interviewee mentioned that many deaths of cancer patients and others were recorded as deaths due to COVID-19, which created confusion and mistrust among the public.

*There was talk about the lack of transparency in records and statistics. The cause of many deaths of cancer patients and others has been recorded as deaths due to Corona.*

*(Interviewee 20)*

The findings emerged from the international organization interviewee (10) regarding trust and transparency during the pandemic highlight a lack of confidence in the system and

the government's handling of the crisis. According to the representative, the community was losing trust in the government and its communication with the public every day.

*The problem is that you can do better all the time, but you have lost the community's trust in your communication. A lot of the press conferences that were happening were times that were a joke to people.*

*(Interviewee 10)*

The representative also pointed out that there was a great deal of confusion and a loss of direction in the government's approach to vaccines, and that the government's priority seemed to be scoring points instead of implementing a systematic and organized plan for vaccine distribution. The representative also mentioned that the lack of a clear and explicit policy regarding vaccines and poor practices at vaccination centers were contributing to a decrease in the number of people who wanted to receive the vaccine. According to a survey conducted by UNICEF, 60% of people wanted to receive the vaccine, but this percentage was gradually decreasing. The representative stated that there were clear problems that could be seen and heard at vaccination centers, and that they, as UNICEF, were trying to visit and address these problems.

*The method of dealing that occurred and how we were launching a national vaccination campaign was clearly floundering and the compass was lost. The mode for them was a show off. How to score points was more important than doing the thing in a systematic and organized way that helps to reach the largest percentage of vaccine coverage as quickly as possible.*

*(Interviewee 10)*

Findings of an interviewee who works in an International Organization interviewee showed, in terms of transparency, that the numbers were made public, but there were some sensitive issues such as decisions about closures that were not disclosed to the public. The society was not included in all discussions. According to the interviewee, when it comes to risk communication and coordination during a pandemic, there should be a designated spokesperson for risk communication and coordination. The speaking person must be qualified and the speech must be coordinated and well-studied in advance to avoid problems with consistency of messages. The interviewee stated:

*“Regarding the coordination of the speaking person, it could have been done in a better way than what happened (Interviewee 16).”* They explained that there were instances where there were inconsistencies in the messages being delivered. This led to confusion and a loss of confidence among the public.

With regards to trust, there was a problem, and more work needed to be done to gain the trust of citizens. At the beginning of the pandemic, everyone was committed, but with the second wave, confidence was shaken, especially as people became fatigued with the pandemic.

*At the beginning of the pandemic, with the first wave, everyone was committed. With the second wave, the confidence has been shaken, especially when people get tired (pandemic fatigue). This may also cause a loss of confidence.*

*(Interviewee 16)*

An international organization interviewee (23) highlights that the deep-seated distrust of the Palestinian health system, represented by the MOH. According to the interviewee, the

only program that still have some trust among the citizens is the EPI (Expanded Program of Immunization for children), evidenced by the high coverage rates for vaccines in Palestine.

*Other than that, I do not think that the citizen relies on the Ministry of Health, whether in hospitals or PHC.*

*(Interviewee 23)*

However, the interviewee notes that the Palestinian health system lacks transparency and credibility in transferring information to the public. There is a general belief among the citizens that the MOH and the government were hiding information that was deemed "in the public interest." This led to an increase in skepticism about the health system, including the misinformation about vaccines. The interviewee notes that there is no culture of transparency within the Palestinian health system and that the response to the pandemic was solely the responsibility of the government and the MOH.

*In fact, trust is something that is stabbed from the beginning, so what about the subsequent strikes? It was a lethal blow, frankly.*

*(Interviewee 23)*

Based on the findings provided by the Ministry of Education representatives, it appears that the trust and transparency regarding the handling of the pandemic was mixed. In the early stages of the pandemic, the government provided accurate information and managed the crisis well. However, as time passed, the representative felt that the government became less organized and that there was a lack of clarity in the information being provided, as well as in compensation for the economic losses faced by citizens. According to the interviewee (12), who works in the Ministry of Education too, it appears that the

issue of transparency was given high priority and importance during the pandemic, even in the face of conflicting numbers and information. It was important to the Ministry to ensure that no information was neglected or hidden. When information was communicated by high-level officials such as the minister or prime minister, it was ensured that all information was revealed, no matter how small or large it may have been. The Ministry of Education focused on ensuring that accurate and up-to-date information was communicated to the public. The representative mentioned that there was interest to unify the database and follow up on the details related to various aspects of the pandemic, including vaccines and individual safety.

Despite this, the interviewee (14) mentions that the numbers and information related to the health sector were clear and transparent, although there may have been some unintentional errors due to the limited number of trained personnel. The interviewee acknowledged that Palestine did well in this regard, despite some technical problems. According to the respondent in the Ministry of Education (15), the level of trust and transparency in the Ministry during the pandemic was good in terms of procedures to confront the pandemic.

*But with regard to the transparency related to the procedures to confront the pandemic, I think that things were fine.*

*(Interviewee 15)*

However, there were criticisms related to the abundance of information sources leading to inaccurate information, which causes citizens to doubt the information they receive later. From this aspect, the interviewee (15) suggests that the level of trust and

transparency during the pandemic was a matter of concern. The interviewee emphasizes the importance of having a unified database and unified data, as this would help to ensure that accurate information is being provided to the public. The interviewee focused on accuracy than on the openness and honesty of the information being provided.

A public health expert and former government manager interviewee indicates that the provision of raw data on the number of infections and deaths was not sufficient to build trust in the information provided during the pandemic. The interviewee believes that this information needs to be accompanied by actionable policies and measures based on the data. This lack of actionable information led to a contradiction in the information being communicated, both through traditional media and social media, which contributed to a crisis of trust among the citizens. The interviewee also noted that the interpretation of the raw data varied from region to region, and that the population density of a particular region also impacted the analysis of the disease, making the raw data less meaningful.

*I am not saying that the information was wrong, but it is not enough to be useful in terms of decision-making process.*

*(Interviewee 17)*

*There was a crisis of trust because there is a contradiction in the information, whether through the media or the social media.*

*(Interviewee 17)*

According to another NGO interview (18), who corresponding to the previous interviewee, the pandemic led to a crisis of trust due to several factors. The reports from the MOH regarding the numbers of infected cases and deaths were seen as good, but the dissemination of information was not clear enough. The issue of the Corona virus was



raised without enough attention given to the psychological problems, people with chronic diseases, and the elderly who are considered vulnerable. This lack of attention to these aspects further weakened the trust of the citizens in the information and measures being taken to address the pandemic.

*During the pandemic, some situations occurred that contributed negatively to the issue of trust, such as the issue of vaccines and the different types of vaccines. There was not enough communication to explain to people, such as the issue of expired medicines.*

*(Interviewee 18)*

The findings from the governorate interviewee indicate that the governorate was successful in building trust with the community by providing clear and detailed information about the pandemic and the decisions made to address it. This was achieved through a daily press conference that was based on recommendations from various committees and sub-committees, which ensured that all relevant information was disseminated to the public. The interviewee stated that this approach boosted confidence among the community and helped to build trust.

*The basis for building trust with the community is clarity in disclosing information, details and decisions. The daily press conference, which was based on the recommendations of the provincial committees, which in turn are based on the sub-committees..... This boosted confidence somewhat.*

*(Interviewee 21)*

An interviewee (22) working in the ministry of health believes that the government failed to provide accurate, correct, and comprehensive information during the pandemic, resulting in a lack of trust and transparency. The interviewee notes that the information

provided was often incomplete, which forced people to rely on the media and social media for information. As a result, the government was seen as responding after the news had already spread, rather than proactively providing information to the public. The worker believes that the MOH's failure to provide comprehensive information was a key factor in the loss of trust and transparency during the pandemic.

## Discussion

COVID-19 pandemic has represented a huge challenge for public health. To face the difficulties, the traditional public health paradigm is being changed and strengthened from a vertical, top-down to an inclusive, whole-of-society, and people-centered one (55,56). This study specifically intends to address the following objectives: What are the guiding principles of risk communication and community participation during the COVID-19 epidemic in Palestine? What is the level of community participation in Palestinian preparedness and response during the COVID-19 pandemic? How did the competent authorities and the community approach health communication?

