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＜ Research Data ＞

Attitudes and actions of primary care facility administrators based on their experiences during the COVID-19 pandemic: An interview study

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Abstract

Purpose: The 2019 novel coronavirus (COVID-19) pandemic has reshaped our lives and communities. In the medical field, primary care providers were required to continue providing medical and long-term care despite the global shortage of protective equipment against the progressing infection. How did frontline primary care facility administrators experience the COVID-19 pandemic? Were they required to change our attitude and behavior during the COVID-19 pandemic?

Methods: To explore this, we conducted a semi-structured interview survey. Four researchers interviewed the administrators of 20 clinics (7 general practitioner clinics and 13 dental clinics) and 11 long-term care services (7 visiting nurse home services and 4 resident long-term care and home help services) in Japan. We conducted interviews with administrators either face-to-face or using remote communication devices. The interview results were analyzed using a qualitative descriptive approach.

Results: We interviewed 31 primary care facility administrators and found three attitude categories: (1) self-awareness of being responsible for the business site, (2) self-awareness of contributing to the community through medical care, (3) self-awareness for respecting the life of each local resident. Further, we found five behavior categories: (1) Taking action to protect the staff, (2) taking Measures to safeguard the facility, (3) establishing and implementing infection control policies, (4) ensuring service continuity and community service, and (5) collaborating in community infection control efforts.

Conclusions: Frontline administrators of primary care facilities displayed strong transformational leadership during the COVID-19 pandemic.

keywords: COVID-19, pandemic, primary care, administrator, decision-making, community service

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I. Introduction

In 2020, the Japanese government believed that COVID-19 was spreading throughout Japan, and that it would have a major impact on the lives, health, and economy of the people. Therefore, a state of emergency regarding the novel coronavirus disease was issued on 7 April 2020 by the Japanese government. It was also decided that under this state of emergency, citizens of all prefectures would be subject to restrictions on their activities, except in emergency situations [1]. Citizens were requested to avoid non-essential outings by the Japanese government. COVID-19 has had a major influence on general practitioners and impacts primary care delivery, both in the present and future [2]. Though the COVID-19 pandemic threatens long-term primary care maintenance [3], there are only

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a few reports of the impact of COVID-19 on primary care.

Due to findings that COVID-19 can be present in saliva, many people felt apprehensive about visiting the dentist; furthermore, due to the state of emergency, a trend emerged of people refraining from making dental visits. This led to an actual decline in the number of patients seeking dental care [4-5]. In 2020, the American Dental Association released guidelines that dental practices should defer some procedures and only provide emergency or urgent care, and the World Health Organization (WHO) advised in August that routine, non-urgent oral health care should be postponed [6-7]. The patient volume was temporarily reduced in April and May 2020, but the patient volume recovered since June in the United States [8]. In Japan, a state of emergency was declared in April 2020 to prevent the spread of COVID-19, and people were advised to refrain from non-essential and non-urgent travel [9]. After the state of emergency was lifted in May, medical and dental treatment resumed in many clinics, but it is unknown how the administrators of dental clinics behaved during these emergency periods in Japan.

Like dentistry and clinics, long-term care insurance services that provide home care to the elderly have also had a major impact from COVID-19. Long-term care services in the community require careful attention because patients of long-term care services have high risk factors for COVID-19: they are older adults, may have pre-existing diseases, and are frail [10-11]. This is why previous efforts against COVID-19 outbreaks, even in the early phase of the pandemic, were critically important for the care of patients in long-term care hospitals/facilities [12]. Visiting nurses, home health aides, and visiting helper home services typically involve long-term care services, and they are among the frontline workers of primary care services. The shortage of personal protective equipment (PPE) was identified as a basic infection control measure in a survey that examined the influenza pandemic in primary care [13-14]. From the early stages of the pandemic, primary care physicians have demonstrated an adaptive capacity to deal with changes resulting from the COVID-19 pandemic in the communities served by their clinics [15]. Previous reports on nursing services and long-term care facilities have highlighted the emergence of new types of leadership to address challenging situations [16-18]. However, previous studies have focused on specific subjects such as primary physicians, dentists, and long-term care facilities. Reports regarding how primary care facility administrators (many of whom are in smaller facilities) have generally adapted during the pandemic are limited. Further, how these administrators have reconsidered their role and community cohesion has barely been explored in connection with local services [16-17].

