



Article

# Qualitative Study: Management of the Prolanis Diabetes Mellitus Program at the Kramatsari Community Health Center in Pekalongan City

Shilnia Rahmatika <sup>1</sup>, Aisya Nurul Falla <sup>2</sup>, Fadhilla Anisa Nur Aini <sup>3</sup>, Zubaidah Tsania Ulul Azmi <sup>4</sup>, Dewi Nugrahaeni Restu Mastuti <sup>5</sup>, and Yulis Indriyani <sup>6\*</sup>

<sup>1</sup> Public Health, Pekalongan University; shilniarahmatikaa@gmail.com

<sup>2</sup> Public Health, Pekalongan University; aisyanurulfalla@gmail.com

<sup>3</sup> Public Health, Pekalongan University; fadhillaa413@gmail.com

<sup>4</sup> Public Health, Pekalongan University; zubaidahtsania12@gmail.com

<sup>5</sup> Public Health, Pekalongan University; dewi57gizi@gmail.com

<sup>6</sup> Public Health, Pekalongan University; yulis@unikal.ac.id\*

\* Correspondence: yulis@unikal.ac.id; Tel.: 085741983529

**Abstract:** Diabetes mellitus (DM) is a chronic disease that has a significant impact across the country and is a major focus of treatment in primary health care. This study aims to assess the implementation of the chronic disease management program (PROLANIS) related to DM at the Kramatsari Community Health Center in Pekalongan City. The method used was descriptive qualitative, with in-depth interviews conducted with four informants: the head of the community health center, the community health center coordinator, and two program participants. Data analysis was conducted using a thematic approach based on the Miles and Huberman model, which includes data reduction, presentation, and conclusion drawing, along with source triangulation to increase data validity. The findings of this study indicate that PROLANIS has successfully increased patient awareness of a healthy lifestyle, adherence to treatment, and control of blood pressure and blood sugar. However, several challenges remain, such as long queues, mobility difficulties for elderly participants, and limited access to administrative documents. Recommendations include the need for intersectoral collaboration and the provision of mobile health units to reach elderly participants. Overall, although this program has had a positive impact, improvements in infrastructure, documentation systems, and community support are needed to ensure the program's benefits are sustainable and equitable.

**Keywords:** prolanis; diabetes mellitus; evaluation; community health center; program

**Citation:** S. Rahmatika, A. N. Falla, F. A. N. Aini, Z. T. U. Azmi, D. N. R. Mastuti, and Y. Indriyani, "Qualitative Study: Management of the Prolanis Diabetes Mellitus Program at the Kramatsari Community Health Center in Pekalongan City", *IJHIS*, vol. 3, no. 2, pp. 91-95, Jul. 2025.

Received: 06-07-2025

Accepted: 16-07-2025

Published: 29-07-2025



**Copyright:** © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International License (CC BY SA) license (<http://creativecommons.org/licenses/by-sa/4.0/>).

## 1. Introduction

Diabetes Mellitus (DM) is one of the non-communicable diseases with a prevalence that continues to rise both globally and nationally. According to the International Diabetes Federation (2023), the number of DM patients globally is estimated to reach 537 million adults and is projected to increase to 643 million by 2030. In Indonesia, the 2018 Riskesdas survey showed a DM prevalence of 10.9%, and this trend is expected to continue, placing a significant burden on the healthcare system, both medically and economically (Ministry of Health of the Republic of Indonesia, 2022).

In response to these challenges, the Indonesian government, through the Indonesian Health Security Agency (BPJS Kesehatan), initiated the Chronic Disease Management Program (Prolanis) at Primary Health Care Facilities (FKTP). This program aims to enhance patient knowledge, promote adherence to treatment, and prevent complications through a sustainable approach combining preventive, promotive, curative, and rehabilitative measures (BPJS Kesehatan, 2021). One of Prolanis' primary targets is DM patients, with the hope that they can maintain optimal quality of life and reduce long-term healthcare costs.

Pekalongan, as one of the regions implementing Prolanis, has recorded 332 active participants at the Kramatsari Health Center, most of whom are DM and hypertension patients. Activities include Prolanis exercises, routine blood sugar monitoring, health education, and home visits. Several studies have shown the benefits of this program, such as blood sugar control and improved healthy lifestyles (Putri & Wulandari, 2023). However, the effectiveness of Prolanis implementation still faces various challenges, particularly regarding patient engagement and administrative support.

While some studies have evaluated Prolanis from quantitative aspects such as changes in health indicators or medication adherence rates, there remains a gap in understanding patients' subjective experiences in participating in this program. A qualitative approach is needed to explore patients' perceptions, motivations, barriers, and expectations regarding Prolanis DM. This understanding is crucial to ensure that the program is truly aligned with participants' needs and socio-cultural context (Ningsih et al., 2021; Sari & Nugraheni, 2024).