The findings point to a conflicting viewpoints on community involvement during the COVID-19 outbreak in Palestine. Despite efforts to involve the community through local and national committees, it was difficult to articulate the government's vision for community participation and how people would be involved. However, there were restrictions on the community's capacity to organize voice concerns, possibly because of a top-down strategy. Although the government had trouble reaching all areas and satisfying their requirements, transparency in information transmission was nonetheless noted, which led to a fall in confidence. These findings underline the necessity of a transparent and all-inclusive strategy for community involvement during public health emergencies. Building trust and maintaining an efficient pandemic response require strengthening communication channels, actively including the community in decision-making procedures, and attending to the special needs of disadvantaged and vulnerable groups.

Overall, the results highlight the significance of ongoing assessment and development of community engagement techniques to promote communication, cooperation, and transparency between the government and the community during future public health emergencies. Findings show that the absence of engaging community in decision-making and planning processes, the government placed greater responsibility on the community to adhere to prevention measures and follow governmental instructions. This approach suggests that the government primarily perceived the community as passive recipients of instructions, rather than as active partners in responding to the pandemic. By excluding the community from the planning process initially, the government may have missed out on valuable insights and perspectives that could have contributed to a more effective pandemic response. Community members often have a deep understanding of local needs, cultural considerations, and social dynamics that can be critical for crafting effective and context-specific responses to a health crisis.

Community engagement is crucial for health system resilience and effective crisis management. A study published in 2017 indicated that community engagement plays a pivotal role within the context of health system resilience (57). Another study, which was published in 2020, relied on the Liberia's Ebola epidemic as evidence and showed that community engagement encompasses the active involvement and participation of individuals, groups, and organizational structures within a defined social boundary or catchment area of a community (58). This involvement extends to decision-making processes, strategic planning, design considerations, governance, and the delivery of services (58).

Moreover, there are several issues related to government-level policies and decision-making processes during the pandemic. There is a finding related to the absence of a national policy for (RCCE) in the event of the pandemic, which likely hindered effective community engagement efforts. This lack of a clear policy framework may have contributed to the challenges faced in engaging with the community in a meaningful way and in the absence of a well-established plan or policy further underscored the need for more coordinated and integrated approaches (as shown in later parts/themes). As the results show, the community itself was not actively engaged and included in the planning process, which primarily involved the government and other partners. The absence of meaningful community involvement hindered the effectiveness of the planning efforts and limited the potential impact on addressing the unique challenges faced by marginalized groups.

The Palestinian government's strategy, published on March 26th, 2020, follows the principles of containment and suppression, with the goal of protecting our residents from illness while also reducing stress on an already overburdened health-care system (59). Additionally, the crisis management structure (60) showed a top-down direction which is supported by the description of an interviewee about the hierarchical decision-making process, with the Prime Ministry holding the primary authority and the concentration of decision-making power at the top without significant involvement of local communities may have hindered the ability to incorporate diverse perspectives and local knowledge into the response strategies.

Additionally, the interviewee's perspective from the Ministry of Education highlighted the need for a partnership model that involves schools, students, parents, and health preventive measures. The absence of such a model made it challenging to respond quickly to the pandemic in the education sector. This emphasizes the significance of engaging all relevant stakeholders in decision-making processes, ensuring that responses are comprehensive, proactive, and tailored to the needs of the local community. It appears that there should be a space for further advocacy and efforts on inclusion of systematic approach in RCCE during public health global emergencies in Palestine.

On a more positive note, the interviewee from the Ministry of Social Development mentioned that meetings were held with long-term partners to discuss and define the plan for providing assistance. This highlights a collaborative approach and a willingness to engage with various stakeholders, demonstrating the potential benefits of inclusive decision-making processes.

The findings highlight the importance of establishing clear national policies, promoting collaborative partnerships, and integrating community engagement into decision-making processes. By adopting a more inclusive and participatory approach, governments can effectively harness local knowledge, enhance the responsiveness of their interventions, and ultimately strengthen community resilience during pandemic/s or other public health crises.

The incorporation of community voices in the policy-making process ensures that policies align with the needs, values, and aspirations of the community (61). This means that the

community engagement in the policy-making process enables policymakers to co-create more robust, responsive, and inclusive policies (61). By incorporating community voices, policymakers can identify and address policy gaps, anticipate potential negative consequences, and develop solutions that are more attuned to the needs of the community (61).

Additionally, the problem is that the lack of clear distribution of tasks can lead to a number of problems, including blurry situation as it can be difficult to know who is responsible for what. This can lead to confusion, duplication of effort, and missed deadlines. Another problem is that the individuals may take it upon themselves to define their own roles and responsibilities and may feel the need to impose themselves thus resulting in people working at cross-purposes and not contributing to the overall goal in addition to leading to conflict and tension, especially where there are different ideas about what needs to be done. Therefore, the implementation of a well-defined task distribution framework would have provided clarity to all involved, enabling them to understand their roles and contribute more effectively to the overall response efforts by reducing conflict and ensuring that everyone is on the same page towards the same goal and that decisions are made in a timely manner.

Because everyone's participation is critical during a pandemic, authorities must think of the public as active players, not merely recipients of orders, and engage them towards empowerment (62). For instance, in Norway, the national policy for restoring kindergartens allowed for some leeway. This enabled communities and individual

kindergartens to adjust limitations and protective measures to their own circumstances. Kindergarten teachers in certain areas gathered to debate and collectively agree on long-term local solutions to satisfy national standards. This method emphasizes the significance of allowing for autonomy, ownership and local decision-making in national planning (63).

A study's findings regarding the lessons learnt from Ebola epidemic and COVID-19 show a lack of data on pandemic preparedness and response competencies in the majority of affected nations. This demonstrates a critical misunderstanding of the skills and knowledge required for effective pandemic response (64).

Early COVID-19 pandemic experiences have highlighted the importance of capacity-building activities. This includes improving risk communication and coordinating actions to support the successful implementation and measurement of Risk Communication and Community Engagement (RCCE) strategies at all levels. The effectiveness of RCCE interventions is strongly dependent on the abilities of those participating, notably community health workers (CHW), who are frequently at the forefront of community health programs (65).

However, the paucity of thorough studies concentrating on capacity-building, particularly at the grassroots level, is alarming. While some academics have advocated for extensive and decentralized RCCE strategies that implicitly stress the role of community training and awareness, the evidence base supporting such initiatives remains sparse (66).



Further study on capacity building and the competencies of CHWs in the pandemic responses is required. Strengthening these areas is critical for constructing comprehensive and decentralized RCCE plans that focus community training and awareness building. We can increase the effectiveness of pandemic response efforts and improve overall community health outcomes by investing in capacity building.

A successful public health emergency response requires effective coordination and collaboration among all stakeholders participating in Risk Communication and Community Engagement (RCCE). It is critical to identify all partners and precisely describe their duties, as well as to keep them up to date throughout time. This procedure enables for a more accurate identification of areas that require improvement or more assistance.

RCCE is involved in a variety of activities, including technical and implementation support, finance and resource mobilization, advocacy, and the manufacturing and delivery of supplies and equipment. However, if sufficient coordination is not in place, parallel and uncoordinated activities by various partners may emerge, resulting in duplication of actions or opposing approaches. This can lead to inefficient resource utilization and reduce the overall effectiveness of the response (67).

To solve this difficulty, the government authority in charge of directing the response should take the lead in coordinating all partners' actions. They should make certain that partners are identified and actively participating in collaborative activities such as regular update meetings, information sharing, and documentation of their respective actions. It is

easier to assess progress and detect gaps or overlaps in interventions when partner activities are consolidated into a single report.

It is critical to underline that the primary purpose of intervening in a public health emergency is to help stop the spread of disease or to resolve the disaster. Effective collaboration among partners is critical to attaining this goal. While RCCE is a key component of the response, unclear stakeholder roles can stop progress and hinder overall efficacy (68).

