



ศึกษาความเป็นไปได้และการยอมรับการใช้รูปแบบการเยี่ยมติดตามผู้ป่วยโรคเรื้อรังโดย
ทีมเครือข่ายผู้ดูแลในชุมชนพิปูน จังหวัดนครศรีธรรมราช: การศึกษาเชิงคุณภาพ
Feasibility and Acceptability of a Chronic Disease Patient-Caregiver Network of
Follow-Up Model for Local Caregivers, Phipun, Nakhon Si Thammarat
Province: A Qualitative Study

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บทคัดย่อ

การวิจัยเชิงคุณภาพนี้มีวัตถุประสงค์เพื่อศึกษาความเป็นไปได้และการยอมรับการใช้รูปแบบการเยี่ยมติดตามผู้ป่วยโรคเรื้อรังโดยทีมเครือข่ายผู้ดูแลในชุมชนพิปูน จังหวัดนครศรีธรรมราช ซึ่งรูปแบบดังกล่าวนี้เป็นนวัตกรรมที่พัฒนาจากเครือข่ายผู้ดูแลผู้ป่วยโรคเรื้อรังที่ใช้ชุมชนเป็นศูนย์กลาง ที่มุ่งเน้นการระบุและการจัดการผู้ป่วยที่เป็นโรคเรื้อรังในชุมชนพิปูน เครื่องมือวิจัย คือ แบบสังเกตและการสัมภาษณ์แบบกึ่งโครงสร้าง กลุ่มตัวอย่าง คือ ผู้ป่วยโรคเบาหวานและความดันโลหิตสูง 7 ราย และผู้ดูแล 15 ราย โดยมีเป้าหมายเพื่อประเมินผลของรูปแบบการเยี่ยมติดตามผู้ป่วยโรคเรื้อรังจากทีมเครือข่ายผู้ดูแลในชุมชน วิเคราะห์ข้อมูลโดยใช้เทคนิคการวิเคราะห์เนื้อหา

ผลการศึกษาพบว่า การใช้รูปแบบการเยี่ยมติดตามผู้ป่วยโรคเรื้อรังโดยทีมเครือข่ายผู้ดูแลในชุมชนครั้งนี้มีความสำคัญ ซึ่งบ่งชี้ว่ารูปแบบดังกล่าวนี้มีความเป็นไปได้ที่จะนำไปใช้ได้จริงและมีการยอมรับการใช้รูปแบบการเยี่ยมติดตามผู้ป่วยโรคเรื้อรังโดยทีมเครือข่ายในการจัดการโรคเรื้อรังในชุมชน

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รูปแบบนี้สามารถนำไปปรับใช้ให้เหมาะสมกับความต้องการของชุมชน เนื่องจากมีความยืดหยุ่น และความสามารถใช้ในการขยายผลได้ โดยเฉพาะการฝึกอบรมผู้ดูแลและการจัดตั้งระบบเครือข่ายการดูแลโรคเรื้อรังในชุมชน เพื่อให้ผู้ป่วยในชุมชนมีความสะดวกในการเข้าถึงบริการสุขภาพ และได้รับการดูแลที่ดี ซึ่งนำไปสู่การปรับปรุงในการเข้าถึงและการจัดการด้านการดูแลสุขภาพ จุดเด่นที่สำคัญของรูปแบบนี้ คือ การส่งเสริมสนับสนุนให้มีการติดตามสุขภาพที่บ้าน ทำให้ประหยัดเวลาและลดค่าใช้จ่ายต่อผู้ป่วยและผู้ดูแล รวมทั้งรูปแบบดังกล่าวนี้ยังเป็นที่ยอมรับในทีมผู้ให้บริการด้านการดูแลสุขภาพที่เกี่ยวข้องต่าง ๆ ด้วย ตลอดจนผู้ป่วยโรคเรื้อรังมีอิสระในการตัดสินใจในการรับการดูแลทำให้เสริมศักยภาพของผู้ป่วย

