Covid-19 Front-Liners: Experiences of Palliative Care Providers in a Tertiary Hospital

Joshua Okyere, MPhil¹,²; Adwoa Bemah Boamah Mensah, PhD² and Kwaku Kissah-Korsah, PhD¹

Abstract

Introduction: In “normal” times, palliative care (PC) service delivery is confronted with many challenges thereby making access to care difficult. Now, we are in the era of COVID-19 where the healthcare ecology is radically changed. During this process of radical transformation, there are some ramifications of COVID-19 on PC service delivery. Yet, there is a paucity of empirical evidence to support this claim.

Objective: We explored PC providers’ perspectives on delivering PC services in the era of COVID-19.

Methods: Using an exploratory descriptive qualitative approach, we conducted face-to-face and telephone interviews with seven PC service providers at Korle Bu Teaching Hospital, Ghana. Haase’s adaptation of Colaizzi’s method was employed as the analysis strategy.

Results: Two main themes emerged: ramifications and adaptations. The ramifications of COVID-19 on PC service delivery included changes in care relationship, perceived increased responsibilities, psychological distress, shortage of medicines, and treatment delays. In an attempt to mitigate the challenges posed by COVID-19 on PC service delivery, the following mechanisms adaptations were made: halting of service provision, resorting to tele-consultation, adopting shift system and reducing number of appointments, and adoption of infection prevention and control strategies.

Conclusions: Our results indicate that COVID-19 has substantial ramifications of PC service delivery. In conclusion, priority should be given to the training of healthcare workers on emergency preparedness for future pandemics. Also, continuous professional development would be needed in order build PC service providers’ skills and capacity to effectively utilize tele-consultation in PC service delivery.

Keywords
COVID-19, palliative care, ramifications, adaptations, frontline

Introduction

Palliative care (PC) has been identified as a key element for improving the quality of life of patients and their families (Harding, 2018). PC refers to “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psycho-social and spiritual” (Ofosu-Poku et al., 2020).

With the advent of the novel coronavirus-2019 (COVID-19), healthcare systems have radically changed (Vrdoljak et al., 2020). The introduction of physical distancing has changed the way patients and healthcare providers interact, hence, affecting the quality of healthcare delivery. One area of healthcare that has been heavily...
affected by the COVID-19 pandemic is PC for persons living with life-limiting diseases such as cancers (Mathews et al., 2020; Ritchey et al., 2020). This is against the backdrop that several facilities providing PC to individuals with chronic conditions could not provide the person-centered care that is characteristic of PC service provision to those who needed it (Ritchey et al., 2020).

PC operates on the principles of equality in care provision, empathy, and personal interactions (Davies & Hayes, 2020). These principles are significantly compromised by the COVID-19 pandemic. In “normal” times, access to PC has been described as extremely lacking and a parody of justice (Lancet, 2020). Evidence suggests that COVID-19 would exacerbate isolation and suffering for patients with PC needs (Costantini et al., 2020; Rosenbaum, 2020). As such, it is imperative to explore nuances that characterizes PC service delivery during this period of COVID-19.

Some studies have investigated the challenges that confront PC service delivery amidst COVID-19. For instance, a qualitative study by Franchini et al. (2021) revealed that COVID-19 emphasized the importance of home PC services. Notwithstanding this positive implication of COVID-19 on PC, the authors also revealed that COVID-19 and its concomitant protocols adversely affected patient-provider communication as well as resulting in a perception of increased responsibility among service providers (Franchini et al., 2021). Similar findings have been reported in China (Liu et al., 2020) and Iran (Ardebi et al., 2021). However, in sub-Saharan Africa and specifically in Ghana, the challenges confronting PC service delivery in this period of COVID-19 remains unclear.

