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Research Article

Barriers to the Commitment of Palestinian Health Providers to the Protocol of Healthy Behaviors for Patients with Non-Communicable Diseases: A Qualitative Thematic Analysis Study

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Abstract

Background: Although large number of clinical protocols and guidelines are being produced and carried out in the world, commitment to these protocols is still suboptimal from various healthcare professionals. This study aimed to assess senior physicians' and nurses' perspectives on barriers to commitment to the protocol of healthy behaviors for Non-Communicable Diseases (NCDs) patients in the Palestinian primary health care system.

Methods: The present semi-structured qualitative study was conducted from December 2020 to January 2021 among ten seniors' physicians and nurses at the governmental primary health system, Gaza Strip. Data were collected using a semi-structured in-depth interview guide. The guide was established based on the Cabana framework. The thematic analysis method has been used to analysis of the data.

Results: The main themes barriers that emerged from the analyzed data were inadequate knowledge "awareness & familiarity", protocol trustworthiness, protocol specialty and outdated, inadequate reimbursement, insufficient resources, time constraint, and inadequate monitoring & feedback.

Conclusion: Generally, the interviews with health providers demonstrated that they had a positive attitude towards healthy behaviors protocol. The insufficient protocol commitment seems to be related to additional wide-ranging factors rather than the knowledge or attitude factors. Healthcare providers might be facing barriers that are associated with external factors or protocol-related factors. The findings of the current study should attract policymakers and high-level managers to implement various practical strategies to target the main barriers to adherence to the Protocol of healthy behaviors.

Keywords: Commitment; Physicians'; Nurses'; Healthy behaviors; Protocol; Non-communicable Diseases (NCDs)

Introduction

Non-communicable Diseases (NCDs) or chronic diseases tend to be long-term and are the result of a combination of genetic, physiological, environmental, and behavioral factors [1]. The major NCDs are cardiovascular diseases, chronic respiratory diseases, different types of diabetes, and cancer [1]. NCDs are responsible for than 70% of the world's mortality, about three-quarters of these deaths occur in developing states [1,2]. The behavioral risk factors for the different types of NCDs are alcohol and tobacco use, lack of physical activity, and unhealthy diet [2]. There is extensive science that these factors contribute substantially to morbidity and mortality from non-communicable diseases [3,4]. The Occupied Palestinian Territory is undergoing an epidemiological transition, at present, the population has faced a significant change in lifestyles, nutritional activities, and environmental conditions, it is estimated that two out of every three elderly Palestinians experience at least one non-communicable disease [5,6]. Like other developing countries, the Palestinian primary health care system is characterized by a lack of essential medicines, basic equipment, diagnostic tests, and health behavior counseling services for patients with non-communicable diseases [7,8]. The Gaza Strip is part of the Occupied Palestinian Territory and is characterized by a highly-populated area, with a total population of approximately two million [9]. Cardiovascular diseases, cancer, and complications of diabetes remain the first, second, and fourth causes of death, respectively, among the Palestinian people [10]. In 2010, the World Health Organization set a package of interventions to address the main NCDs in low-setting primary health systems named Package of Essential NCDs interventions (WHO-PEN) [11]. The package created is the lowest set of interventions to address the main types of non-communicable diseases in primary care [1]. For more than seven years, the Palestinian Ministry of Health in the Gaza Strip has started the process of implementing WHO-PEN into the government's primary health care system [12]. Furthermore, the protocol of health education and counseling on healthy behaviors (WHO-PEN