นอกจากนี้ รูปแบบการติดตามนี้ ยังมุ่งเน้นถึงความสำคัญของระบบการตรวจติดตามผลอย่างละเอียด โดยให้ความสำคัญและความจำเป็นในการดูแลอย่างต่อเนื่อง ซึ่งความครอบคลุมนี้มีความสำคัญอย่างยิ่งต่อการดูแลผู้ป่วยเป็นรายบุคคล โดยเฉพาะอย่างยิ่งสำหรับผู้ที่มีอาการเรื้อรังในสภาพแวดล้อมของชุมชน

รูปแบบดังกล่าวนี้ อาจจะนำไปเป็นต้นแบบเพื่อไปปรับประยุกต์ใช้ในชุมชนอื่น ๆ ที่มีบริบทใกล้เคียงกัน ซึ่งอาจจะมีการบูรณาการตามสภาพของแต่ละชุมชนโดยชุมชนตามความเหมาะสม ในการจัดการกับโรคเรื้อรังในพื้นที่ เพื่อให้เกิดประสิทธิภาพในการปรับปรุงการจัดการโรคเรื้อรัง โดยดึงการมีส่วนร่วมในท้องถิ่นและความร่วมมือแบบสหสาขาวิชาชีพในการยกระดับการให้บริการด้านการดูแลสุขภาพในชุมชน

คำสำคัญ: ผู้ดูแล, โรคเรื้อรัง, ชุมชน, เครือข่าย, รูปแบบการติดตาม

Abstract

The objective of this qualitative study was to evaluate the feasibility and acceptability of a Chronic Disease Patient-Caregiver Network (CDP-CN) of follow-up model in community. This innovative approach involved establishing a community - centered network of caregivers, focusing on identifying and managing patients with chronic diseases. The methodology encompassed the use of observation forms and semi - structured interviews with seven diabetes and hypertension patients and 15 caregivers, aiming to identify challenges, devise solutions, and evaluate the CDP - CN of follow - up model's efficacy. Content analysis techniques were applied for data analysis.

The findings of this study are significant, indicating that the CDP-CN of follow - up model is a viable and effective method for managing chronic diseases in communities. The model was adapted



to fit the specific needs, flexibility and scalability. Particularly, training for caregivers and the establishment of a network system. It facilitated enhanced patient care in chronic disease management and led to notable improvements in healthcare access and management. A critical advantage of this model was its support for home-based health monitoring, which proved to be both time-efficient and cost-effective for patients and caregivers. Also, the model's acceptability among all divers' teams involved, including patients, caregivers, and healthcare providers due to enhance patient autonomy and empowerment.

Additionally, the importance of a thorough follow-up visit system model was highlighted, emphasizing the need for continuous care. This comprehensive approach is crucial for delivering personalized, patient-focused care, especially for those with chronic conditions in community environments.

The CDP - CN of follow-up model's success illustrates its potential as a template for community healthcare initiatives, especially in managing chronic diseases in less urbanized areas. It emphasizes the importance of community-based care, local involvement, and multidisciplinary collaboration, offering an effective solution for improving chronic disease management and healthcare delivery.

Keywords: Caregiver, Chronic disease, Community, Network, Follow-up model

Introduction

In recent years, the socio-economic progress in Thailand has led to prominent lifestyle and health shifts, with significant implications (Vollset et al., 2020) Although this development has extended life expectancy, it has concurrently escalated the prevalence of diseases, largely attributed to an aging demographic. This scenario has entrenched chronic health issues, especially non - communicable diseases like hypertension, diabetes, cancer, and stroke, which are increasingly common (World Health Organization, 2023) These diseases are often tied to unhealthy lifestyle choices, adversely affecting individuals, their families, communities, and ultimately, the country's socio-economic growth (AlQuaiz et al., 2021) The rising consumer culture and the gravitation towards Westernized living standards have prioritized short-term conveniences, undermining long - term health. Additionally, technological advancements have led to a decrease in physical activity,



introducing new public health challenges such as obesity (Liu et al., 2023) The prevalence of diseases associated with inactive lifestyles and poor nutrition, such as diabetes and hypertension, continues to climb (Gamage & Seneviratne, 2021) Despite heightened public health efforts and investments, the burden on individuals and healthcare systems intensifies as the frequency of these conditions rises (Park et al., 2020) leaving patients to grapple with the lifelong management of these chronic diseases and their debilitating complications, significantly impacting their quality of life (AlQuaiz et al., 2021)