After Ghana registered its first confirmed case of COVID-19 on March 12, 2020, the government imposed some measures to mitigate and control the spread the virus. These measures included the ban on all public gatherings, closure of the country’s borders (air, land, and sea), closure of schools, and beaches (Evans & Kyeremeh, 2020). There was also a total lockdown of Ghana’s two major cities, Accra and Kumasi, which were the epicenters of COVID-19 in the country (Ofosu-Poku et al., 2020). In addition, healthcare facilities had to provide only essential services for a relatively extended period coupled with a shift system for all healthcare workers (HCWs) in order to limit their exposure to the virus (Kugbey et al., 2020). At the peak of the lockdown, it was certain that PC patients were not going to benefit from in-patient and home visitsations. Yet, there is sparse empirical evidence that explores ramifications of COVID-19 on PC service delivery and adaptation mechanisms. This study sought to provide an in-depth exploration of PC service providers’ perspectives on delivering PC services in the era of COVID-19 using a Ghanaian tertiary hospital as a case in point.

**Methods**

**Study Design**

This study adopted an exploratory descriptive qualitative method of enquiry using a combination of telephone and face-to-face semi-structured interviews. With this method of enquiry, focus was on using text to describe the data and create meaning through interpretation rather than the generalizability of the findings (Bernard, 2017). The study was conducted between October 1 to December 31, 2021.

**Setting**

The study was conducted at KBTH, which is Ghana’s premier teaching hospital and doubles as its leading referral hospital (Sackey, 2015). Specifically, we conducted the study at the PC unit at the KBTH. The PC unit has a team that offers in-patient consultation to clients in all departments of the hospital and also provides home-based care to the terminally ill. Although PC is provided by other health facilities such as Komfo Anokye Teaching Hospital, Tetteh Quarshie Memorial Hospital and the Greater Accra Regional Hospital (Anyane et al., 2021), KBTH is the only facility in Ghana with well-established PC unit for providing PC services to patients. Hence, making this area a suitable study setting. Another reason for choosing KBTH as the study setting lies in the fact that the hospital is located in Accra, the epicenter of COVID-19 in Ghana.

**Participants, Sampling and Recruitment**

A total of seven (7) participants were included in this study. The sample size was based on theoretical saturation (Rowlands et al., 2016). Participants were sampled using purposive sampling technique. Participants who met the following criteria were included in the study: (a) they must be members of the PC team (PCT), they must have been in practice at KBTH during the period of the first wave of the pandemic, and (c) they must be willing to participate in the study. The interdisciplinary PCT was constituted by a geriatric nurse, community health nurse (CHN), PC nurse specialist, pharmacist, family physician, general nurse, clinical psychologist, and a social worker. With the exception of one team member who declined invitation to participate in the study, all other members of the PCT voluntarily accepted to participate. The interviews lasted an average of 54 min.

**Data Collection**

Majority of the interviews (6/7) were conducted using face-to-face interviews, while the last interview was conducted via telephone, based on the participants’ preference. Semi-structured interview guide was used for data collection. This guide was developed by the research team based on
literature and the study objectives (Franchini et al., 2021; Liu et al., 2020). Questions began with general issues pertaining the socio-demographic characteristics of the participants: “Please, can you tell me about who you are - your age, marital status, speciality, length of practice, position in this hospital, etc.” This was followed with questions that solicited response about the challenges characterized with service delivery: “In what ways has the COVID-19 pandemic affected delivery of palliative care services to cancer patients? [Ref. 1st wave].” We probed for changes in care relationship, shortages in medications, etc. The final section of the guide solicited information about operational adaptations: “What operational strategies were exploit to cope with the emergency? Probe for: strategies that worked and those that failed.” All interviews were audio recorded using a tape recorder alongside field notes. Interviews were conducted by the principal investigator (JO) under the supervision of an expert in PC and oncology research (ABBM) and qualitative research (KKK). To avoid bias, no prior contact was made with the participants. The audio data were transcribed verbatim. The interview language was English.