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protocol2) is a critical tool in pragmatic implementation, which deals with key health behaviors recommended for patients with major non-communicable diseases and contains instructions for physicians and nurses to teach patients proper health behaviors such as medical follow-up, cessation of smoking and alcohol, physical activity and a healthy diet [1,13]. The findings of quantitative parts of the current Project show that more than 55% of government primary health care centers had all counseling on healthy behaviors according to WHO-PEN protocol 2, the health providers overall compliance level for WHO-PEN Protocol 2 was 70.0%, and 50.1% of NCD patients claimed that they adhere to health professionals' advice regarding physical activity, and 44.04% in terms of a healthy diet [7,14,15]. Awareness of protocols as substantial knowledge translation methods has increased significantly in previous years, it known as tools for the progression of evidence-based health, medicine, and nursing, they are useful tools for improving the quality of health services, can improve patients outcomes, and contain the costs by decreasing unnecessary differences in care [16,17]. Although a large number of clinical protocols and guidelines are being carried out in the world, commitment to these protocols is still suboptimal from various healthcare providers [18]. Suboptimal adherence to health protocols can intimidate patient safety, waste valuable resources, and lead to negative outcomes [19]. Implementation of a health protocol is a combination process influenced by many factors such as the behavior of health providers, the nature of the health protocol, and how the protocol is implemented [20]. According to Cabana and colleagues' framework, there are seven sub-themes considered as perceived barriers to compliance with health protocols, and these barriers are categorized under three main themes: Knowledge related barriers (lack of familiarity and lack of awareness); attitude-related barriers (lack of agreement, lack of self-efficacy, lack of outcome expectancy, and lack of motivation/inertia of previous practice); and behavior-related barriers (patient factors, guideline factors, and environmental factors) [20]. There are many quantitative studies of providers' commitment to counseling on healthy behaviors and perceived barriers, but little is known qualitatively about this issue. This study aimed to assess senior physicians' and nurses' perspectives on barriers to commitment to the protocol of healthy behaviors.

Materials and Methods

Study design and setting

The present semi-structured qualitative study was conducted from December 2020 to January 2021 at the governmental Primary Health Centers (PHCs), Gaza Strip. The Gaza Strip includes five small governorates, extending from Rafah and Khan-Yunis in the south to Deir al-Balah in the center, and Gaza, north Gaza [21]. The Ministry of Health (MoH) is the dominant healthcare services provider at all levels (primary, secondary, and tertiary), the primary health care covered through fifty-two Primary Healthcare Centers (PHCs) [7].

Sampling and participants

The senior physicians and nurses were selected purposively from five government primary healthcare centers based on the following criteria: (i) the healthcare providers at the center practice all the health behaviors proposed by the WHO-PEN 2 protocol, and (ii) the intended health providers are willing to participate in the study. The sample size was set based on data saturation, which means that at the point where no new ideas emerged from the respondents' experiences. After ten senior physicians and nurses, saturation was reached. To accomplish the diverse experiences of the study participants, considerations were taken regarding diversity in gender, age, specialty, position, education level, and years of experience. The preliminary list of potential physicians and nurses was compiled based on the experience of the first author, a public health researcher working in the Palestinian health sector.

Interview guide and data collection

Data were collected using a semi-structured in-depth interview guide. The guide was established based on the Cabana framework [20]. The Cabana framework was selected on the basis that it has been widely used as a theoretical framework in the study of adherence to clinical protocols or guidelines in various countries and the Palestinian context [14,22]. Particular items related to some main substantial previous quantitative results were included [14]. A semi-structured interview technique was chosen to offer extra flexibility for both the interviewee and the researcher [23]. The guide of the interview consisted of 12 open-ended questions measuring the importance of protocol, protocol use, resources, protocol contents, issues in actual practice interfering with the protocol used, and suggestions. Demographic questions were included to determine the interviewee's age, gender, specialty, position, education level, and years of experience. The core interviews were carried out by the first Author (AHA). The interviewees were conducted face to face in a quiet location inside primary health care centers with an average time from 25-60 minutes. In-depth interviews with the informed consent of participants were recorded.

Trustworthiness

Trustworthiness was ensured through, carefully collecting the purposefully study sample, and looking for a wide range of differences within the sample, check the accuracy of the researcher guesses about the transcripts, each transcription was checked several times, and during analysis time, the researcher analyzed the data in each transcript independently with additional Ph.D. a health management researcher, and in case of any disagreements, a third public health researcher consulted.