Previous studies have predominantly focused on investigating how healthcare practitioners view and manage chronic illnesses. (Michielsen et al., 2023) However, patients with chronic conditions in rural communities face significant challenges in accessing healthcare services (Saddi, et al., 2018) Their concerns extend beyond health issues and encompass various complex everyday life situations, significantly impacting both their physical and mental well-being (Saddi et al., 2018; World Health Organization, 2022) Furthermore, family caregivers are burdened with the responsibilities of long-term care, struggling with a multitude of physical, mental, and social challenges (Centers for Disease Control and Prevention [CDC], (2019) Therefore, it is crucial to strengthen healthcare systems by implementing caregiver networks, as these support systems have been shown to deliver positive results for both caregivers and patients, benefiting the entire healthcare system (Karam et al., 2021) The concept of a care network plays a pivotal role in addressing chronic conditions, offering a range of strategies to establish links between services, to improve coordination within healthcare systems, and to promote collaboration with external stakeholders and service users (Rajamani & Iyer, 2023)

Phipun, a rural district in southern Thailand, has a total population of 3,944 people across 1,078 households. Its economy is predominantly agricultural, reflecting an integrated economic structure. The district faces challenges due to the migration of its working-age population to urban areas in search of employment. Health statistics reveal that in Phipun, 302 individuals have been diagnosed with diabetes, and 791 with hypertension. There are also 15 patients who are bedridden due to chronic illnesses (Health Data Center, 2023) A significant issue affecting the district is the management of non-communicable diseases, largely attributed to a widespread lack of awareness regarding healthy lifestyle practices



Furthermore, Phipun's healthcare system faces its own set of challenges, including the absence of a clear care plan for bedridden patients with chronic diseases. Most healthcare services were provided through lower - quality local health facilities and relied on the assistance of village health volunteers as VHV's who play a crucial role in delivering healthcare services and health education at the grassroots level in Thailand, particularly in rural and remote areas. These factors collectively contributed to the health-related challenges experienced by the Phipun community.

Evidence supports the idea that patient care delivered through a model of multi-disciplinary, healthcare networks can enhance disease control and reduce the risk of additional health complications (Saddi et al., 2018; Schenker & Costa, 2019) Local community health networks play a pivotal role and should receive backing to prevent health - related issues among service users (Clark & Himmelberger, 2023; Michielsen et al., 2023) This may involve minimizing the likelihood of more severe complications by enhancing rehabilitation networks for bedridden patients, ultimately leading to improved health outcomes and quality of life.

In this study, which forms a part of a participatory action research initiative, we explored and formulated a novel patient-caregiver network model within three communities in Phipun. Our qualitative analysis was aimed at devising a network that highlights the importance of community engagement and reducing complexities to bolster the resilience and interconnectedness of patient-caregiver relationships, particularly in the context of chronic disease management in community settings. By adopting a forward-thinking strategy, we shifted our focus to developing a comprehensive, multi-disciplinary, and multi- health network model dedicated to overcoming the multifaceted obstacles of chronic disease care. This led to the creation of the Chronic Disease Patient-Caregiver Network ("CDP-CN") of follow-up model. The process of evaluating the practicality and reception of such networks is intricate and ever-evolving, necessitating an all-encompassing approach. Through ongoing adjustments based on their feedback and practical experiences, we refined our model to more accurately meet the complex needs of the patient-caregiver network, highlighting the necessity for a model that adeptly navigates the challenges of chronic disease management at the community level.



Objectives

This qualitative study aimed to evaluate the feasibility and acceptability of a CDP - CN of follow - up model in Phipun district, Nakhon Si Thammarat province, Thailand.