Data Analysis

In this study, Haase’s adaptation of Colaizzi’s method was employed (Colaizzi, 1978; Liu et al., 2020). First, transcripts were read by independent authors. Each person read the transcript at least three times in order to comprehend the intended meaning inherent in the transcripts. Using QSR NVivo 12, we identified key phrases from the transcripts and assigned codes to them using the “nodes” function of the software. There were team discussions to build consensus and validate the emerging themes from the study.

Trustworthiness

To ensure credibility, we used only verbatim quotes from the participants and went strictly according to the research methodology. Member checking was done with two of the respondents a week after the data collection in order for them to verify the results. Moreover, credibility was also ensured by designing the interview guide to reflect the objectives.

To guarantee transferability, we provided detailed descriptions of the study setting and the methods for selecting the participants. We ensured dependability by leaving an audit trail of audio-records, transcripts, interview questions, and consent forms was kept for any future confirmatory audits.

Ethical Issues

Ethical approval was sought from the Korle Bu Teaching Hospital Scientific and Technical Committee [KBTH-STC] (approval ID number: KBTH-STC 000108/2021). All methods were carried out in accordance with relevant guidelines. Informed consent was sought from all the participants. Participants were informed and guaranteed of their right to withdraw from the study at any time of the study and chose to refuse to answer questions they deemed discomforting without any consequences. All participants voluntarily participated in this study and consented for the study by writing before the interview.

Results

Table 1 presents participants’ socio-demographic characteristics. A total of seven PC service providers participated in this study. Majority of the participants had been practicing PC for nine years. The participants were aged between 30–55 years with all of them being females. Four of service providers were currently married while the remaining were single.

The findings are categorized under two main themes: ramifications and adaptations. Under the category of ramifications, five sub-themes emerged: changes in care relationship; perceived increased responsibilities; psychological distress; shortage of medicines; and treatment delays. Concerning the adaptations, the following themes emerged: halting of service provision, resorting to tele-consultation, adopting shift system and reducing number of appointments, and adoption of infection prevention and control (IPC) strategies (see Table 2).

Table 1. Participants’ Socio-Demographic Characteristics.

| Participant ID | Age | Sex | Specialty            | Years of practice | Marital status |
|----------------|-----|-----|----------------------|-------------------|----------------|
| SP1            | 31  | Female | Geriatric nurse   | 2                 | Married        |
| SP2            | 34  | Female | CHN                  | 8                 | Married        |
| SP3            | 55  | Female | Palliative care nurse | 9                | Married        |
| SP4            | 52  | Female | Pharmacist          | 9                 | Married        |
| SP5            | 36  | Female | Family physician    | 9                 | Not married    |
| SP6            | 35  | Female | General nurse       | 9                 | Not married    |
| SP7            | 30  | Female | Palliative care nurse | 2.5              | Not married    |

Source: Fieldwork, 2022.

Rami...
in care relationship; (b) perceived increased responsibilities; (c) psychological distress; (d) shortage of medicines; and (e) treatment delays.

Changes in care relationship. The participants reported that COVID-19 brought about significant changes in the routine PC relationship between service providers and patients. According to the participants, PC thrives on empathy, physical touch and interaction. However, because of COVID-19, they were unable to touch patients. They had to dress up in personal protective equipment (PPE) and that made patients feel isolated:

You know that for the kind of service that we provide, we need to be human. But this relationship changed because we could not touch the patients or hug them so that they will feel belonged and cared for. Under normal circumstances, we would touch them or hold them so that they [the patients] will feel important. However, in this case, COVID-19 was a barrier to us. We had to take care of our patients in some form of isolation. (SP6_IDI_35 years)

Because of the nature of our work, you need to touch the patients and hug them when they are emotionally stressed and cry. But because of COVID, you have to give create a space/distance of 2 meters. That made the relationship between service providers and patients a bit distant and uneasy. But it is the new normal, so we have to go by that. (SP2_IDI_34 years)