Data analysis

The interviews were audio-recorded, and data were transcribed verbatim and analyzed based on a thematic approach. All transcriptions were carried out by the first Author (AHA), each transcript was checked several times. Participants' anonymity was maintained. The thematic analysis approach has been used to analysis of the data, which consisting of the following steps 'familiarization', 'identifying a thematic framework', 'indexing', 'charting', and 'mapping, and interpretation' [24, 25]. The researcher analyzed the data in each transcript independently with an additional Ph.D. health management researcher, and in case of any disagreements, a third public health researcher consulted.

Results

Characteristics of the study participants

Table 1 displays the characteristics of the health providers' participants, the ten in-depth interviews were conducted with ten healthcare providers' (5 senior Physicians and 5 head Nurses) in five

Table 1: Characteristics of the interviewees (n=10).

ID	Age/Year	Gender	Specialization	Position	Education level	Years of experience
P1	53	Male	Medicine	Head of clinic	Bachelor	21
P2	49	Male	Nursing	Head nurses	Bachelor	15
P3	50	Female	Medicine	Head of clinic	Ph.D. or Family medicine Board	19
P4	46	Female	Nursing	Nursing supervisor	Master	22
P5	43	Female	Medicine	NCDs supervisor	Ph.D. or Family medicine Board	13
P6	56	Male	Nursing	Head nurses	Bachelor	24
P7	44	Male	Medicine	NCDs supervisor	Bachelor	16
P8	42	Male	Nursing	Nursing supervisor	Bachelor	9
P9	55	Male	Medicine	NCDs supervisor	Bachelor	18
P10	49	Female	Nursing	Nursing supervisor	Bachelor	22

primary healthcare centers, the interviews included four females and six males. The ages of the interviewees ranged between 42-55 years, and three of those interviewed had postgraduate degrees.

The themes extracted from the current study were typed based on the cabana framework which is called knowledge-related factors, attitude-related factors, and behavior-related factors [20]. Table 2 summarized the main themes barriers that emerged from the analyzed data which are inadequate knowledge "awareness & familiarity", protocol trustworthiness, protocol specialty and outdated, inadequate reimbursement, insufficient resources, time constraint, and inadequate monitoring & feedback.

Knowledge-related factors

The interviewees described widespread involvements about learning of and training about healthy behaviors for NCDs patients but the training courses did not focus exactly on WHO-PEN protocol 2. Most of the interviewees claimed that the health professionals were aware and training at least one time bout healthy behaviors for NCDs patients'

"…Doctors and nurses got at least on time training courses on healthy behaviors for NCDs patients, and joined various workshops about healthy behaviors." (P2).

The interviewees dissemble that the WHO-PEN protocol2 dissemination did not systematically reach all professionals and a print copy of the protocol not available in each PHCs. In addition, they claimed that the healthcare professionals had some familiarity with the content of the WHO-PEN Protocol 2, but did not have up-to-date information about healthy behaviors for various NCDs patients.

"… Most health colleges, whether they are medicine or nursing, include courses in their curricula related to health education about health behaviors, the availability of health care professionals with suitable skills is the responsibility of educational institutions in the first step." (P8).

Another recognition was about the non-systematic training, they believed that healthcare professionals' training capacities, and training opportunities were implemented based on the availability of donors' funds and sometimes according to their agenda.

"… Most training courses are planned and implemented by an international and national NGOs, and they depend on the organizations' funds and the purpose of their project rather than the needs of the staff." (P7).

However, there is consensus among the key informants that non-physician healthcare professionals should be delegated to educate patients on healthy behaviors. They believe that the absence of systematic dissemination of the protocol is one of the main perceived barriers toward the proper adherence to WHO-PEN Protocol2.

"… I think nurses are well qualified and can-do health education and counseling on health behaviors properly." (P4).