Research methodology

This descriptive qualitative research is the fourth phase of the participatory action research project titled “Developing a caregiver network for chronic disease patients by community at municipality of Phipun, Nakhon-Sri Thammarat” The study examines the basic elements of the chronic care model, which was introduced by Wagner (1998) This approach allows for a comprehensive exploration of how the model integrates with Clinical Information Systems. The study highlights the importance of involving a multidisciplinary team, engaging the community, and fostering collaboration among organizations to manage follow-up care for people with chronic health conditions.

Participants

The qualitative part involved 22 volunteers, including 15 caregivers and 7 patients, who were dealt with chronic conditions such as diabetes and hypertension. This was conducted to evaluate the feasibility and acceptability of a CDP - CN of follow-up model.

Data collection

The data collection for the study was segmented into four phases, aligning with the Participatory Action Research (PAR) methodology for the initial three stages. This method highlighted the importance of engaging the community and collaborative efforts to tackle health issues in Phipun, Thailand. In this concluding phase, the study aimed to summarize the research findings and perform an evaluative review. A gathering of all public health leaders (15 in number) was organized to discuss and provide a thorough overview of a CDP - CN of follow-up model's progression. Additionally, the effectiveness of the community's involvement was assessed through individual interviews with representatives from the CDP - CN of follow-up model, each lasting between 15 to 20 minutes. This step was crucial for reflecting on the network's impact and its efficiency in addressing the community's chronic disease management needs.



For research purposes, three main instruments were utilized:

1. An observation form to track the CDP-CN of follow-up model evolution.
2. A semi-structured interview, conducted in Thai, aimed at extracting detailed insights from network representatives about the CDP - CN's of follow-up model development, referencing existing literature for context.
3. A satisfaction interview protocol focused on community engagement, needs, objectives, and encountered challenges. This protocol was reviewed for content validity by three community work experts with refining based on their feedback.

The interview process involved six questions designed to gather diverse perspectives and experiences from network representatives regarding the CDP - CN of follow - up model. These questions explored feelings about the network's operation, benefits derived from the model, involvement in its development, obstacles faced, and recommendations for its enhancement, and strategies for sustaining its growth within the community.

Before implementation, the interview protocol underwent a thorough review by three specialists in community work to guarantee its content's consistency and relevance. Adjustments were made based on their feedback, ensuring that the final set of questions effectively captured the community's views and experiences with the CDP - CN of follow - up model. This reflective and evaluative stage provided critical insights into the network's functioning, offering a foundation for future improvements and sustained development in managing chronic diseases within the community.

Data analysis

The qualitative data analysis in this study involved the examination of interview and observation data collected during follow-up visits. Content analysis, as described by Creswell and Creswell (2018) was carried out to identify and summarize key points pertaining to the development of the CDP - CN of follow - up model and the level of community involvement. All themes were coded by reading through the transcriptions, and the researcher interpreted and captured the phrase, sentence, or paragraph by coding and theming its relevance to the research aim. The new code was assigned in the code book. All themes were recorded and confirmed by member checking.



Research Rigor

To enhance the trustworthiness of the research, data triangulation was employed by considering information from both observations and interviews with multidisciplinary teams. The audio recordings of the interviews were transcribed and then cross-checked for accuracy with community representatives to ensure data fidelity.

To promote transparency and community engagement, the research team shared their initial findings with the community, encouraging reflection on the results. This collaborative reflection was particularly valuable when current actions did not yield the desired outcomes, prompting a need for change. Following this feedback process and the recommendation of new solutions to address practical challenges from the participants, the research team made necessary adjustments to the supporting data and refined insights and results based on feedback received in previous cycles. This iterative approach ensured that the research was responsive to the needs and perspectives of the community it sought to serve.