Therefore, this study aims to describe the perceptions of primary care facility administrators on how the COVID-19 pandemic challenged primary care and how they adapted to deal with these challenges and connect with other primary care community facilities during the pandemic.

II. Operational definitions

Muldoon et al. [19] defined primary care as a specific concept of family doctor-type services delivered to individuals.

In this paper, a primary care facility is defined as a facility providing primary care services, such as clinics (general practitioner and dental) and long-term care services (visiting nurse home services and resident long-term care and home help services), for each patient in the community. The services of primary care facilities include outpatient and long-term care insurance services.

A primary care facility administrator is defined as an administrator of a primary care facility, such as clinics and long-term care services.

III. Methods

1. Setting and participants

Semi-structured interviews were conducted by four nurses between 23 September and 31 December 2020. These nurses were trained in qualitative research methods and interviewing skills.

The researchers interviewed 31 primary care facility administrators in a community. Totally, 4 researchers interviewed the administrators of 20 clinics (7 general practitioner clinics and 13 dental clinics) and 11 long-term care services (7 visiting nurse home services and 4 resident long-term care and home help services) in Japan. This study focused on community primary care provisions that provided services other than inpatient care. The services provided include outpatient services and long-term care insurance services. These facilities experienced delays in the provision of medical supplies compared to large hospitals with inpatient services during the COVID-19 pandemic. The selection criteria for interview subjects were being an administrator of an organization providing primary care in the community or a person designated by the administrator who are familiar with the facility's philosophy and background.

Participants were recruited nationwide using snowball sampling. To recruit frontline primary care facility administrators, we used telephone and e-mail. When a respondent met the inclusion criteria for this study, we sent an e-mail describing the study. No-one declined to participate. We scheduled interviews at a time and place convenient for the

participants. Given the risks of infection, the researchers accommodated participants who opted for telecommunication methods. Totally, 17 participants were interviewed using remote communication equipment, and 14 were interviewed face-to-face. For both methods, interviews were recorded with the participants' permission. All recordings were transcribed verbatim by the first author. We refrained from recruiting participants from areas where the number of patients increased dramatically during the study period to avoid over-burdening the medical professionals.

2. Data collection and analysis

We used an interview guide that was developed based on previous studies [13,20-21] focusing on the collaboration between clinics and dental practices, as well as the implementation of infection control measures at home-visit nursing stations, as well as group discussions with research members. The questions were as follows: "How did you take care of patients and staff in light of COVID-19, an infectious disease for which no evidence of treatment or infection route has been established?," "How has COVID-19 impacted the continuation of facility establishments and the business environment?," and "How are your facility's infection prevention methods and care." We used a qualitative descriptive approach to analyze textual data [22].

The first and second authors were familiar with all recordings and transcripts, after which they carefully and independently read the transcripts line by line and applied an open code that described their interpretations of the content that fit the research questions. Before the interview began, participants were asked to reread the information sheet and provide written informed consent to participate. Each interview lasted between 30 and 79 minutes (mean, 47.2 min).

In this study, a qualitative descriptive approach was adopted to analyze the data—a method of choice when direct descriptions of phenomena are desired—which is useful for researchers who want to know the who, what, and where of events [22]. We described the recording units and classified them in terms of the categories of the chosen analytic constructs. The codes were categorized in terms of similarities and differences to develop main categories and subcategories, and this process continued until the main categories were extracted. As the type of primary care provided may influence categories and subcategories, this paper refers to the interview results from administrator of home-visit services as "Home visits," those from administrators of facility-based services as "Facilities," and those from administrator of dental and medical clinics as "Clinics." Interview results that are common to all administrators are indicated as "All."

3. Ethical considerations

The proposal for this study was approved by the Ethics Committee of the Research Council of Iwate Medical University (NH2020-1). Written, informed consent was obtained from the participants.

4. Competing interests

The authors declare that they have no competing interests.

IV. Results

1. Participants description

Table 1 shows participants' demographic characteristics. We interviewed 31 primary care facility administrators. Of these, 13 were 50 years old (41.9%), 20 were male (64.5%), 13 were dentists (41.9%), 9 were registered nurses (RNs) (29.0%), 5 were physicians (16.1%), and 4 participants were care workers (12.9%). The mean number of occupational experience year was 25.4±11.4 years (ranging from 3 to 42 years), and the mean number of years of administrative experience was 15.1±11.7 years (ranging from 0 to 34 years).