Protocol related factors

Trustworthiness of the protocol: There is a belief among all participants that the protocol is a useful standard tool of care, and can promote the improvement of health care services, the quality of life of NCD patients, and reduce health costs. Most of the interviewees think that the existence of protocols as scientific reference and evidence can lead to standardize care and reduce the variation in all health care steps. The majority of participants think that the protocol advantages outweigh the disadvantages. Discussion of the trustworthiness of the content of the WHO-PEN Protocol 2 took a significant part of the interviews and revealed that the interviewees demonstrated confidence in the reliability and worth of evidence on which WHO protocols were based. Most doctors and nurses' common ideas about the good quality of scientific evidence on which the protocol was based, which influenced the professionals' commitment to the WHO-PEN protocol2.They supposed that the evidence rigor was often mentioned. While the participants' not sure which method was used in evolving the protocol or at least how the recommendations were finalized, most of them had trust in the WHO experts who developed the protocol. Many of the interviewees argued that protocol should adapt and taking into account the local context. They worry about implementing international protocols without adapting to the local context which might negatively affect compliance level. There are four major health service providers in Palestine: the UNRWA, the MOH, NGOs, and private for-profit providers, the interviewees believed that there is a strong need for a strategy to standardizing the care provided by different health services providers. Most of the Palestinian physicians in Gaza are learned in different medical schools outside Palestine, which means that they are learning in different learning methods and approaches, and the interviewees

Table 2: Themes, subthemes, and codes based on the analysis.

	Domain Framework	Themes/subthemes	Codes
1	Knowledge related factors	Inadequate knowledge 'awareness & familiarity'	- Accessibility to the protocol - Dissemination - Training strategy - Delegation strategy
2	Protocol related factors	Trustworthiness	- Protocol developers - Protocol content - Protocol adaptation - Protocol specialty
		Outdated Protocol	- latest evidences - Updating process
3	Environmental related factors	Inadequate reimbursement	- Fiscal incentives - Non- fiscal incentives - Economic-Political instability.
		Insufficient resources	- Physical resources - Human resources - Fiscal resources - Consultation time
		Time constraint	- Number of patients seen - Consultation period - Over work
		Inadequate monitoring & feedback	- Filed inspection - Systemic supervision - Feedback - Clinical performance

claimed that not all training and health education organizations in Gaza Strip meet the global standards nor are fit to cover all health needs of the population in the country. Most of the interviewees think that the existence of protocols as scientific reference and evidence can lead to standardize care and reduce the variation in all health care steps. The majority of participants think that the protocol advantages outweigh the disadvantages.

"… Health professionals and health organizations nowadays are concerned with evidence-based health, and the World Health Organization is like the Ministry of Health in the world, the most credible organization to export this evidence." (P3).

"...In the fragmented health system and health care providers graduating from different external colleges such as the Palestinian system, protocols are the most effective interventions that can achieve standardized care and an optimal outcome for patients." (P4).

Non-specialization of the protocol & outdated: One of the main barriers raised by most of the interviewees was the lack of distinction between different NCD patients. Most of the people interviewed stated that it is not possible to treat different types of non-communicable diseases based on the same instructions, for example, many heart disease patients most of the time are unable to practice the protocol recommendations regarding physical activity.

"…It seems illogical to educate the same instructions for cancer patients and asthmatics." (P3).

Another main sub-themes barrier that was regularly raised by most interviewees was the outdated protocol. Some interviewees declared that it had been more than a decade or more since the last update of the current WHO-PEN protocol 2. Others claimed that the information in the protocol on health behaviors was generally stable and did not need to change significantly over time. However, it has been frequently recommended by participants that should have a regular period of time to update protocols; For example, every 3-5 years. They also recommended the establishment of a committee comprising the Ministry of Health, educational institutions, and the Palestinian Medical Council with responsibilities for frequently revising updated research evidence relevant to the local context.

Environmental factors

Environmental factors were the main notable barriers associated with the behavior of healthcare professionals in practicing according to WHO-PEN protocol2. Particularly, inadequate reimbursement, insufficient resources, time constraint, and inadequate monitoring &feedback were frequently reported as barriers to protocol commitment.