Perceived increased responsibility. Participants asserted that they experienced increased responsibility. From the accounts of the participants, they were now more concerned about precautionary measures in order not to infect patients and themselves. This situation always stressed them and result in over concentration on precautionary measures rather than improving the quality of PC service delivery. The participants also reported that they had to spend time on donning and doffing of PPEs. This often felt like an additional task to what they were accustomed to. Moreover, it emerged from the analysis that participants had to learn new ways of conducting assessment and providing PC services via tele-consultation platforms. This presented additional responsibility to their work as they have to now learn and get adjusted to the new norms in PC service provision:

These days, we focus so much on ways not to infect patients rather than the PC services that we are actually providing. When we go for home visits, we have to spend a lot of time to put on our PPEs before we attend to patients. After providing services, you will now have to take off the PPEs and dispose them. All of this increased our responsibility to patients. (SP7_IDI_30 years)

I am sure you are aware that we were trained to provide PC services and improve the quality of life of patients. That is our main responsibility here as members of the PC unit. Yet, when COVID struck we now had to assume the role of public health or infection prevention specialist. We took up additional duties like constantly educating patients on COVID prevention protocols which felt burdensome. (SPI_IDI_31 years)

Some participants also indicated that due to the increasing infection rate among the cancer patients, the KBTH and the PC unit had to resort the use of tele-consultations. This stressed them and made the work difficult as it was a new approach to care with its accompanying limited resources to support it. They had to learn the techniques of using telemedicine and teach patient and families to adopt and use it. Assessing patients’ needs over the phone was challenging task for some service providers as this was not something they had been originally trained to do. Some participants expressed that they had to use their personal call airtime and internet data to get in touch with patients so as to provide PC services.

You know that it is very difficult to diagnose somebody over the phone because the doctor needs to examine the patient. But because of COVID-19, we had to be doing the diagnosis on phone. And that was a bit of challenging to ensure the accuracy of diagnosis since we rely solely on what the patient is reporting on phone. (SP4_IDI_52 years)

Infections were increasing so we had to resort to tele-consultation. In doing so, there were challenges. First, some service providers were not familiar with using phone or internet to deliver healthcare. As such, this transitioning phase was problematic. To compound that, although we were to use our personal internet data and airtime most of the time. (SP6_IDI_35 years)
**Psychological distress.** The participants reported to have suffered some form of psychological distress such as feelings of inadequacy, fear and anxiety. They state that these feelings were due to changes in how PC services were now rendered to patients. Also, they expressed their fears about potentially infecting patients. Others were afraid that they would carry COVID-19 to their households and infect their families.

As service providers too, we were always afraid that we might infect the patients. Like I said, in this office, almost everyone got infected with COVID-19. As such, we were constantly afraid that we would be the reason why our patients would also suffer COVID. It is not only about the patients. So, the psychological distress was always lingering around somewhere because we were constantly in the state of fear and anxiety. Sometimes, we withdrew a bit in order not to get infected or infect our patients. (SP7_IDI_30 years)

**Shortage of medicines.** According to the participants, COVID-19 brought about substantial shortage of opioids such as morphine. In the participants’ perspective, the closure of Ghana’s borders (land and air) as well as the shift in the international community’s priority towards the production of PPEs and COVID-19 vaccines was responsible for the shortages in morphine and other opioids. This situation led to shortage and an escalation in the price of the few morphine on market, thereby rendering most patients incapable to accessing it. The following quotes reflect this finding:

Importation of morphine powder halted due to closure of borders. To worsen that, Ghana had closed its borders making it more difficult for private pharmaceutical companies to import morphine syrup or to get morphine powder to produce the syrup. This made morphine super expensive for patients to afford. (SP5_IDI_35 years)

The thing is that, for Ghana, we import morphine powder from abroad to ease the pain of patients who receive PC service from us. However, there was shortage of the morphine powder after COVID struck. Pharmaceutical companies diverted to the production of hand sanitizers, surgical face masks and other immune boosters. So, there was limited availability of morphine. (SP4_IDI_52 years)

**Treatment delays.** The results indicate that there were treatment delays as a result of factors related to COVID-19. From the accounts of the participants, some surgeons were afraid and reluctant to perform procedures and surgeries. Therefore, patients who required palliative surgery could not receive it. Also, it emerged from the findings that due to the high infection rate, the cancer unit as well as the PC unit had to shut down and cancel patients’ appointments were canceled. These actions brought about some level of delays in treatment.