Audit trail process

The provided patterns are used in the process of editing transcripts in a research context to identify participants and categorize them based on their conditions and roles. Here's how they work:

(DM, 1): This pattern is used to identify a participant who is living with Diabetes Mellitus (DM). The "DM" represents the interviewee's condition, and the number "1" in parentheses indicates the number of informants with this condition. (HT, 1): This pattern is used to identify a participant who is living with Hypertension (HT). The "HT" represents the interviewee's condition, and the number "1" in parentheses indicates the number of informants with this condition. (CG, 1): This pattern is used to identify a participant who is a caregiver (CG). The "CG" represents the interviewee's role as a caregiver, and the number "1" in parentheses indicates the number of informants in the caregiver role. (CLD, 1): This pattern is used to identify a participant who is a community leader (CLD). The "CLD" represents the interviewee's role as a community leader, and the number "1" in parentheses indicates the number of informants in the community leader role. These symbols and patterns help researchers categorize and differentiate participants in the study based on their health conditions (DM or HT) and their role as CG. This system is useful for tracking and analyzing data related to specific participant groups in the research results.



Ethical consideration

The research procedures and potential benefits were thoroughly explained to all of participants, and they each provided informed written consent. We ensured that they understood their rights, the confidentiality of their data, the voluntary nature of their participation, and their right to withdraw from the study at any time. This study accepts an ethical and transparent approach by presenting its findings in a single, comprehensive publication rather than dividing it into smaller parts. This ensures a coherent and complete presentation, facilitating a clear understanding of the study's scope and significance. This approach is respected for its transparency and research integrity. Additionally, this research received ethical approval from the Human Research Ethics Committee at Suratthani Rajabhat University (Approval No. 2560 / 005)

Results

The research participants were 15 caregivers who were all community health volunteers. The participants were all female, and most worked in rubber agriculture. The other group of participants involved in the study was seven patients dealing with chronic diseases, specifically individuals with diabetes and hypertension.

Throughout the research process, the emphasis was on engaging multiple healthcare teams in activities such as problem identification, action planning, implementing follow-up visits, evaluating visit results, and concluding network development. This research was conducted in the Phipun region of Nakhon Si Thammasat, Southern Thailand, and the subsequent findings were directly aligned with the study's objectives.

The results were categorized into two primary sections. The first part focuses on the feasibility of the CDP - CN of follow - up model, and the second part delves into the supporting results, specifically examining the acceptability and satisfaction levels within the patient data for each of these components.

Results of the feasibility “CDP-CN” of follow-up model

All fifteen caregivers with chronic diseases, including individuals with diabetes and hypertension, successfully adhered to the model within a relatively short period of three months. This



high level of adherence is a positive indicator of the model's effectiveness in engaging and involving the target population.

The response the question as "How do you feel about the operation of the chronic disease patient-caregiver network model?" as describe from patients and caregivers as following reflection:

"I believe this is the first time in our community where such a multidisciplinary model has been established for us. Although this model is something new and, at times, seems quite complex due to its multidisciplinary nature, I am not always sure if my knowledge is sufficient to fully engage with it. However, I am committed to giving my best effort to make it work." (CG, 5)

Another reflects on the feasibility of the CDP-CN of follow-up model from the Diabetes patient as the below details:

"I have had diabetes for 10 years, I think this is the first time I will get visit form variety professions, I am so excited and promise to follow this model" (DM, 2)

Also, the positive feedback after employing the model, the caregivers expressed positive feelings. Many of them noted that this model was unique in its incorporation of multiple disciplines to address their needs. This feedback highlights the model's feasibility and suggests that it rounds with the patient-caregivers' expectations and requirements.

"I'm grateful that our Phipun community has enabled both hypertension and diabetes patients to monitor their health conditions at home. This feels like a dream come true within the framework of this model. The proactive initiatives of our community's public health officer and local officials have made this possible. I am committed that this development will significantly benefit our community." (CG, 6)

However, one participant raised a valid concern regarding the negative comment, specifically that the intervention did not contain the provision of sphygmomanometers after the completion of this research project. During follow-up visits on appointment days, participants consistently expressed their concerns and frustrations as the following argument:



"While this project has greatly benefited our community, I'm concerned about the availability of the sphygmomanometers for hypertension and diabetes patients in Phipun once the project ends. The model's effectiveness might be at risk if these crucial tools aren't available." (CG, 1)

These results show that the "CDP-CN" of follow-up model has confirmed feasibility and received positive feedbacks from patient-caregivers. However, sustainability concerns were also raised, emphasizing the importance of addressing the long-term availability of necessary resources for chronic disease management in the community.