Therefore, the findings emphasize the significance of identifying all partners, clarifying their roles, and ensuring continuing coordination and collaboration in RCCE efforts. Coordination is important for avoiding redundancy, contradictory actions, and wasteful resource allocation. To provide a coordinated and successful response to public health emergencies, the government should take the lead in coordinating partner actions.

According to the findings, the COVID-19 pandemic has motivated the application of lessons learnt from prior epidemics, such as SARS and MERS, to crucial research fields. Epidemiological research is being carried out in order to quantify transmission dynamics, analyze variable vulnerability among different population groups, and design effective public health measures to limit transmission and spread. This highlights the need of drawing on past experiences to inform present pandemic response methods (69).

The pandemic has also expedited the development of modelling and mapping approaches for mass vaccine rollouts and coverage effectiveness assessments. Modelling is important in pandemic response because it provides forecasts, guides resource allocation in

healthcare systems, and evaluates intervention techniques. Various modelling techniques can effectively help public health decision-making processes by including up-to-date data from international and local sources. Furthermore, modelling aids in the allocation of humanitarian funds for emergency technical support, helping to the worldwide response to COVID-19 (70).

Overall, the findings highlight the necessity of learning from prior epidemics, using modelling tools, and sharing data to improve our understanding of transmission dynamics and influence decision-making processes. By combining these tactics, public health responses to pandemics such as COVID-19 can be more effective (71).

Stakeholder involvement and risk communication are important in the context of educational institutions during the COVID-19 pandemic. Individuals or groups with legitimate interests in the organization's actions are defined as stakeholders. In the case of educational institutions, key stakeholders include students, faculty, staff, and administrators, while secondary stakeholders include parents, boards of education, alumni, and benefactors, depending on the type of educational organization (72).

Effective risk communication with both primary and secondary stakeholders necessitates a full awareness of their varying information requirements and preferences. Identification of key stakeholder representatives who can assist organizational leaders in understanding these requirements and preferences is critical. Local leaders can gain community support and increase the practicality of COVID-19 risk-reduction policies by including stakeholders in their creation and execution (73).

While limiting exposure may initially reduce the number of cases, there is a chance that the number of cases will eventually grow. For accurate data on case numbers, the availability and effectiveness of community COVID-19 testing and contact tracing tools are critical. However, communities must decide on acceptable levels of risk and how many cases are regarded too many in a school context (74).

During the COVID-19 epidemic, it was critical to prioritize support for vulnerable, disadvantaged, and at-risk communities. These groups frequently experience significant difficulties and restrictions in gaining access to important services, healthcare, and information. It is critical to ensure that Risk Communication and Community Engagement (RCCE) initiatives are accessible, culturally suitable, and gender-sensitive in order to satisfy their individual requirements (75).

Prioritizing vulnerable groups' representation in local decision-making processes is an important aspect of assisting them. Decision-making becomes more inclusive and represents a larger range of opinions when various voices from these communities are included. This not only assists in meeting the specific needs of vulnerable groups, but it also contributes to transformative power structures and community dynamics. Individuals from these groups being involved in decision-making ensure that their knowledge, skills, and experiences are taken into account, resulting in more effective and targeted response measures (75).

To do this, efforts should be taken to create an environment in which vulnerable groups can participate actively in decision-making processes. This may entail providing

resources, training, and assistance to facilitate their participation. Furthermore, developing gender sensitivity in decision-making is critical, as gender dynamics shape vulnerability and access to resources.

Overall, the findings highlight the importance of inclusive and participatory approaches that prioritize assistance and representation of vulnerable communities throughout the COVID-19 epidemic. We can ensure that their individual needs are met and that response actions are more effective and equitable by doing so.

The findings offer light on the evolution of communication strategy during the early phases of the COVID-19 epidemic, with a particular emphasis on the transition from one-way to two-way communication and its influence on diverse segments of the community. The one-way communication method, in which decisions and information were made and disseminated from the governorate without much public input, is common during the early phases of catastrophes and pandemics. Because of the necessity for quick decision-making and centralized information flow, this top-down method is frequently used. As the pandemic situation improved, it became clear that engaging the public and encouraging two-way communication were critical for better pandemic management. However, this was not implemented optimally in the Palestinian context.

One of the lessons learned from Oman's approaches of community engagement during COVID-19 pandemic highlighted the bottom-up approach allowing public to recognize what they need and act appropriately to satisfy their needs (76). This results in possession and sustainability (77). This included empowering community people, organizing

resources, and increasing the local population's sense of ownership by using three major approaches. First, neighborhood groups under the Healthy Cities and Villages Initiative provided a platform for involvement, networking, and the assessment of health information in response to changing demands. Second, the Willayat (District) health committees, with their distinctive multi-sectoral structure, facilitated state-level collaboration by integrating diverse community leaders and groups in developing and implementing pandemic action plans using available local resources. Finally, community volunteers were critical in delivering information, especially when physical access was restricted owing to distancing efforts. This approach resulted in a feeling of ownership and sustainability (76).

Later on, the use of two-way communication enabled a more interactive engagement between the government and the population. Meetings with senior government officials, representatives from government departments, municipalities, and different economic groups resulted in a more diversified and representative exchange of information.

This inclusiveness is likely to have led to greater public awareness and cooperation with pandemic measures, particularly in refugee camps where numerous actors and community leaders were involved in information dissemination.

The data in this study show that, when compared to other communities, two-way communication was especially effective in refugee camps. The presence of diverse forces at work, including as camp committees, UNRWA clinics, camp mayors, powerful persons, and political organizations, resulted in a strong network for information

exchange. This network enabled greater message customization to target individual community needs and concerns, resulting in increased trust and compliance with health norms. The interactive style of communication in the camps most certainly contributed to community members' feelings of empowerment and ownership, since they had opportunity to voice their opinions, ask questions, and provide feedback.

The study highlights a worrying absence of two-way contact between the Ministry of Health and the communities. The one-way communication model, in which messages were sent primarily from the ministry to the communities, resulted in low public engagement and participation. The absence of input and opportunities for communities to express themselves may have contributed to a sense of separation between the ministry and the communities. As a result, it may have hampered the effectiveness of public health campaigns and pandemic control efforts. Two-way communication, which allows for community feedback, is critical for analyzing the effectiveness of government efforts. It not only supports determining whether implemented activities are achieving their goals, but it also promotes transparency and confidence between authorities and the public (31).

It is worth noting the engagement of international organizations such as UNICEF in developing more efficient communication techniques. They were able to address public misconceptions and confusion by utilizing social media channels and involving volunteers from the same neighborhoods. Furthermore, their involvement in the RCCE (Risk Communication and Community Engagement) committee's weekly or bi-weekly meetings allowed them to get input from other institutions based on their engagement

with communities. Such initiatives highlight the need of a multifaceted approach in which information is acquired not just from authorities but also from the community via feedback mechanisms.

The findings of this study emphasize the need of using a two-way communication strategy during the COVID-19 pandemic. While one-way communication may be required early on for quick decision-making, switching to an interactive communication process allows for higher engagement, trust-building, and information personalization. Two-way communication was found to be especially helpful in developing cooperation and understanding in refugee camps, where several players are involved.

However, the study underlines the importance of improving communication tactics between the MOH and communities. A lack of feedback and participatory opportunities can lead to isolation and decreased public collaboration. The effective techniques used by international organizations in leveraging social media, involving volunteers, and participating in RCCE meetings provide significant insights for enhancing communication approaches in comparable circumstances.

Participatory approaches recognize that communities are active participants in their own development and well-being rather than passive beneficiaries of charity. Such approaches, by adopting these features, can result in more sustainable and locally-driven solutions, generating a sense of ownership and empowerment within communities (3,46).

The findings of our interviews emphasize the significance of openness and trust during the COVID-19 pandemic. The degree of transparency with which information such as



statistics, distribution of needs, and treatment were published proved a commitment to keeping the public informed. However, the early confusion and continually changing conclusions reduced decision-makers' confidence and damaged trust. Confusion and lack of confidence were exacerbated by conflicting information and frequent changes in judgments. In addition, a lack of preparation and unequal vaccination distribution weakened trust in the handling of the epidemic. Inconsistent messages and media misrepresentation exacerbated popular distrust even more. Despite efforts to offer correct information, messaging discrepancies and a lack of integrity in vaccine delivery undermined public trust. To create and retain confidence during a public health crisis, the findings emphasize the importance of constant and honest communication, effective preparation, and combating disinformation.