Table 1. Participants' demographic characteristics

		n (%)
Age (years)	30s	2(6.5)
	40s	8(25.8)
	50s	13(41.9)
	60s	8(25.8)
Gender	Male	20(64.5)
	Female	11(35.5)
Affiliation	Dentist	13(41.9)
	Physician	5(16.1)
	Care worker	4(12.9)
	RN	6(19.4)
	RN・PHN・MW	2(6.5)
	RN・PHN	1(3.2)
Occupational experience years	Mean ± SD, min-max	25.4 ± 11.4 (3-42)
Administrator years	Mean ± SD, min-max	15.1 ± 11.7 (0-34)

RN; registered nurse, PHN; public health nurse, MW; midwife
SD; standard deviation, min-max: minimum-maximum

2. Administrators' attitudes in the face of COVID-19

Table 2 displays the categories of the primary care facility administrators' attitudes toward COVID-19. We identified three categories and seven subcategories of primary care facility administrators' attitudes in the face of COVID-19: 1) Self-awareness of being responsible for the business site (becoming aware of playing the role of protecting staff and becoming conscious of indicating the direction of the facilities establishment); 2) Self-awareness of contributing to the community through medical care (reconfirming the desire to believe in the best care for every corner of the community and becoming aware that it is important to keep

Table 2. Categories of primary care facility administrators' attitudes during the COVID-19 pandemic

Category: Self-awareness of being responsible for the business site
Subcategory: Becoming aware of playing the role of protecting staff
Major Code: It's my responsibility because they are covering my work.
Subcategory: Becoming conscious of indicating the direction of the facilities establishment
Major Code: Since they are covering my work, I am responsible for the staff's work.
Category: Self-awareness of contributing to the community through medical care
Subcategory: Reconfirming the desire to believe in the best care for every corner of the community
Major Code: Even in rural areas, delivering the infrastructure of primary care to every corner of the community.
Subcategory: Becoming aware that it is important to keep the business operating
Major Code: If the staff and I overexert ourselves, the business will not succeed, therefore we should be alert to avoid comprising ourselves and the business.
Category: Self-awareness for respecting the life of each local resident
Subcategory: Respecting the feelings of the person and family
Major Code: To help users remain independent at home, I support them in living their life in their own way.
Subcategory: Supporting people to live like themselves
Major Code: The purpose of establishing the facility is to enable people to live authentically.
Subcategory: Believing that all people have their roles even those with severe disabilities
Major Code: Even people who become ill or have disabilities fulfill their roles within their families.

the business operating); and 3) Self-awareness for respecting the life of each local resident (respecting the feelings of the person and family, supporting people to live like themselves, and believing that all people have their roles even those with severe disabilities).

3. Self-awareness of being responsible for the business site

The administrators were self-aware of being responsible for their facilities and believed in protecting their staff from the unstable situation and future caused by COVID-19.

Becoming aware of playing the role of protecting staff

The administrators wanted their staff to work in a relaxed and enjoyable manner similar to before the COVID-19 pandemic. As administrators were aware that their employees were being burdened more than before COVID-19, they thought they should *"address the concern and be responsible for all the hard things such as complaints from patients about the new rules for infection prevention, procurement of supplies, etc." (No. 26, age 50s, Doctor).*

Becoming conscious of indicating the direction of the facilities establishment

Uncertainty regarding infection control and treatment was rife during the pandemic. Administrators believed that they were responsible for leading their facilities establishment in the right direction.

"I think I can always take the responsibility as the administrator of this facility when something terrible happens" (No. 11, age 40s, RN).

4. Self-awareness of contributing to the community through medical care

The administrators wanted to continue contributing to their communities during the pandemic.

Reconfirming the desire to believe in the best care for every corner of the community

The administrators established their facilities to provide medical care, not only in urban areas, but also in rural areas because they believed that *"one of our business goals is to provide the best care in every corner of the region, and it is important to prepare the infrastructure of home care in areas without home care stations" (No. 14, age 60s, Dentist).*

Becoming aware that it is important to keep the business operating

The administrators regarded their facilities as valuable infrastructures in their areas, so they thought, *"I don't want to push myself too hard. In the same way, I don't want my staff to push themselves too hard. If we push too hard, we will burn out. As a result, the people in the community might have to go to other hospitals a lot of times" (No. 2, age 50s, Doctor).*

5. Self-awareness for respecting the life of each local resident

The administrators believed that all residents (including their patients) should be treated with respect. Therefore, they wanted to protect their dignity by providing services.