Inadequate reimbursement

There was agreement among the interviewees that inadequate incentives were a key barrier against protocol adherence. Most of the interviewees stated that the current monthly salary didn't motivate them to adhere to WHO-PEN Protocol2. Participants stated that the incentives are completely absent. Some revealed that the instability in the economic and political in Palestine imposed the Palestinian authority towards stop any plan related to the payment system or job promotion. The majority of interviewees claimed that fiscal incentives appeared to be the most main barriers to commitment to the protocol. They think that if appropriate fiscal incentives were secured, improved compliance could be broadly increased in the behavior of professionals, others believe that the previous argument can be explained by the poor salaries being paid by the government in Gaza for more than eight years due to the Israeli siege.

"…All the MOH employees are frustrated due to the not received complete salaries for more than eight years and lack of incentive. How can they be committed to providing satisfying care base on the protocol recommendations while they are demotivated?" (P5).

"…In the Palestinian system, the health professional receives fixed monthly salaries, and unfortunately, the current instability in the political situation has not allowed the Palestinian Authority to pay full salaries." (P10).

Insufficient resources

Insufficient resources are defined as a vital area of concern. Most of the interviewees recognized lack of resources as one of the main barriers to the employment of the WHO-PEN protocol2. The interviewees debated the requirement of resources as elementary inputs that can guide to better processes and subsequently to better commitment. They discussed the problems of budget constraints and poor fiscal funding to confirm the continuousness of resource readiness. Particular problems recognized by interviewees included the recurrent absences in some drugs, laboratory investigations, shortage of nursing employees, and the ongoing cost of printing and dissemination of health behavior recommendations in the form of leaflets, and posters among non-communicable disease patients. Several interviewees described the shortage of young staff as an obstacle to implementing the protocol. They claimed that the suboptimal adherence to the WHO-PEN protocol2 might be related to the weak planning of human resources development. Most new recruitment in MoH goes to the hospitals and most healthcare professionals working in PHCs are considered old-aged.

"… Ministry of Health employees believe that primary health care centers are a more comfortable place with less workload compared to hospitals." (P5).

A common suggestion made by interviewees is that a portion of the new young recruitment staff should be distributed in a primary health system not only in hospitals.

"…The attitude towards primary health care as a place of comfort should be changed, and the elderly staff should be changed by distributing a portion of the new young employees in the primary health care centers who can make the required change."(P3).

Time constraint

Time constraint was emphasized as a substantial barrier to protocol commitment among interviewees. The issue of time was marked by the view that there was a lack of time to adequately implement the recommendations of the Protocol. The vast majority of interviewees assumed that many providers were imposed to reduce consultation time due to the large numbers of patients examined daily. Some interviewees assumed that the consultation on healthy behaviors needs at least five minutes for each patient. They have acknowledged that healthcare professionals have problems accurately evaluating patients, listening to their medical history, or advising on appropriate health behaviors due to time constraints and a large workload. A common suggestion by the interviewees is that this protocol needs special healthcare professionals to add to the PHC professionals such as nutritionists.

"…This protocol increased workload, adds extra-burden on nurses."(P8).

Inadequate monitoring &feedback

Insufficient systematic inspection of implementation or performance was described by the interviewees to be one of the main barriers to protocol commitment. Some interviewees claimed that most of the time there is a lack of systematic monitoring or there are non-systematically repetitive tasks completed by an assigned supervisor. Some interviewees associate current monitoring practice with the occurrence of errors. The contributors declared that the feedback is restricted to given some notes that are usually ineffective in changing the healthcare professionals' performance. The participants claimed that the failure to make healthy behaviors education into clinical practices was due to the absence of effective and well-organized clinical monitoring & feedback.

"…We can say that there is not enough monitoring and feedback on our work, and the methods used in monitoring are inadequate."(P6).