Transparency and trust are widely regarded as important in the context of the COVID-19 epidemic. The study's findings are consistent with earlier research that emphasizes the need of open communication during public health emergencies. Transparency in information provision, such as COVID-19 case numbers, resource distribution, and treatment methods, displays a commitment to keeping the public informed and participating in decision-making. Transparent and honest communication fosters confidence and increases compliance with preventive measures during public health emergencies (78).

Trust is an essential component of good crisis management because it influences public perception, adherence to guidelines, and collaboration with authorities. Trust is earned by

consistent and transparent behaviors, competency demonstration, and open conversation with the public. Trust has been especially important during the COVID-19 pandemic in ensuring public acceptance of vaccination efforts and commitment to containment measures.

However, the pandemic has made it difficult to retain trust and transparency. Confusion resulted from rapidly expanding scientific understanding, changing guidelines, and conflicting information. This emphasizes the necessity of authority communicating clearly and consistently, acknowledging ambiguities, and changing guidance when new evidence emerges. Transparency in decision-making processes, including the grounds for policy decisions and expert opinion, contributes to increased public knowledge and trust (79).

Furthermore, the impact of misinformation in the media on public trust is well documented. A study published in 2020 by Kouzy et al. stresses the impact of social media in propagating misinformation and altering public opinions throughout the epidemic. Inconsistent messages and the spread of incorrect information can exacerbate public mistrust and stymie successful communication initiatives (80).

This is in line with the findings of a study conducted in Canada that showed how the public becomes frustrated and loses trust when communications are inconsistent or contradictory (84). Transparent communication is essential for fostering public trust and improving adherence to public health interventions. It enables people to make informed decisions and prevents misinformation from spreading.

A main issue with vaccine distribution and unequal access is also eroding trust. Unequal distribution of vaccinations and perceived disparities in access contributed to vaccine hesitation and mistrust in pandemic response management. Transparency and trust are critical in managing and reducing the COVID-19 epidemic. It is critical for governments, health authorities, and institutions to be transparent in their communication, decision-making processes, and information distribution during a crisis, such as a public health emergency. Therefore, the transparency increases public trust and facilitates joint action to address the pandemic's difficulties (81).

Transparency in information exchange and decision-making processes has an impact on public trust. Confusion, inconsistent knowledge, unfair resource distribution, and media misrepresentation, on the other hand, can damage confidence. To ensure public engagement and confidence in the pandemic response, it is critical to prioritize consistent and honest communication, effective planning, and correcting misconceptions.

To summarize, transparency and trust are important components of successfully managing the COVID-19 epidemic. Transparent communication, clear messaging, and open engagement with the public all contribute to the development of trust and the promotion of adherence to public health guidelines. Authorities can improve public collaboration, reduce misinformation, and negotiate the hurdles posed by the pandemic by prioritizing transparency and creating trust.

## Conclusion

It appears that the Palestinian response to the pandemic was marked by a lack of clear rules and effective implementation, leading to confusion and misinformation. There was also a lack of transparency and trust in the health-care system, which aided in the spread of stigma and misinformation. The participation of different entities, including NGOs and international organizations, was frequently chaotic and hampered efficient cooperation. Capacity-building activities were extensive, but the influence on the overall reaction is unknown. Vulnerable and marginalized groups were identified; however, it is unclear whether their unique needs were met effectively.

The findings emphasize the significance of effective community participation and open communication in addressing the COVID-19 pandemic in Palestine. The government's position on community participation looked varied, with some respondents recognizing community collaborations while others highlighting inadequacies in engagement. Lack of clear planning and coordination, frequent changes in choices, and contradicting information were noted as barriers to public trust and confidence in the response.

Proper planning and the participation of all stakeholders emerged as essential components of successful community engagement. To avoid duplication of efforts and ensure efficient response measures, a well-defined national framework for risk communication and community participation was highlighted as vital. The reaction relied heavily on the involvement of multiple sectors and coordination among government agencies, non-governmental groups, and international organizations.

The local community's participation emerged as critical, with direct involvement in providing private quarantine areas, encouraging contact with schools and institutions, and supporting pandemic management efforts. Furthermore, traditional partners like as universities, non-governmental organizations, and UNRWA, as well as some experts, were actively involved in the pandemic response. However, issues persisted, such as the need for stronger public education and clear communication, addressing economic and educational consequences, and ensuring the response includes disadvantaged and vulnerable people.

Finally, during the COVID-19 pandemic, effective risk communication and community participation necessitate a comprehensive, coordinated, and transparent approach. To create confidence, foster cooperation, and effectively manage public health emergencies, all stakeholders must be involved, precise planning must be implemented, and obstacles in information dissemination and decision-making must be addressed. The findings highlight areas for improvement and emphasize the significance of ongoing learning and adaptation in public health crisis response.

The findings from the interviews highlight several aspects of community engagement, planning in the Palestinian response to the COVID-19 pandemic. The government's opinion on community engagement appeared to be varied, with some respondents recognizing community collaborations and others highlighting gaps in engagement and a lack of clear planning. The pandemic response developed over time, with an initial emphasis on prevention and containment efforts, shifting to addressing economic and

educational consequences as the outbreak progressed. The role of the local community emerged as critical in providing support and coordination. Local governments and civil society organizations played an important role in raising awareness and assisting individuals in need. However, there were difficulties, such as a lack of coordination.

During the epidemic, vulnerable and marginalized populations faced special obstacles. Efforts were made to meet their requirements, however providing focused services and assistance proved difficult. The response to mental health needs was identified as requiring more attention and a more structured manner. Despite the difficulties, there were some positive parts to the response.

Overall, the findings emphasize the necessity of transparent and coordinated planning, good communication, and community engagement in handling public health emergencies like as the COVID-19 pandemic. The pandemic's lessons should be used to develop future preparedness and response plans to better address the needs of vulnerable people and increase confidence and collaboration among all stakeholders.

The findings of the interviews emphasize the necessity of trust and honesty in dealing with the COVID-19 pandemic in Palestine. The early stages of the pandemic were characterized by one-way communication between the government and the general populace, with information coming primarily from official sources. However, as the pandemic proceeded, two-way communication and community engagement became increasingly vital in fostering trust and meeting the public's needs.

The ability of the government to effectively interact with the public and give transparent and accurate information was critical in earning popular trust. However, difficulties emerged as a result of inconsistent information from numerous sources within the government, leading to citizen misunderstanding and mistrust.

During the epidemic, the work of humanitarian organizations and international organizations in providing support and coordination was highlighted. However, there were some concerns about a lack of coordination and efficacy in some cases, which may have had an influence on community engagement.

During the pandemic, vulnerable and marginalized populations faced specific obstacles, and efforts to meet their needs were not always enough. A lack of clarity and transparency in decision-making, particularly on vaccine distribution and fiscal support, contributed to public distrust.

Overall, the findings indicate that preserving transparency, guaranteeing accurate communication, and actively interacting with the community are critical in addressing public health crises such as the COVID-19 epidemic. Building and sustaining trust is critical for securing the public's participation and support and enabling a cohesive and coordinated response to such catastrophes. This study does not provide evidence on the nature and scale of community engagement during the pandemic. Therefore, it is recommended to include this aspect in further studies in this field.

## Limitations

Due to the small number of interviews or sources used, the study may not adequately cover the diversity of stakeholders and populations in Palestine. The data may not represent all types of community engagement in Palestine during the pandemic. Moreover, Gaza Strip participation in terms of number of interviewees was very limited due to difficulty in contacting them and this might impact the results. The study focused on key formal stakeholders and did not include members of the general public or key groups like young people. Missing young people from the interviews can lead to a limited perspective of the community's experiences, restricting insights, limiting policy development, and reinforcing power disparities. This omission might result in inadequate policy suggestions. It would be important to include young people in such research or to conduct subsequent separate interviews or focus groups with them to capture their particular perspectives and needs.