Respecting the feelings of the person and family

The administrators believed that their facilities were providing services to meet the needs of patients and families.

"Patient is not a patient, and since we provide nursing care in the community rather than in a hospital, we want to offer a service where it is not necessary for patients to get dressed to meet us. Essentially, we want to provide a service where the patient is at the center of our care" (No. 18, age 40s, RN・PHN・MW)

Thinking about supporting people to live like themselves

The administrators had a vision of establishing facilities for people to live like themselves, which is why they want-

ed to support their loved ones.

Believing that all people have their roles even those with severe disabilities

The administrators believed that *"the most important thing […] is that people maintain their role (husband, grandfather, son, and ex-office worker) even if they have a severe disability" (No. 27, age 40s, Care Worker).*

Primary care facility administrator behaviors in the face of COVID-19

Table 3 shows categories of behaviors for the administrators in the face of COVID-19. Five categories and fourteen subcategories emerged from the data analysis: 1) Taking action to protect the staff (preventing the spread of infection in the workplace and guaranteeing work management); 2) Taking measures to safeguard the facility (striving for the continuation of the facility and developing a business continuity plan if the administrators become unavailable); 3) Establishing and implementing infection control policies (assigning infection control as a specific duty, educating the staff directly, securing medical supplies, using an information platform, adhering to new rules, and separating clean areas and zoning); 4) Ensuring service continuity and com-

Table 3. Categories of primary care facility administrators' behavior during the COVID-19 pandemic

Category: Taking action to protect the staff	
Subcategory: Preventing the spread of infection in the workplace	
Major Code: Keep reassuring staff that it's okay (All)	
Create an environment where it is easy to take time off. (Home visits)	
Subcategory: Guaranteeing work management	
Major Code: Adjust interpersonal relationships to reduce stress (All)	
Allow employees to not work as usual .(Home visits)	
Category: Taking Measures to safeguard the facility	
Subcategory: Striving for the continuation of the facility	
Major Code: Replace the positions of retired employees(Clinics)	
Promote telephone/online consultations. (Clinics)	
Subcategory: Developing a business continuity plan if the administrators become unavailable	
Major Code: Review procedures with staff for when an administrator are absent. (Home visits)	
Establish a system where nurses do not have fixed patients, but share responsibilities among multiple nurses (Home visits)	
Category: Establishing and implementing infection control policies	
Subcategory: Assigning infection control as a specific duty	
Major Code: Adjust appointment times to avoid patient crowding (Client)	
Establish a specialized infection control team (Home visit)	
Appoint a contact person for infection control consultations (Home visit)	
Subcategory: Educating the staff directly	
Major Code: Continue to follow the usual standard precautions (All)	
Reinforce infection control measures if they start to become lax (All)	
Subcategory: Securing medical supplies	
Major Code: Stock up when items are available for purchase. (All)	
Establish a system to receive information in advance (Clinics)	
Obtain supplies through connections with other industries (Clinics)	
Assign an administrator to create homemade supplies (Home visits)	
Subcategory: Using an information platform	
Major Code: Share information (All)	
Subcategory: Adhering to new rules	
Major Code: Developing new manuals for new rules (All)	
Obtain patient consent for new rules (Home Visits)	
Subcategory: Separating clean areas and zoning	
Major Code: Focus on zoning through soft measures (Clinic)	
Select visitation methods according to the patient conditions (Facility)	
Category: Ensuring service continuity and community service	
Subcategory: Providing services to help patients make the best choices	
Major Code: Accommodate people who prefer home care due to disliking hospital visitation restrictions (Home visits, Clinic)	
Regularly assess the ADL (Activities of Daily Living) of those whose visits have been cancelled (Home visits, Clinics)	
Subcategory: Collaborating with other facilities to provide service to patients even in crisis situations	
Major Code: Establish partnerships with other facilities for staff replacements (Home visits)	
Category: Collaborating in community infection control efforts	
Subcategory: Fulfilling the wishes of other facilities	
Major Code: Recognize that success cannot be achieved alone and seek collaboration (All)	
Adjust discussions to ensure alignment with different professions (Home visits)	
Subcategory: Releasing methods of infection control	
Major Code: Host study sessions (All)	
Meet the expectations of other professions for primary care providers to deliver care and prevent infections (Home visits, Clinics)	
Publicize the infection control measures being implemented (Home visits, Facilities)	

munity service (providing service to help patients make the best choices and collaborating with other facilities to provide service to patients even in crisis situations); 5) Collaborating in community infection control efforts (fulfilling the wishes of other facilities and releasing methods of infection control).