Results of the acceptability and satisfaction attitudes

Fifteen caregivers responded in the questionnaires, and the majority of them expressed a high level of satisfaction with the CDP - CN of follow - up model. They noted that the model had a positive impact on their health outcomes and especially reduced the need for hospital visits within a short three-month period. This highlights the model's effectiveness in enhancing both the satisfaction and health outcomes of caregivers in a relatively brief timeframe. These responses highlight the tangible and positive impacts of the CDP - CN of follow - up model on healthcare access and management for patient-caregivers. They response this question "How have you benefited from the chronic disease patient-caregiver network model?"

As mentioned earlier, one patient who living with hypertension addressed the opinion on care model benefit and satisfaction as the following reflective quote:

"I'm sure that this model can enhance my ability to monitor my blood pressure because I can now check it at home, eliminating the need to go to a health center. This has saved me time and money that I used to spend on traveling to the hospital" (HT, 2)

Another patient also expressed the positive reflection on the care model:

"You know, before this project came here, whenever I had a headache, I had to go to the health center. But now, it's not only convenient for me but also for my daughter, who takes care of me." (HT, 3)

As same as the above representative patients who had reflected in the new care model satisfaction, most of caregivers were satisfied with the model of care:



"I am happy to use this model, and I am committed to adhering to every step of it because I understand that it was created through multidisciplinary brainstorming. That's why I am determined to follow this model." (CG, 4)

Another community leader reflected on the feelings of being part of the network for patient care as the following details:

"I feel proud to be part of the team, even though I do not have much knowledge, but I am a part of One who has helped the team" (CMD,1)

The participants confirm that the CDP-CN of follow-up model has had tangible and beneficial effects on healthcare access and management for the patient-caregiver group. These benefits include the convenience of home-based health monitoring, resulting in significant time and cost savings. Moreover, the respondents highlight their commitment to follow the model's guidelines due to its development through a multidisciplinary approach, which has instilled confidence and a strong commitment to adhering to its recommendations

Discussion

As the research aim to evaluate the feasibility and acceptability of the CDP-CN of follow-up model in the Phipun district, Nakhon Si Thammarat province, Thailand, the research results show that the network following and visiting diabetic and hypertension patients in the community was feasible. This result may be due to the follow-up visit process based on community participation aiming to solve the problems of patients who need continuous care. The design of the follow-up visit plan is not too frequent, and the follow-up visits for each patient took an appropriate amount of time and benefit the patient and family caregivers. Including the excellent follow-up team, they can carry out their duties with confidence due to the composition of the team that complements each other's strengths. It is similar to the recent study that reveals that teamwork is a crucial component of the health care system for chronic patients in the community (Surendran et al., 2022) In term of acceptability, the results revealed that most participant were satisfaction and willing to be part of community care team. These results may cause of the confidence in multidisciplinary care team that could fill the patient' gaps and needs (Ruiz-Ramos et al., 2021)



The CDP - CN of follow - up model aligns with the principles of the Chronic Care Model, particularly emphasizing proactive patient care, as conceptualized by Wagner (1998) This is evident in its community visitation strategies and active engagement, embodying a comprehensive and multifaceted approach to address health issues. Research, such as Clark and Himmelberger (2023) supports the idea that patient engagement and autonomy are crucial in influencing health outcomes, a notion central to the CDP - CN of follow - up model.

Additionally, the importance of leadership involvement and environmental awareness, as emphasized by Fernando and Hughes (2019) resonates with the CDP-CN of follow-up model's principles. This proactive, community-focused approach engages leadership and other healthcare teams effectively to address chronic diseases, ensuring sustainable healthcare efforts. This is further supported by Pye et al. (2018) who highlight the role of leadership in raising awareness and stimulating consumer demand for resources and support in chronic disease management.