Moreover, the position of the interviewees may bias their perspectives and have an impact on the impartiality and dependability of the information acquired. Recall bias effect, which is common in retrospective studies, may result in erroneous and inadequate data gathering because individuals may forget facts or unintentionally exaggerate or downplay recollections (82). This bias can lead to under- or over-reporting of behaviors or outcomes, compromising the study's validity.

The data in this paper may not give enough context or in-depth insights about the exact interventions, tactics, or initiatives adopted for community participation in Palestine



during the epidemic. Due to the specific nature of the study and data sources used, the findings and conclusions generated from the data may have limited generalizability to other contexts or regions outside of Palestine.

## The lessons learned from this study

1. The study emphasizes the importance of unifying community involvement perspectives and a clear goal vision across the government and all stakeholders.
2. Using a two-way communication strategy in which the government and the community communicate and share information, particularly during a public health crisis is critical. This enables improved comprehension, input, and targeted solutions to community requirements.
3. Trust and transparency are essential between government officials, foreign organizations, and local communities.
4. Local community partners, such as community-based groups, local government agencies, and community leaders, should be assigned clear and specific roles and responsibilities.

## Recommendations

Based on the findings of this study, various recommendations for improving RCCE (Risk Communication and Community Engagement) in Palestine during future health crisis and pandemics can be made:

1. Clear and comprehensive pandemic response policies and plans must be developed, with an emphasis on efficient implementation and coordination among all sectors and stakeholders.
2. Creating a partnership model for community engagement, the following steps could be the basis of a proposed partnership model, which would need to be validated and adapted.
  - a) Defining the objectives and goals of the interaction.
  - b) Create a detailed stakeholder map that includes persons, organizations, local agencies, and community groups.
  - c) Sorting these stakeholders according to their amount of influence and interest.
  - d) Assess the stakeholders requirements and resources.
  - e) Create customized strategies for each group and define collaboration expectations within the context of a partnership framework.
  - f) Create a clear engagement plan that includes specific actions and timetables, as well as a communication strategy for regular updates.

- g) Create feedback systems to enable ongoing communication and capacity-building initiatives as needed.
- h) Assess the partnership's progress on a regular basis, modifying techniques as the requirements of the community change.
- i) Recognize and appreciate the efforts of partners, prepare for long-term sustainability, and ensure that monitoring and reporting procedures are in place to assess progress and issues.

This comprehensive approach to partnership formation encourages successful community engagement by harnessing varied resources and expertise to achieve beneficial results.

- 3. It is critical to increase transparency and trust in the health-care system, which may be accomplished by regular and accurate information, communication with the public.
- 4. It is critical to prioritize the needs and rights of vulnerable and disadvantaged groups, and customized solutions should be introduced to address their specific issues.
- 5. Rather than addressing urgent requirements, capacity-building programs for both government staff and stakeholders should emphasize the development of long-term skills and knowledge regarding communication and community engagement.
- 6. Finally, further studies on risk communication and community engagement in Palestine are needed in order to have a more comprehensive view and to include

the youth and other groups not represented in this study as well as to develop mechanisms for enhancing communication and community engagement.

# Annexes

## Annex 1: Interviews questions

1. What is the role that the government (Ministry of Health) gave to community participation to face COVID-19 pandemic?
2. At what stage of the pandemic did it seem that the involvement of the local communities was a necessity to face the pandemic? How have the local partners been identified?
3. How can you describe the evolution of community engagement during the successive phases and waves of the pandemic?
4. Who is responsible for effectively managing risk communication with and engaging local communities in facing the pandemic?
5. How was community participation managed? On whom did you rely on social mobilizing? (Did it include religious leaders, representatives from political organizations, municipal representatives, or non-governmental organizations ...?)
6. What are the RCCE standards adopted and worked through?
7. How was the National Action Plan developed to address the priorities and the sensitive issues in communities.
8. What are the methods of communication that have been adopted and worked through? Were the methods one-way (directive) or two-way communication?

9. How were the community priorities identified in the response plan? How were the priorities of local partners identified in order to fill the gaps related to technical support and reinforce capacities and capabilities? (facilitating participatory approach)
10. What are the criteria relied on to identify the vulnerable and marginalized groups as they are more prone to suffer from the complications of this pandemic? How were these groups classified?
11. To what extent were the competent authorities adopting standards of transparency and building confidence in managing this crisis and reducing tension and panic resulting from the uncertainty about the nature of the pandemic?
12. What is the role that the UNRWA and the other non-governmental health care providers gave to community participation to face COVID-19 pandemic?

1. ما هو الدور الذي أعطته الحكومة (وزارة الصحة) للمشاركة المجتمعية لمواجهة جائحة كورونا؟
2. في أي مرحلة من مراحل الجائحة بدأ أن اشراك المجتمع المحلي ضرورة لمواجهة الجائحة؟ وكيف تم تحديد الشركاء المحليين؟
3. كيف تطورت المشاركة المجتمعية خلال المراحل والموجات المتتالية للجائحة؟
4. من هو المسؤول عن إدارة التواصل مع المجتمعات المحلية واشراكها بشكل فعال في مواجهة الجائحة؟
5. كيف كانت تدار المشاركة المجتمعية؟ ومع من؟ (هل شملت قيادات دينية، ممثلين من تنظيمات سياسية، أو ممثلين بلديات، أو منظمات غير حكومية...؟)
6. ما هي المعايير التي تم تبنيها والعمل من خلالها لإشراك المجتمع المحلي (RCCE standards)؟
7. كيف تم تطوير خطة العمل الوطني لمواجهة القضايا ذات الأولوية والحساسية في المجتمعات

8. ما هي أساليب التواصل التي تم اعتمادها والعمل من خلالها؟ وهل كانت الأساليب ذات اتجاه واحد أو اتجاهين؟
9. كيف تم تحديد الأولويات المجتمعية في خطة الاستجابة؟ وكيف تم تحديد أولويات الشركاء المحليين من أجل سد الثغرات المتعلقة بالدعم الفني وتطوير القدرات والامكانيات؟ facilitating participatory approach
10. ما هي المعايير التي تم العمل من خلالها لتحديد المجموعات الضعيفة والمهمشة والأكثر عرضة لمضاعفات هذه الجائحة؟ وكيف تم تصنيف هذه المجموعات؟
11. إلى أي درجة كانت الجهات المختصة تعتمد معايير الشفافية وبناء الثقة في إدارة هذه الأزمة وتخفيف التوتر وحالة الهلع الناتجة عن الضبابية حول طبيعة الوباء؟
12. ما هو الدور الذي أعطته وكالة الغوث والمنظمات العاملة في النظام الصحي للمشاركة المجتمعية لمواجهة جائحة كورونا؟



## Annex 2: Questions based on the target population

Target population	Topic	Question/s
Policy- and decision-makers in the Ministry of Health	<ul style="list-style-type: none"> <li>- Governance</li> <li>- Participatory approach</li> </ul>	Q1-11
NGOs' policy makers (United Nations Relief and Works Agency for Palestine Refugees (UNRWA), Palestine Red Crescent Society (PRCS)).	<ul style="list-style-type: none"> <li>- Community-centered</li> <li>- Nationally-led</li> <li>- Data-driven</li> <li>- Collaboration and coordination</li> </ul>	Q2-10,12
International organizations representatives (The United Nations Children's Fund (UNICEF), World Health Organization (WHO)).	<ul style="list-style-type: none"> <li>- Trust building</li> <li>- Transparency and accountability</li> </ul>	Q1-12
Local communities' representatives including head of municipalities and local emergency committees members).	<ul style="list-style-type: none"> <li>- Inclusiveness</li> </ul>	Q1-3,5,6,8-11

## Annex 3: Ethical Approval



### Institute of Community and Public Health – Birzeit University

#### Ethics Review Committee Decision

**Date:** November 25, 2021

**Applicant's name:** Dr. Weeam Hammoudeh (thesis supervisor)

**Institution:** Institute of Community and Public Health

<b>Reference No:</b>	<b>2021 (6 – 2)</b>
<b>Project Title:</b>	<b>Communication and community engagement in emergency preparedness and response during COVID-19 pandemic in Palestine</b>
<b>Names of contributing researchers, other than the Principal Investigator/ Applicant:</b>	Khaled Shiha (MPH student)

Thank you for submitting your application for the ethics review of your research proposal. Your application was examined carefully, and discussed by the Ethics Review Committee during a meeting which took place on November 25, 2021. The following documents were reviewed:

1. Ethics Review Application Letter/Form
2. Project proposal

#### **The ICPH -BZU Research Ethics Review Committee has approved your research proposal.**

Approval is given for three years. Projects, which have not commenced within two years of original approval, must be re-submitted to the Ethics Review Committee. You must inform the Committee when the research has been completed. If you are unable to complete your research within the three year validation period, you will be required to write to the Ethics Review Committee to request an extension. You may also need to re-apply for approval by the Committee.