We experienced delays in treatments and procedures, especially for those that needed some form of palliative surgery. Due to the rising infection rates, some departments of the hospital had to close. For instance, Oncology and PC clinic closed. Hence, patients’ appointments were cancelled, resulting in delay in treatment. (SP3_IDI_55 years)

When COVID struck, we had we had to shut down operations for a while because a lot of our staffs were getting infected. So, during that period, patients’ appointments were cancelled. Cancelling patients’ appointments meant that those patients could not receive timely PC services. (SP6_IDI_35 years)

**Adaptations**

In an attempt of mitigate the challenges posed by COVID-19 on PC service delivery, the following mechanisms adaptations were made: halting of service provision, resorting to tele-consultation, adopting shift system and reducing number of appointments, and the adoption of IPC strategies.

**Halting of service provision.** Participants indicated that during the first wave of the COVID-19, the initial response was to completely halt service provision because they were uncertain about the nature of the disease and how it was going to impact of the patients. Moreover, both patients and service providers had been infected by the COVID-19 virus. As such, the PC unit had to shut down to prevent further spread of the virus. The following quotes reflect this theme:

During the first wave of the COVID-19, we tried working until things got worsen. We had no option than to strategies to contain the virus as a unit. Our initial response was to halt service provision. We had no option than to stop seeing patients and devise a better approach .... You see both patients and service providers were testing positive at an increasing rate. So, there was a complete halt to PC services to patients during the first wave of the COVID-19. The clinic wasn’t working for over a month. (SP1_IDI_31 years)

The COVID-19 affect PC in so many ways. We even had to shut down. We were not seeing patients because we had an increasing infection rate here. We closed the whole clinic for a month. (SP3_IDI_55 years)

**Resorting to tele-consultation.** Following a month of the clinic close down, a new approach of delivering PC through tele-consultation was considered. Through technological gadgets and systems such as mobile phones, WhatsApp
and Zoom platforms, the PCT was able to resume care delivery. Assessment of patients, prescription and provision of psychological support were done using tele-consultation:

The thing is that, we realized that we cannot continue to shut down and cancel appointments forever. We needed to start something because COVID had come to stay! We had to strategize to provide care in this ‘new normal’ state. So, management came up with the strategy for us to use tele-consultation to provide PC services to patients. And so, we relied on phone calls, text messages and WhatsApp platform to reach patients and care for their needs. (SP7_IDI_30 years)

What we did was that, we ended up doing a lot of tele-consults where we called the patients to check up on them and then do the assessment on the phone. Then for the medications, we take a snapshot of the prescription and send it to them via mobile phone so that they can buy. It was only during serious emergencies that we allowed them to come to the hospital. (SP2_IDI_34 years)

Adopting shift system and reduced appointments. Another adaption to maximize the PC service delivery amidst COVID-19 was the adoption of a shift system. This mechanism was adopted in order to reduce the risk of infection among service providers at the clinic. The participants expressed that the PC unit adopted a shift system whereby there were 2–3 PC service providers on duty for a week while the remaining took over during their shift period.