6. Taking action to protect the staff

The administrators have to protect the financial, physical, and spiritual lives of their staff. This category has two subcategories: infection control and work management.

Preventing the spread of infection in the workplace

COVID-19 has a symptomatic and pre-symptomatic transmission and is highly infectious. Administrators believed that by creating an environment in which employees could rest immediately if they felt unwell, it would be possible to prevent the spread of infection from staff to patients and within the workplace. An administrator said, *"I always thought it was important to have an environment where it was easy to rest" (No. 25, age 40s, Care worker).*

Guaranteeing work management

The administrators guaranteed the staff that the business would not go bankrupt and that they would continue to employ them. One explained, *"My facility is small in size, so if a staff member becomes infected with COVID-19, other staff will have increased work and burden. I have serious concerns about staff infections and staff salary guarantee" (No. 11, age 40s, RN).*

7. Taking measures to safeguard the facility

As primary care facility administrators, they struggled with the COVID-19 pandemic in the community. However, they would keep their facility open and develop a business continuity plan if other administrators became unavailable.

Striving for the continuation of the facility

The administrators were willing to adapt to new business formats, such as telemedicine, as well as take on new patients to keep gaining earnings. They also had to replace retiring staff who were afraid of COVID-19.

"You can also issue prescriptions over the phone, so by talking on the phone, prescriptions can be issued, making the process surprisingly smooth" (No. 20, age 40s, Doctor).

Developing a business continuity plan if the administrators become unavailable

The administrators created a business continuity plan for when they became unavailable so as not to confuse the staff. An administrator said, *"I have created a manual for when I become unavailable. We have simulated the use of this manual in a serious scenario" (No. 28, age 50s, RN・PHN).*

8. Establishing and implementing infection control policies

Assigning infection control as a specific duty

The administrators chose a specific member for infection control. The facility found it important for home facilities to control infection; thus, the company hired an infection control nurse who had played a central role since the COVID-19 pandemic began.

Educating the staff directly

COVID-19 was an unknown virus to medical staff, which meant that it was necessary to look for certain information and separate it from fake information. Owing to the staff's confusion regarding COVID-19, the administrator directly educated them.

The administrators felt it was important to, *"pay attention to infection control, so I communicated with staff to carry out regular infection control" (No. 21, age 60s, Dentist).*

Securing medical supplies

At the beginning of the COVID-19 pandemic, there was a lack of PPE supplies. The administrators reassured the staff by identifying various methods of securing medical supplies including connecting with other industries and/or local governments to obtain PPE: *"I bought a sewing machine, and I made masks for the staff" (No. 17, age 30s, RN).*

Using an information platform

The administrator devised the use of a platform that allowed the staff to exchange information without having to meet face-to-face, because they wanted to avoid infection among staff. *"We had tablets and a smartphone, one per person, so we were always sharing information" (No. 26, age 50s, Doctor).*

Adhering to new rules

COVID-19 had new rules related to infection control, and administrators ensured that everyone involved with the facilities adhered to the new rules. In contrast, administrators considered flexible relaxation of rules in response to the local conditions caused by COVID-19. Administrators worried *"for the health of the staff if the rules that restricted behavior were continued for a long time" (No. 3, age 50s, Care worker).*

Separating clean areas and zoning

Zoning minimizes the risk of infection by creating designated clean and dirty zones. Zoning involves installing ventilation equipment when constructing a building and a structure that clearly separates clean and contaminated areas so that the flow lines do not cross each other. However, when COVID-19 suddenly spread, it was not possible to accommodate infected people only in facilities that could be structurally zoned. Administrators made zoning rules using software, as physically reforming the building was challenging. *"Our building was already old, so I think it's about time, but next time. I made a new rule to separate the clean and contaminated areas. We taped a line to separate the areas" (No.*

5, age 50s, Dentist).

9. Ensuring service continuity and community service

Providing services to help patients make the best choices

During the COVID-19 pandemic, care facilities and hospitals established visitation policies. Many patients wanted to live at home after being discharged from facilities.