Any serious adverse events or significant changes which occur in connection with this study and/or which may alter its ethical considerations must be reported immediately to the Ethics Review Committee. On such an occasion, an "Amendment Form" must be submitted to the Committee for re-assessment.

Thank you,  
Ethics Review Committee Coordinator  
**Maysaa Nemer, PhD**



**Institute of Community and Public Health – Birzeit University**  
**Ethics Review Committee (ERC)**

**Part I: To be completed by the applicant:**

**Date:** June 26, 2021

**Applicant's Name:** Dr. Weeam Hammoudeh (thesis supervisor)

**Unit:** Institute of Community and Public Health

<b>Reference No:</b>	2021 (6 – 2)
<b>Project Title:</b>	Communication and community engagement in emergency preparedness and response during COVID-19 pandemic in Palestine
<b>Names of contributing researchers, other than the Principal Investigator/ Applicant:</b>	Khaled Shiha (MPH student)

**Comments:**

We have attached the full proposal and consent form.




**Part II: To be completed by the (ERC)**

**Decision:**

The ICPH-BZU Research Ethics Review Committee approves this study.

**Decision date:** November 25, 2021

**Ethics Review Committee members, qualifications and signatures:**

Name	Specialty	Qualifications	Signature
Maysaa Nemer	Occupational Epidemiology	PhD	
Rula Ghandour	Public Health	MPH	
Shiraz Nasr	Spatial Analysis	MSA	

#### Annex 4: Informed Consent

##### طلب موافقة على المشاركة في بحث علمي

**عنوان الدراسة:** التواصل بشأن المخاطر والمشاركة المجتمعية في التأهب والإستجابة للحالة الطارئة خلال جائحة كورونا في فلسطين.

**إسم الباحث الرئيسي:** د. خالد شبيحة.

**إسم المشرف على البحث:** د. وئام حموده.

**ملخص البحث:** هذه الدراسة هي دراسة نوعية عن التواصل من أجل المخاطر والمشاركة المجتمعية في التأهب والإستجابة لجائحة كورونا في فلسطين.

تهدف هذه الدراسة إلى البحث بعمق وإستكشاف المبادئ العامة التي تم اتباعها في فلسطين من أجل التواصل ومشاركة المجتمع في مواجهه هذه الحالة الطارئة.

كما وستحاول هذه الدراسة تحديد نهج التواصل الصحي الذي تم اتباعه بين السلطات المختصة والمجتمع.

وأخيرا ستحاول هذه الدراسة لقاء الضوء على مدن المشاركة المجتمعية في التصدي لجائحة كورونا.

**أسلوب البحث والعينة المختارة:** هذه الدراسة والتي ستكون رسالة تخرج في برنامج ماجستير الصحة العامة – جامعة بيرزيت، تقوم على المقابلات الوجيهة شبه المنظمة مع مجموعة منتقاه من الشخصيات المؤثرة ( عينة هادفة مسبقة ) تشمل صانعي القرار في وزارة الصحة الفلسطينية، المنظمات غير الحكومية، المنظمات الدولية والمجتمع المحلي، ستكون مدة المقابلة الواحدة بين 60-80 دقيقة.

**الخصوصية:** سيتم التعامل مع المشاركين في هذه الدراسة بأقصى درجات الخصوصية، وعدم نشر أي معلومة عنهم، وسيتم تحليل المعلومات والمقابلات بشكل مجهول.

سيكون الوصول لمحتوى المقابلات والتسجيلات الصوتية متاحا فقط للعاملين على هذه الدراسة وسيتم اتلاف كافة هذه المواد فور الانتهاء من الدراسة.

**التوقف أو الانسحاب من المقابلة:** يحق لأي مشارك في هذه الدراسة إيقاف المقابلة أو الانسحاب وعدم المشاركة في الدراسة في أي وقت.

**طريقة التواصل مع الباحث :** يمكنك التواصل مع ( د. خالد شبيحة ) عن طريق ( 0595599599 )

أو ( Khaled2bs@yahoo.com ) إذا كانت لديك بعض الأسئلة عن الدراسة.

حصلت على شرح مفصل عن الدراسة وأهدافها وإجراءاتها، ومنافعها، والمخاطر المحتملة وعن الحرية الكاملة للمشاركة.

أوافق على أن أشارك في هذه الدراسة بطوعية وبدون أي نوع من الإجبار أو الضغوط، أفهم ان بإمكانني التوقف عن المشاركة في أي وقت.

أعلم أنه سيتم تسجيلي بالصوت كجزء من هذه الدراسة.

○ أوافق على ( تسجيلي بالصوت ) بطوعية وبدون أي نوع من الإجبار أو الضغوط.

○ لا أوافق على ( تسجيلي بالصوت )

إسم المشارك:

التاريخ:

التوقيع:

التوقيع:

إسم الباحث:

## References

1. World Health Organization Director. General's opening remarks at the media briefing on COVID-19 - 11 March 2020 [Internet]. 2020 [cited 2020 Oct 10]. Available from: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
2. Weekly epidemiological update - 9 February 2021 Data as received by WHO from national authorities, as of 7 February 2021, 10 am CET.
3. World Health Organization. COVID-19 global risk communication and community engagement strategy, December 2020 - May 2021: interim guidance, 23 December 2020. World Health Organization; 2020.
4. Thomas S, Sagan A, Larkin J, et al. Strengthening health systems resilience: Key concepts and strategies [Internet]. Copenhagen (Denmark): European Observatory on Health Systems and Policies; 2020. (Policy Brief, No. 36.) Policy brief. Available from: <http://www.euro.who.int/en/health-topics/communicable-diseases/publications/2020/01/strengthening-health-systems-resilience-key-concepts-and-strategies>
5. World Health Organization. International health regulations (2005). Third edit. WHO; 2016. 84 p.
6. Atkinson J-A, Vallely A, Fitzgerald L, Whittaker M, Tanner M. The architecture and effect of participation: a systematic review of community participation for communicable disease control and elimination. Implications for malaria elimination. Malar J [Internet]. 2011;10(1):225. Available from: <http://www.malariajournal.com/content/10/1/225>

<https://doi.org/10.1186/1475-2875-10-225>

7. Gilmore B, Ndejjo R, Tchetchia A, de Claro V, Mago E, Diallo AA, et al. Community engagement for COVID-19 prevention and control: a rapid evidence synthesis. *BMJ Glob Heal* [Internet]. 2020;5(10). Available from: <https://gh.bmj.com/content/5/10/e003188>
8. Bedson J, Jalloh M, Pedi D, Bah S, Owen K, Oniba A, et al. Community engagement in outbreak response: Lessons from the 2014-2016 Ebola outbreak in Sierra Leone. *BMJ Glob Heal*. 2020;5:e002145.
9. World Health Organization. COVID-19 strategic preparedness and response plan: Operational planning guidance to support country preparedness and response. Geneva, Switzerland; 2020.
10. World Health Organization. COVID-19 strategic preparedness and response plan: Country preparedness and response status for COVID-19 as of 28 February 2020. 2020.
11. State of Palestine. State of Emergency Palestine ' s COVID-19 Response Plan [Internet]. 2020. Available from: [http://www.emro.who.int/images/stories/palestine/documents/Palestine\\_Authority\\_COVID-19\\_Response\\_Plan\\_Final\\_26\\_3\\_2020.pdf?ua=1](http://www.emro.who.int/images/stories/palestine/documents/Palestine_Authority_COVID-19_Response_Plan_Final_26_3_2020.pdf?ua=1)
12. Bath J, Wakerman J. Impact of community participation in primary health care: what is the evidence? *Aust J Prim Health*. 2015;21(1):2–8.
13. Laverack G, Manoncourt E. Key experiences of community engagement and social mobilization in the Ebola response. *Glob Health Promot*. 2016 Mar;23(1):79–82.