However, as pointed out by Haldane et al. (2019) some community initiatives may require hospital follow-up, such as laboratory tests, suggesting the need for a coordinated approach between community and healthcare systems. This coordination is crucial for the CDP - CN of follow - up model on a coordinated and integrated approach involving various multidisciplinary teams (Kim et al., 2020)

Nurses are pivotal in this integrated approach. Their role as a central hub in the care team, providing vital patient data and managing resources, is indispensable for continuity of care. They bridge the gap between community and hospital care, enhancing communication and coordination, and ensuring patients receive timely and appropriate care.

In conclusion, the CDP - CN of follow - up model, with its emphasis on proactive patient care, leadership, environmental awareness, and a coordinated approach involving nurses, presents a promising solution for chronic disease management in the Phipun community. This holistic, community-centered model aligns with established healthcare principles, offering a potential blueprint for enhancing patient care and health outcomes in similar settings.



Limitations of this study

1. Scope Limitation: The study focused solely on healthcare settings in Southern Thailand, for a short period of time i.e., 3 months only, potentially limiting the generalizability of its findings and recommendations to healthcare systems with different resources and cultural contexts.

2. Need for Further Studies: To address these limitations and provide recommendations that are more context-specific and broadly applicable, additional studies and research are necessary. These future studies can validate the effectiveness of the proposed strategies in diverse healthcare settings.

Conclusions

The CDP-CN of follow-up model for DM and hypertension patients, as implemented in Phipun, Thailand, marks a pivotal advancement in chronic disease management in communities. Its focus on community involvement and minimizing complications has generated significant improvements in patient-caregiver relationships and overall health outcomes. Tailored to address the specific challenges of chronic disease management in Phipun, the CDP - CN of follow - up network has confirmed to be feasibility and acceptability to its participants. The CDP - CN of follow-up model's adaptability and positive reception in Phipun suggest its potential as a scalable and versatile framework for other communities with similar healthcare challenges. Its ability to improve healthcare dynamics and outcomes in Phipun serves as a compelling model for replication, offering a path forward for enhancing chronic disease management in community settings worldwide. However, the sustainability of the care network and clinical outcomes monitoring must be a concern and attention in this patient group. Therefore, the government agency needs to support the local care team to operate the further visiting program policy-driven successfully. In addition, this study only focuses on the DM and hypertension patients' care in the community, so there may be some limitations in using the pattern of network for any other diseases of chronic patients.

Suggestions

The study's recommendations can be summarized as follows:

1. Enhancing Follow-Up Visits for Better Engagement and Continuity:



Strengthening follow-up visits is crucial for maintaining continuous care and engaging diverse teams effectively. This entails collecting and incorporating feedback from patients, their families, and caregivers to better understand and address their specific needs. In this context, nurses play a crucial role as advocates, educators, coordinators, assessors, and communicators, utilizing their multifaceted skills to tailor follow-up visits. This approach ensures that the visits are patient-centered, thereby improving patient outcomes.

2. Improving Information Recording Practices:

The current method of recording patient and family information should be broadened to cover all aspects of care. This can be achieved by adopting advanced technologies like electronic health records, which enhance the efficiency of data collection and storage. The addition of a quick search feature can also streamline this process.

3. Initiating a Thorough Quality of Life Study:

It's important to start an in-depth study based on follow-up visits to evaluate the quality of life from various perspectives and assess the proficiency of the follow-up team. Such a study would provide essential insights for the ongoing development of the network and refinement of visitation strategies. In the CDP-CN of follow-up model, nurses, as key players, are vital for delivering effective, patient-centered care and facilitating community engagement. The further study could pay attention on the research development to develop and evaluate the community care program by integrating the digital technology for health outcomes monitoring.

In summary, these suggestions underscore the importance of enhancing follow-up visits, expanding information recording systems, and conducting comprehensive quality of life studies, with nurses playing a central role in these improvements within the framework of the CDP - CN of follow - up model in Phipun, Thailand.

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