Discussion

The current qualitative research study aimed to assess senior physicians' and nurses' perspectives on barriers to commitment to the protocol of healthy behaviors (WHO-PEN Protocol2) at governmental primary healthcare centers in the Gaza Strip. Generally, the interviews with health professionals demonstrated that they had a positive attitude towards healthy behaviors protocol. The insufficient protocol commitment seems to be related to additional wide-ranging factors rather than the knowledge or attitude factors. Healthcare professionals might be facing barriers that are associated with external factors or protocol-related factors. The main theme barriers that emerged from the analyzed data were the inadequate knowledge "awareness & familiarity", protocol trustworthiness, protocol specialty and outdated, inadequate reimbursement, insufficient resources, time constraint, and inadequate monitoring & feedback. The previous quantitative part of the current project demonstrated that the main perceived barriers to adherence to healthy behaviors protocol (WHO-PEN Protocol2) were lack of incentives, patient factors, lack of time, and lack of motivation/inertia of previous practice [14].

Knowledge "awareness & familiarity"

The interviewees described widespread involvements about learning of and training about healthy behaviors for NCDs patients but the training courses did not focus exactly on WHO-PEN protocol2. The interviewees dissemble that the WHO-PEN protocol2 dissemination did not systematically reach all professionals and a print copy of the protocol not available in each PHCs. Another recognition was about the non-systematic training, they believed that healthcare professionals' training capacities, training opportunities were implemented based on the availability of donors' funds and sometimes according to their agenda. Various systematic review studies have identified that one of the major barriers to adherence to the protocol is the lack of systematic dissemination and health professionals are not aware of the protocol's existence [26,27]. Implementation of the WHO-PEN protocol2 does not require special investigations or advanced interventions, it is about health education and includes recommendations for healthcare professionals to teach NCD patients to appropriate health behaviors such as medical follow-up and eating a healthy diet [13]. Previous studies demonstrated that protocols like WHO-PEN2 which are easy, uncomplicated protocols and do not need particular resources have a better chance of being utilized [27-29].Although reliance on donations may have a positive effect in the short term, it has been recognized as one of the main obstacles to the Palestinian health system reform agenda [30,31].

Inadequate reimbursement, insufficient resources, and time constraint

The interviewee declared that the incentives are completely

absent. Some revealed that the instability in the economic and political status in Palestine imposed the Palestinian authority towards stop any plan related to the payment system or job promotion. Furthermore, Particular problems recognized by interviewees included the recurrent absences in some drugs, laboratory investigations, shortage of nursing employees, and the ongoing cost of printing and dissemination of health behavior recommendations in the form of leaflets, and posters among non-communicable disease patients. Several interviewees described the shortage of young staff as an obstacle to implementing the protocol. In addition, time constraint was emphasized as a substantial barrier to protocol commitment among interviewees. The issue of time was marked by the view that there was a lack of time to adequately implement the recommendations of the Protocol. The vast majority of interviewees assumed that many providers were imposed to reduce consultation time due to the large numbers of patients examined daily. The result of the current study is consistent with a previous study conducted among Palestinian healthcare professionals that demonstrated lack of incentives, lack of resources, and lack of time as the main recurrent perceived barriers to adherence to the local diabetes mellitus guideline [22]. To illustrate, Gaza Strip has been under siege for more than 14 years, which has affected the whole government's ability, the government in Gaza is unable to pay full salaries for the current employees due to fiscal constraints and is unable to recruit sufficient numbers of health professionals including physicians and nurses which leads to an increase in the workload of the current employees and shortage the time of consultation time for patients [14,22,32,33]. The government was unable to purchase some essential drugs, laboratory investigations, and provide the ongoing cost to printing and dissemination of health behavior recommendations in the form of leaflets, and posters among non-communicable disease patients [7,14,22,34,35]. A recent systematic review showed that twelve low- and middle-income countries failed to reach the WHO's optimal target of availability of essential medicines and technologies for patients with non-communicable diseases [8]. In the Gaza Strip, the readiness index score based on the WHO-PEN suggestion in terms of essential medicine, diagnostic capacity was 46.5%, 65.3% respectively [7]. In this complex economic and political situation, it seems feasible to study the non-financial incentives that could motivate healthcare professionals before implementing any protocol. Several interviewees described the shortage of young staff as an obstacle to implementing the protocol, they claimed that most new recruitment in MoH goes to the hospitals, and most healthcare professionals working in PHCs are considered old-aged. New staff should be redistributed between hospitals and the primary health care system. A common suggestion by the interviewees is that this protocol needs special health professionals to add to the PHCs professionals such as nutritionists.