14. World Health Organization. WHO community engagement framework for quality, people-centred and resilient health services. Geneva; 2017.
15. O'Mara-Eves A, Brunton G, McDaid D, Oliver S, Kavanagh J, Jamal F, et al. Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis [Internet]. Southampton, UK: NIHR Journals Library (Public Health Research, No. 1.4.); 2013. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK262817/> doi: 10.3310/phr01040
16. Federal Emergency Management Agency. A whole community approach to emergency management: Principles, themes, and pathways for action. 2011;
17. Reed MS, Curzon R. Stakeholder mapping for the governance of biosecurity: a literature review. *J Integr Environ Sci* [Internet]. 2015 Jan 2;12(1):15–38. Available from: <https://doi.org/10.1080/1943815X.2014.975723>
18. De Weger E, Van Vooren N, Luijkx KG, Baan CA, Drewes HW. Achieving successful community engagement: a rapid realist review. *BMC Health Serv Res*. 2018 Apr;18(1):285.
19. European Centre for Disease Prevention and Control. A literature review on community and institutional emergency preparedness synergies. Stockholm; 2017.
20. Ramsbottom A, O'Brien E, Ciotti L, Takács J. Enablers and Barriers to Community Engagement in Public Health Emergency Preparedness: A Literature Review. *J Community Health*. 2018;43:1–9.
21. Laverack G. The Role of Health Promotion in Disease Outbreaks and Health Emergencies. *Societies*. 2017;7:2.

22. ECDC. A literature review of trust and reputation management in communicable disease public health. 2011.
23. van der Bles AM, van der Linden S, Freeman ALJ, Spiegelhalter DJ. The effects of communicating uncertainty on public trust in facts and numbers. *Proc Natl Acad Sci U S A*. 2020 Apr;117(14):7672–83.
24. Mishel MH. Reconceptualization of the uncertainty in illness theory. *Image J Nurs Sch*. 1990;22(4):256–62.
25. Han PKJ, Klein WMP, Arora NK. Varieties of uncertainty in health care: a conceptual taxonomy. *Med Decis Mak an Int J Soc Med Decis Mak*. 2011;31(6):828–38.
26. Finset A, Bosworth H, Butow P, Gulbrandsen P, Hulsman RL, Pieterse AH, et al. Effective health communication - a key factor in fighting the COVID-19 pandemic. Vol. 103, *Patient education and counseling*. 2020. p. 873–6.
27. Lauer SA, Grantz KH, Bi Q, Jones FK, Zheng Q, Meredith HR, et al. The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly Reported Confirmed Cases: Estimation and Application. *Ann Intern Med*. 2020 May;172(9):577–82.
28. Eisenberg SA, Kurita K, Taylor-Ford M, Agus DB, Gross ME, Meyerowitz BE. Intolerance of uncertainty, cognitive complaints, and cancer-related distress in prostate cancer survivors. *Psychooncology*. 2015 Feb;24(2):228–35.
29. Daugherty EL, Carlson AL, Perl TM. Planning for the inevitable: preparing for epidemic and pandemic respiratory illness in the shadow of H1N1 influenza. *Clin*



- Infect Dis an Off Publ Infect Dis Soc Am. 2010 Apr;50(8):1145–54.
30. Paek H-J, Hilyard K, Freimuth V, Barge JK, Mindlin M. Theory-based approaches to understanding public emergency preparedness: implications for effective health and risk communication. *J Health Commun.* 2010 Jun;15(4):428–44.
  31. Wray RJ, Becker SM, Henderson N, Glik D, Jupka K, Middleton S, et al. Communicating with the public about emerging health threats: lessons from the Pre-Event Message Development Project. *Am J Public Health.* 2008 Dec;98(12):2214–22.
  32. Hornik R. Epilogue: evaluation design for public health communication programs. In: *Public Health Communication: Evidence for Behavior Change.* Mahwah, NJ: Lawrence Erlbaum Associates; 2002.
  33. Rubin GJ, Chowdhury AK, Amlôt R. How to communicate with the public about chemical, biological, radiological, or nuclear terrorism: a systematic review of the literature. *Biosecur Bioterror.* 2012 Dec;10(4):383–95.
  34. Rubin GJ, Potts HWW, Michie S. The impact of communications about swine flu (influenza A H1N1v) on public responses to the outbreak: results from 36 national telephone surveys in the UK. *Health Technol Assess.* 2010 Jul;14(34):183–266.
  35. Young ME, Norman GR, Humphreys KR. Medicine in the popular press: the influence of the media on perceptions of disease. *PLoS One.* 2008;3(10):e3552.
  36. Savoia E, Lin L, Viswanath K. Communications in public health emergency preparedness: a systematic review of the literature. *Biosecur Bioterror.* 2013 Sep;11(3):170–84.

37. Viswanath K, Ackerson LK. Race, Ethnicity, Language, Social Class, and Health Communication Inequalities: A Nationally-Representative Cross-Sectional Study. PLoS One [Internet]. 2011;6(1):1–8. Available from: <https://doi.org/10.1371/journal.pone.0014550>
38. Okan O, Messer M, Sorensen K. COVID-19: a guide to good practice on keeping people well informed. 2020;
39. The Lancet. Redefining vulnerability in the era of COVID-19. Lancet (London, England) [Internet]. 2020 Apr 6;395(10230):1089. Available from: [https://www.unboundmedicine.com/medline/citation/32247378/Redefining\\_vulnerability\\_in\\_the\\_era\\_of\\_COVID-19](https://www.unboundmedicine.com/medline/citation/32247378/Redefining_vulnerability_in_the_era_of_COVID-19).
40. Ataguba OA, Ataguba JE. Social determinants of health: the role of effective communication in the COVID-19 pandemic in developing countries. Glob Health Action [Internet]. 2020;13(1):1788263. Available from: <https://doi.org/10.1080/16549716.2020.1788263>
41. World Health Organization Regional Office for Europe UN City. Factsheet - Vulnerable populations during COVID-19 response - Addressing vulnerability upfront in the WHO European Region (October 2020) [Internet]. Copenhagen; 2020 [cited 2021 Feb 2]. Available from: <https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/vulnerable-populations/factsheet-vulnerable-populations-during-covid-19-response-addressing-vulnerability-upfront-in-the-who-european-reg>
42. United Nations International Children’s Fund. Minimum quality standards and

- indicators for community engagement [Internet]. 2020. Available from: <https://www.unicef.org/mena/reports/community-engagement-standards>
43. WHO Regional Office for Europe. Pandemic fatigue - Reinvigorating the public to prevent COVID-19, September 2020 [Internet]. Copenhagen OE, Denmark; 2020. Available from: <https://apps.who.int/iris/bitstream/handle/10665/335820/WHO-EURO-2020-1160-40906-55390-eng.pdf>
  44. RCCE technical working group. Finding community-led solutions to COVID-19 [Internet]. 2020. Available from: <https://communityengagementhub.org/resource/finding-community-led-solutions-to-covid-19/>
  45. International Federation of Red Cross And Red Crescent Societies. COVID-19 Pandemic Six Month Update: Reporting timeframe: 31 January - 31 July 2020 [Internet]. 2020. Available from: <https://reliefweb.int/report/world/covid-19-pandemic-six-month-update-reporting-timeframe-31-january-31-july-2020>
  46. European Centre for Disease Prevention and Control. Guidance on community engagement for public health events caused by communicable disease threats in the EU/EEA, 2020. Stockholm: ECDC; 2020.
  47. Goodman RM, Speers MA, McLeroy K, Fawcett S, Kegler M, Parker E, et al. Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Heal Educ Behav Off Publ Soc Public Heal Educ*. 1998 Jun;25(3):258–78.