As part of the mechanisms to bounce back and ensure the continuation of PC service provision was the decision to run a shift system. Three members of the team will come for a week then the remaining will come the following week. We did this to avoid crowding at the facility and minimize the spread of COVID to patients, their families and among ourselves. (SP7_IDI_30 years)

Then we also reduced the number of patients that we were seeing in a day. When they come, we do only one patient a day and we enforced fewer relatives at the hospital. Yeah, we enforced that. (SP3_IDI_55 years)

Adoption of IPC strategies. Additional adaptations that were implemented was the adoption of IPC strategies. KBTH directed its staff to use PPEs when delivering healthcare services to confirmed or suspected patients. To that end, PPEs such as Hamzat suits, face masks, gloves, and hand sanitizers were provided. Patients were also screened via temperature check and COVID symptom assessment. Suspected cases were directed to test. Additionally, participants reported that members of the PC unit had to undergo training on the use of PPEs in delivering PC services to patients. The following quotes exemplify this point:

To cope with COVID and still ensure that we provide palliative care services to our patients, management of the hospital directed us to use PPEs. So, all of us had to undergo some training because this was something new to us. So, they trained us on screening our patients for COVID. They also trained us on how to provide palliative care while maintaining physical distance. I also remember that management provided us with some face masks, gloves and sanitizers. We donned complete PPE with suspected or confirmed cases. (SP1_IDI_31 years)

You know; we had to continue providing care for our patients but at the same time make sure we don’t infect them or get infected by asymptomatic patients. So, during home visits for instance, we donned our face masks, gloves and in suspected or confirmed cases the Hamzat suit before providing care for the patient. (SP7_IDI_30 years)

Discussion

The present study explored PC service providers’ perspectives about PC service delivery during this period of COVID-19. The findings of this study indicate that COVID-19 has several consequences on PC service delivery: changes in care relationship, perceived increased responsibilities, psychological distress, shortage of medicines, and treatment delays.

Our study shows that COVID-19 has changed the relationship between service providers and patients. Prior to COVID-19, the PC unit at KBTH employed physical touches and hugs in their interaction activities with patients. However, as a result of the COVID-19 safety protocol which emphasizes on physical distancing, these interactive activities with patients were stopped. Similar findings have been reported in related study conducted in Italy (Franchini et al., 2021). The implication of this finding is that, the absence of physical touches and hugs would potentially make patients feel isolated and not cared for. This could potentially derail service providers’ success in improving patients’ quality of life. Also, adverse changes would certainly affect the quality of patient–service provider communication (Adams & Walls, 2020; Fadul et al., 2021).

The results also indicate that service providers perceived their responsibilities to have increased. This finding corroborates previous studies that have found perceived increased responsibilities as a major consequence of COVID-19 on PC service delivery (Franchini et al., 2021; Nestor et al., 2021). For instance, our finding is consistent with Nestor et al.’s (2021) study which revealed that 78% of PC service providers believe that their responsibilities towards care provision to patients has significantly increased. A plausible explanation for this finding could be that, PC service
providers were constantly concerned about protecting their patients from getting infected with COVID-19. As such, they were consistently on guard. Another possible explanation for this observation could be that, PC service providers had to adjust to the use of tele-consultation for assessment, diagnosis and prescription which hitherto was alien to them. Hence, increasing their responsibility to learn and adapt to the changing tides.

From the findings of this study, PC service providers experienced psychological distress as a result of the difficulties in providing PC services during a pandemic. Notably, it was revealed that fear, feelings of inadequacy and anxiety were the most experienced psychological distress among PC service providers. The result is consistent with previous studies that reported high levels of burnout, stress, depression, anxiety, and fear among PC service providers in the execution of their responsibilities amid COVID-19 (Franchini et al., 2021; Lai et al., 2020; Reddy et al., 2020). This observation underscores the need for hospital management to prioritize the health of PC service providers, particularly in the wake of the COVID-19 pandemic. Having PC service providers who are psychologically satisfied is essential to having an efficient service delivery process.