Protocol trustworthiness, protocol specialty and outdated

Health professionals had a positive attitude towards protocols as important evidence-based methods, in particular the protocols or guidelines recommended by the World Health Organization. They believed that protocols were the most appropriate ways to standardize care and reduce differences between different health professionals in different health institutions. Interviewees argued that the current protocol should be adapted and take into account the local context, distinguishing between different NCD patients, stated that different types of NCDs could not be treated based on the same instructions, and declared that it had been a decade since the last update to the current WHO-PEN protocol2. The result of the current study consistent with previous studies that identified the lack of protocol trustworthiness and outdated protocol as perceived barriers to adherence [14,22,36-38]. In literature, it can be clearly seen that most organizations don't have clear ways to updating the protocols, and do not have a formal way for deciding when a protocol becomes outdated [39,40]. However, it has been frequently recommended by participants that should have a regular period of time to update protocols; for example, every 3-5 years. They also recommended the establishment of a committee comprising the Ministry of Health, educational institutions, and the Palestinian Medical Council with responsibilities for frequently revising updated research evidence relevant to the local context.

Inadequate monitoring & feedback

Insufficient systematic inspection of performance was described by the majority of the interviewees to be the main barrier to protocol adherence. Some interviewees claimed that most of the time there is a lack of systematic monitoring or there are non-systematically repetitive tasks completed by an assigned supervisor. Monitoring and feedback have been applied for decades as an approach for changing the clinical practice behaviors of health care employees, monitoring and feedback integrate the collection of information related to professionals' performance and the providing of a summary of that performance to individuals or teams of professionals [41]. It has been used to enhance efforts toward increase adherence across widespread situations and environments [42-44]. Many studies have demonstrated that conducting monitoring is one of the ways that may be improving the efficiency, accountability, and quality of care [45-47]. Nevertheless, it appears that the success of monitoring and feedback relies on baseline performance and how the feedback is providing [48]. It seems that the mindset and key roles around supervision must be changed and baseline performance must be measured before any protocol is implemented.

Conclusion

Our study is one of the few qualitative studies in the Palestinian context that uses the cabana framework that provides an in-depth understanding of factors that hinder the commitment of Palestinian health care providers to the protocol of healthy behaviors for patients with non-communicable diseases (WHO-PEN protocol2). Generally, the interviews with health professionals demonstrated that they had a positive attitude towards healthy behaviors protocol. The insufficient protocol commitment seems to be related to additional wide-ranging factors rather than the knowledge or attitude factors. Healthcare professionals might be facing barriers that are associated with external factors or protocol-related factors. The main theme barriers that emerged from the analyzed data were the inadequate knowledge "awareness & familiarity", protocol trustworthiness, protocol specialty and outdated, inadequate reimbursement, insufficient resources, time constraint, and inadequate monitoring & feedback. The findings of the current study should attract policymakers and high-level managers to implement various practical strategies to target the main barriers to adherence to the Protocol of Healthy Behaviors.

Declarations

Ethics approval and consent to participate: This study is part of

a project that includes quantitative and qualitative parts, the project protocol was approved by the Palestinian Helsinki Ethical Committee of Research (PHRC/HC/599/19) and the Ethics Committee of Tehran University of Medical Sciences (Code: IR.TUMS.REC.1398.349). All interviewees were attending a brief explanation about the aim of the research. Written informed consent was obtained from the interviewees before the data collection. The Pseudonymity of all interviewees was preserved by using the alphanumeric coding system (i.e., P1, P2) and removing all identifiable data from the transcripts. All methods in this study were completed according to the appropriate guidelines and regulations.

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