48. Cassels A. Health sector reform: key issues in less developed countries. *J Int Dev.* 1995;7(3):329–47.
49. Nyamapachitu-Mago E, Ndejjo R, de Claro V, Diallo A, Tchetchia A, Gilmore B, et al. Community engagement for COVID-19 infection prevention and control: A rapid review of the evidence. 2020.
50. Gibson PJ, Theadore F, Jellison JB. The common ground preparedness framework: a comprehensive description of public health emergency preparedness. *Am J Public Health.* 2012 Apr;102(4):633–42.
51. Stoto MA, Nelson C, Savoia E, Ljungqvist I, Ciotti M. A Public Health Preparedness Logic Model: Assessing Preparedness for Cross-border Threats in the European Region. *Heal Secur.* 2017;15(5):473–82.
52. van Dale D, Lemmens L, Hendriksen M, Savolainen N, Nagy P, Marosi E, et al. Recommendations for Effective Intersectoral Collaboration in Health Promotion Interventions: Results from Joint Action CHRODIS-PLUS Work Package 5 Activities. *Int J Environ Res Public Health.* 2020 Sep;17(18).
53. World Health Organization. A Strategic Framework for Emergency Preparedness [Internet]. Geneva; 2016 [cited 2020 Dec 12]. Available from: <http://apps.who.int/iris/bitstream/10665/254883/1/9789241511827-eng.pdf>.
54. Kyngäs, H. (2020). Inductive Content Analysis. In: Kyngäs, H., Mikkonen, K., Kääriäinen, M. (eds) *The Application of Content Analysis in Nursing Science Research*. Springer, Cham. [https://doi.org/10.1007/978-3-030-30199-6\\_2](https://doi.org/10.1007/978-3-030-30199-6_2).
55. Beauchamp T, Walters L. *Contemporary issues in bioethics*. sixth. Boston:

- Wadsworth, Inc; 2003.
56. Heymann DL, Shindo N. COVID-19: what is next for public health? *The lancet*. 2020;395(10224):542–5.
  57. McCloskey B, Zumla A, Ippolito G, Blumberg L, Arbon P, Cicero A, et al. Mass gathering events and reducing further global spread of COVID-19: a political and public health dilemma. *The Lancet*. 2020;395(10230):1096–9.
  58. Kruk ME, Ling EJ, Bitton A, Cammett M, Cavanaugh K, Chopra M, et al. Building resilient health systems: a proposal for a resilience index. *Bmj*. 2017;357.
  59. Barker KM, Ling EJ, Fallah M, VanDeBogert B, Kodl Y, Macauley RJ, et al. Community engagement for health system resilience: evidence from Liberia’s Ebola epidemic. *Health Policy Plan*. 2020;35(4):416–23.
  60. The Government of Palestine. State of Emergency Palestine’s COVID-19 Response Plan [Internet]. 2020 Mar. Available from: [https://www.emro.who.int/images/stories/palestine/documents/Palestine\\_Authority\\_COVID-19\\_Response\\_Plan\\_Final\\_26\\_3\\_2020.pdf?last access 20.7.2023](https://www.emro.who.int/images/stories/palestine/documents/Palestine_Authority_COVID-19_Response_Plan_Final_26_3_2020.pdf?last%20access%2020.7.2023)
  61. خطط حكومية - مجلس الوزراء - فلسطين - إدارة حالة الطوارئ الفلسطينية “كورونا أثناء أزمة الوباء العال - كوفيد 19”ة الزمنية ر خالل الفت 5 آذار/مارس – 25 أيار/مايو 2020 - تاريخ النشر 2020/06/21
  62. Marston C, Renedo A, Miles S. Community participation is crucial in a pandemic. *The Lancet*. 2020;395(10238):1676–8.

63. Hyland-Wood B, Gardner J, Leask J, Ecker UK. Toward effective government communication strategies in the era of COVID-19. *Humanit Soc Sci Commun*. 2021;8(1).
64. Lal A, Ashworth HC, Dada S, Hoemeke L, Tambo E. Optimizing pandemic preparedness and response through health information systems: lessons learned from Ebola to COVID-19. *Disaster Med Public Health Prep*. 2022;16(1):333–40.
65. World Health Organization. Pandemic fatigue–reinvigorating the public to prevent COVID-19: policy framework for supporting pandemic prevention and management. World Health Organization. Regional Office for Europe; 2020.
66. Hu G, Qiu W. From guidance to practice: Promoting risk communication and community engagement for prevention and control of coronavirus disease (COVID-19) outbreak in China. *J Evidence-Based Med*. 2020;13(2):168–72.
67. Atkinson JA, Vallely A, Fitzgerald L, Whittaker M, Tanner M. The architecture and effect of participation: a systematic review of community participation for communicable disease control and elimination. Implications for malaria elimination. *Malar J*. 2011;10:1–33.
68. Tambo E, Djuikoue IC, Tazemda GK, Fotsing MF, Zhou XN. Early stage risk communication and community engagement (RCCE) strategies and measures against the coronavirus disease 2019 (COVID-19) pandemic crisis. *Global Health Journal*. 2021;5(1):44-50

69. Gonah L. Key Considerations for Successful Risk Communication and Community Engagement (RCCE) Programmes During COVID-19 Pandemic and Other Public Health Emergencies. *Annals of Global Health*. 2020;86. DOI: 10.5334/aogh.3119
70. Qiu W, Chu C, Mao A, Wu J. The impacts on health, society, and economy of SARS and H7N9 outbreaks in China: a case comparison study. *J Environ Public Health*. 2018;2018.
71. WHO Statement Regarding Cluster of Pneumonia Cases in Wuhan, China. WHO Statement Regarding Cluster of Pneumonia Cases in Wuhan, China 2020. <https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-wuhan-china>.
72. World Health Organization. Risk communication and community engagement (RCCE) action plan guidance COVID-19 preparedness and response. 2020;
73. Hoover AG. Defining environmental health literacy. *Environ Health Lit*. 2019;3–18.
74. Clarkson ME. A stakeholder framework for analyzing and evaluating corporate social performance. *Acad Manage Rev*. 1995;20(1):92–117.
75. Hoover AG, Heiger-Bernays W, Ojha S, Pennell KG. Balancing incomplete COVID-19 evidence and local priorities: risk communication and stakeholder engagement strategies for school re-opening. *Rev Environ Health*. 2021;36(1):27–37.
76. Al Siyabi H, Al Mukhaini S, Kanaan M, Al Hatmi S, Al Anqoudi Z, Al Kalbani A, et al. Community participation approaches for effective national covid-19 pandemic

- preparedness and response: an experience from Oman. *Front Public Health*. 2021;8:616763.
77. Board GPM. From Words to Action: Towards a Community-Centered Approach to Preparedness and Response in Health Emergencies. Geneva Switz Int Fed Red Cross Red Crescent Soc Available [Httpsapps Who Intgpm/bassetsthematicpaperstr-5 Pdf](https://apps.who.int/gpm/bassetsthematicpaperstr-5.pdf) Accessed Sept. 2019;1:2020.
  78. Bish A, Michie S. Demographic and attitudinal determinants of protective behaviours during a pandemic: A review. *Br J Health Psychol*. 2010;15(4):797–824.
  79. Freimuth VS, Musa D, Hilyard K, Quinn SC, Kim K. Trust during the early stages of the 2009 H1N1 pandemic. *J Health Commun*. 2014;19(3):321–39.
  80. Kouzy R, Abi Jaoude J, Kraitem A, El Alam MB, Karam B, Adib E, et al. Coronavirus goes viral: quantifying the COVID-19 misinformation epidemic on Twitter. *Cureus*. 2020;12(3).
  81. Spalluto LB, Planz VB, Stokes LS, Pierce R, Aronoff DM, McPheeters ML, et al. Transparency and trust during the coronavirus disease 2019 (COVID-19) pandemic. *J Am Coll Radiol*. 2020;17(7):909–12.
  82. Althubaiti A. Information bias in health research: definition, pitfalls, and adjustment methods. *J Multidiscip Healthc*. 2016 May 4;9:211-7. doi: 10.2147/JMDH.S104807. PMID: 27217764; PMCID: PMC4862344.