Consistent with evidence from previous studies (Pastrana et al., 2021; Singh et al., 2020), we observed that there was shortage of medicines, particularly opioids needed for pain management. The availability of opioids such as morphine was sparse, thereby leading to an escalation in the price of the limited stocks of morphine. This finding can be explained from the perspective that COVID-19 is a pandemic; thus, it affected all countries worldwide. Hence, disrupting the supply chain for internationally controlled essential medicines like opioids (e.g., morphine). Another plausible explanation could be that, local pharmaceutical companies and the international communities had shifted their priority towards the production of sanitizers, PPEs, immune boosters and supplements, and COVID-19 vaccines. As such, little priority was given to the production of opioids (Beltran-Aroca et al., 2021; Pastrana et al., 2021; Singh et al., 2020).

The decision to resort to tele-consultation as an adaptation mechanism is synonymous to other studies conducted in the United States (Ritchey et al., 2020) and India (Atreya et al., 2020). Tele-consultation offered PC service providers the opportunity to still conduct assessments, make prescriptions and offer psychosocial support. Nevertheless, our findings illuminate the fact that tele-consultation cannot replace face-to-face consultations (Atreya et al., 2020). This argument is premised on the basis that service provider had difficulties in conducting assessments and diagnosis via tele-consultation platforms. Similar challenges of using tele-consultation in PC service delivery has been reported in a qualitative study by Cormi et al. (2021). This finding underscores the need for tertiary hospitals in Ghana to prioritize service providers’ technological development through continuous professional development and implementation of emergency response strategies.

This study also revealed that KBTH adopted a shift system. The result mirrors the findings previous studies (Pastrana et al., 2021; Reynolds & Jahromi, 2021). Although this adaptation mechanism was timely for sustaining PC service delivery, it has some potential adverse implications. Given that PCT is made up of a group of interdisciplinary members, it implies that running a shift system would mean that all members of the team will not be present at the appointment of the patients. Hence, leading to re-scheduling of appointments and delays in care provision.

**Strengths and Limitations**

The present study provides rich in-depth exploration of how COVID-19 has impacted PC service delivery and the adaptations that were employed. We maintained high level of rigor which makes the study replicable in other contexts. Nevertheless, there are some limitations that are noteworthy. First, patients were not included in this study. Hence, variations in the perspectives about the ramifications of COVID-19 of PC service delivery from a patient’s viewpoint cannot be assessed in this study. Given that the first wave of COVID-19 was the reference period, there is the likelihood of recall bias.

**Implications for Practice**

Our findings have significant implication for policy and practice. The study emphasizes the need for hospital management to prioritize and invest in training HCWs on emergency preparedness for future pandemics. Our findings also highlight the opportunity to leverage on tele-consultation in delivering PC services. Continuous professional development programs would be needed to advance PC service providers’ capacity to provide PC using tele-consultation platforms. The study contributes to the wider evidence-based literature on pandemic preparedness particularly for resource-constrained settings. Our findings suggest that in times of crises, technology can be leveraged to provide continuous care to person in need of PC services. Our findings that there was a change in care relationship highlights a need for PC service providers to adopt healthy alternatives to provide care without compromising on the holistic and compassionate attributes of PC. Practically, PC service providers can adopt strategies such as continuously reassuring clients through chit-chats, and attentive listening to clients. These are sure ways to maintain empathetic interactions amidst pandemics like the COVID-19.

**Conclusion**

Our results indicate that COVID-19 has substantial ramification of PC service delivery. The study reveals that COVID-19 impacted PC service delivery by resulting in changes in care
relationship, perceived increased responsibilities, psychological distress, shortage of medicines, and treatment delays. To cope with these challenges posed by COVID-19, KBTH PC unit adopted certain institutional adaptation mechanism such as temporal halt of service provision, reducing number of appointments, running shift system, and adopting IPC strategies. In conclusion, priority should be given to the training of HCWs on emergency preparedness for future pandemics. Also, continuous professional development would be needed in order build PC service providers’ skills and capacity to effectively utilize tele-consultation in PC service delivery.

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ORCID iD
Joshua Okyere https://orcid.org/0000-0003-4080-7522

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