Collaborating with other facilities to provide service to patients even in crisis situations

The local offices cooperated to ensure that there was no disruption in the services provided to the clients.

"In case there are close contacts or confirmed COVID-19 cases among the staff at any office, we have an agreement in place to ensure that we don't cause inconvenience to our clients by being unable to visit them. In such emergency situations, each station will cooperate and, if necessary, visit clients from other stations as well."(No. 22, age 50s, RN)

10. Collaborating in community infection control efforts

The facilities were leading medical providers in the community.

Fulfilling the wishes of other facilities

The administrators were leaders of their community, and so they delivered lectures about infection and prevention policy, *"After experiencing COVID-19, one more job is a lecture on infectious diseases for caregivers" (No. 29, age 50s, RN・PHN・MW).*

Releasing methods of infection control

The administrators created original infection control manuals, and published the manuals because they wanted to help other facilities in the same industry.

"We also provide home visits medical care, and since we frequently enter nursing homes, these facilities are even more vigilant about infection control than we are, as they handle elderly residents. The administrator often ask us for advice on infection prevention measures. We share information about infection control with these nursing homes and implement the same precautions." (No. 24, age 40s, Doctor).

V. Discussion

We interviewed the administrators of primary care facilities and found that they were struggling to maintain community services and protect their staff during the COVID-19 pandemic. Their behaviors and actions were directed toward supporting the staff during COVID-19 in the face of challenges, including rapidly changing policies, limited PPE, declining mental health, and distressing psychological, behavioral, social, and sometimes spiritual aftermath of exposure to COVID-19 [23-25]. Their actions began before the COVID-19 pandemic, which was also their motivation for starting their business. It was the basis of their business philosophy and their professional attitude, because of which they were able to decide their own path and behavior in the uncertain future of the COVID-19 pandemic.

1. Primary care facility administrators believe in their business and moral philosophy and decision-making

Our findings showed that not only nurses but also other professionals such as doctors, dentists, and care workers had an important role in advocating for people living in the community. They built their business to develop and/or provide and protect the life of community living people, even if people have severe disabilities or severe diseases. Their policies were self-consciously responsible for the business site to contribute to the community through medical care and to respect the life of each local resident, and they continued these policies even after the COVID-19 pandemic.

Why were they, including administrators and their staff, able to continue to fight the unknown virus on the frontlines of the community? Loe et al. reviewed the assessment of ethical decision-making in business and showed that moral philosophy is relevant to the role of moral intensity in ethical decision-making, which may be based on either personal experience or the industry [26]. The administrators believed that the conviction to stand at the forefront of the community and protect local medical and long-term care was the driving force for contributing to the business. The COVID-19 pandemic caused frontline primary care providers to experience tremendous stress as they were forced to make difficult medical decisions that may lead to moral injury [27-28]. To live up to the administrators' philosophy and decision-making that the business would continue, and the service would continue to be provided, administrators would start taking action.

2. Primary care facility administrators' leadership during COVID-19

Our interviews began during the COVID-19 pandemic, and early on, there were few treatment methods and no vaccinations. Primary care providers had limited treatment options and insufficient PPE and other medical supplies. Extended working hours, increased workload, and other emerging concerns were sources of stress and had the potential to overwhelm the system [29]. Inadequate supply of PPE also caused caregiver distress [30-31]. Administrators suggested methods to handle information, collect PPE, and collaborate with other facilities. In addition, they believed that it was their role as community health professionals to protect staff, care recipients, and their families. These behaviors also involved protecting the staff and the facil-

ity and providing services to the community. Thus, they determined facility policy and a plan for infection control of COVID-19. Keeping businesses running was thought to contribute to the community.

Our results show that facility administrators came forward and took responsibility for collecting medical supplies. Sometimes, they made masks and distributed them to their staff, showing that they were stepping forward to fight against COVID-19. Such behavior can be termed transformational leadership. Transformational leaders are those who practice contingent reinforcement of followers, inspire, intellectually stimulate, and are individually considerate of their followers [32]. Transformational leaders promote employee performance and have a positive impact on psychological safety, which in turn reduces their turnover intentions, even during the COVID-19 pandemic [33-34]. Similar to these studies, our findings revealed that administrators protected their employees, educated and trained them to protect themselves from COVID-19, and managed the workplace. Moral decisions needed to be made, but the proliferation of information available from various sources made it difficult to identify reliable research evidence and guidance [35]. Our findings suggest that administrators made it their role to select and manage information to prevent employees from making erroneous moral decisions. This was also an action to reduce the mental burden on employees to select important information that affects patient outcomes from a large amount of information. Our research was not longitudinal as we do not have information about staff turnover, but our findings indicate that transformational leadership might be an appropriate leadership style in situations where we are faced with the unknown, such as COVID-19.

3. Connecting other facilities during COVID-19

Our findings revealed that administrators sought to continue providing services, even in partnership with other establishments, to prevent the services from disappearing from the areas where they operate. This kind of action was not the result of the cooperation led by the administration or the country, but the voluntary judgement of the facility's administrator. During a public emergency, the primary care system is at risk of becoming overwhelmed and the system's disruption could be more harmful to the community than the effects of the emergency itself [36]. As a health policy, it is necessary to strengthen coordination between local offices during normal times and prepare to promote service coordination during emergencies.

VI. Limitations and future challenges

From the investigation in this study, it became clear that primary care facilities continuously strived to provide uninterrupted services during the COVID-19 pandemic, which was caused by an unknown virus. While previous studies often focused on interviews by service type or profession, this study confirmed that primary care and welfare services, as organizations with specialized knowledge and skills, took responsibility for infection control and the continuous provision of services. On the other hand, by analyzing regardless of the service type, the specific characteristics of services were less visible, particularly concerning the actions of the administrators. Further investigation is needed to determine whether the behaviors confirmed in this study are unique to this sector or if they are observed in other industries as well. Additional research is also required to understand the reasons behind these actions. In terms of clinical applications, to prepare for the next outbreak of an unknown infectious disease and ensure the continuity of primary care, it will be necessary to develop business continuity plans, promote agreements between facilities, and train infection control experts to disseminate specialized knowledge for primary care.

VII. Conclusion

We revealed the attitudes, behaviors, and struggles of administrators of primary care facilities during the COVID-19 pandemic in this study. Administrators believe in their own philosophies. Believing in their own philosophy was the reason for the establishment of their facility and for their continuation during the pandemic, which has no established treatment. Based on a solid philosophical background, the administrators devised different actions daily to ensure infection control against COVID-19. Through transformational leadership, they led their staff to protect patients from COVID-19 and feel secure.

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＜資料＞

COVID-19 禍における地域事業所の管理者の経験と行動：インタビュー調査

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抄録

目的：COVID-19 の大流行は私たちの生活と地域社会を大きく変えた．医療従事者は世界的な COVID-19 の流行によって個人防護具が不足する中で，医療・看護・介護を提供し続けなければならなかった．第一線で活躍するプライマリ・ケアの事業所管理者たちは，COVID-19 によるパンデミックにおける自事業所に対してどのような認識をもち，彼らはどのような行動をとり，この危機に対応したのだろうか．本研究の目的は，COVID-19 のパンデミック禍におけるプライマリ・ケアの事業所管理者たちの姿勢と行動を危機管理の視点から明らかにすることである．

方法：本研究はプライマリ・ケアの事業所管理者に対する半構造化面接調査を行った．4 人の研究者が日本の20の診療所（開業医診療所7, 歯科診療所13）と11の介護サービス（訪問看護ステーション7, 入居型介護・ホームヘルプサービス 4）の管理者に，対面，もしくは，遠隔通信機器を用いてインタビュー調査を行った．インタビュー結果は質的記述的アプローチを用いて分析した．

結果：31 名のプライマリ・ケアの事業所管理者にインタビューを行った結果，⑴事業所に責任を持つという自覚，⑵医療を通じて地域に貢献するという自覚，⑶地域住民一人ひとりの生活を尊重するという自覚，の 3 つの認識に関するカテゴリーが見出された．また，行動面では⑴職員を守るための行動をとる，⑵施設を保護するための対策を講じる，⑶施設の感染対策の方針を策定し実施する，⑷サービスの継続と地域サービスを確保する，⑸地域における感染対策に協力する，の5項目がみられた．

結論：第一線のプライマリ・ケアの事業所管理者はCOVID-19 パンデミック時に，強力な変革的リーダーシップを発揮し，自事業所のみならず，地域の医療・看護・介護サービスの提供が停止しないよう行動していた．

キーワード：COVID-19，パンデミック，プライマリ・ケア，管理者，意思決定