This study explores patients' experiences and the challenges of implementing the Prolanis DM program at the Kramatsari Community Health Center in Pekalongan City. The findings from this study are expected to provide input for improving the implementation strategy of Prolanis based on a more participatory and patient-centered approach.

## 2. Materials and Methods

This research uses a descriptive qualitative approach that aims to deeply understand the experiences and views of participants on the implemented program. The research location was at the Kramatsari Health Center in Pekalongan City, on June 19-24, 2025. The selection of participants was done purposively, i.e. the researcher intentionally chose individuals who were considered capable of providing information relevant to the research focus. In this study, purposive sampling technique was used based on the framework of Ahmad & Wilkins (2024), which emphasizes the flexibility and suitability of sampling to the research context. Participants were purposely selected according to predetermined criteria who were active in the program, had at least one month of experience, and were willing to participate. The method was improved by knowledge from Nyimbili & Nyimbili (2024), who outlined various kinds of purposive sampling such as maximum range and vital case sampling to ensure coverage and depth of data.

Data was collected through semi-structured interviews that allowed researchers to explore participants' answers in depth. In addition to interviews, data was also obtained through participatory observation and documentation of activities. The entire interview process was recorded using a voice recording device, after participants gave their consent. The ethical aspects of the research were strictly maintained. This study has secured the consent of all research subjects by giving an informed consent form listing an explanation of the purpose of the study, the right to refuse or withdraw, and the assurance of data privacy.

Once the interview transcripts were finalized, the data was coded and classified into key themes that emerged from the participants' narratives. Data presentation was done in narrative form and thematic matrix to facilitate the interpretation process. Data analysis was conducted using the Miles and Huberman model, which includes the process of data reduction, data presentation, and conclusion drawing and verification. The Miles and Huberman method was chosen because it has a systematic flow of analysis, including reduction, presentation, and drawing conclusions from qualitative data. As explained by Qomaruddin and Sa'diyah (2024), this approach facilitates the processing of complex data and increases the validity of findings through a continuous verification process. (Conclusions were drawn inductively based on the findings that had been analyzed, then verified through data triangulation and confirmation to participants (member checking). The methodology was done by utilizing a spreadsheet tool as a data entry tool, avoiding

the use of subjective analysis software such as NVivo, but still ensures an audit trail of the data throughout the data mining procedure.

### **3. Results and Discussion**

#### **Implementation of the Prolanis Program**

The implementation of the Prolanis Program at Puskesmas Kramatsari is quite well run, marked by the involvement of competent officers, consistent routine activities, and active participation of participants in gymnastics, counseling, and health checks. Activities such as monthly exercises, twice-yearly laboratory examinations, and routine drug administration indicate the continuity of a structured program. In addition, the counseling activities after the exercises succeeded in raising participants' awareness of the importance of a healthy diet and active lifestyle. As one participant said, "I feel more enthusiastic about my diet and regularly participate in activities here."

#### **Program Benefits for Participants**

The Prolanis program has generally shown positive benefits, such as increased active participation of participants and regular reductions in blood sugar and blood pressure levels. In addition, the program was also able to improve participants' knowledge and discipline in disease management and implementation of a healthy lifestyle. These findings are in line with previous studies that suggest that continuous physical activity and education can improve adherence and clinical outcomes of diabetic patients.

#### **Barriers to Implementation**

Other obstacles encountered were unsupportive environmental conditions and limited access to transportation. Nevertheless, there are still obstacles in the implementation of the program, both from the technical and social aspects. Technical barriers include logistical constraints such as long queues for drug collection and unfavorable environmental conditions. Social barriers include administrative difficulties such as limited access to identity documents required by participants and limited mobility and transportation, especially for the elderly. One participant revealed, "Sometimes I have to queue for hours to take my medicine, this is very difficult for me who is old." Related research showed that neighborhood and family support had a major influence on participants' motivation, but support from the community and outside agencies was limited.

#### **Social and Environmental Support**

Support from family is quite active in helping participants in running the program, but support from the surrounding environment and external institutions is not optimal. Several previous studies have emphasized the important role of family and community in maintaining the motivation and sustainability of health of Prolanis program participants. To improve the success of the program, interventions that involve all stakeholders are needed, such as the formation of community support groups and improved service facilities, for example through mobile health units or educational campaigns that involve the wider community.

#### **Closing and Comparison with the Literature**

In general, the findings of this study indicate that the implementation of Prolanis at Puskesmas Kramatsari has been good, similar to the findings of previous studies that showed the benefits of the program in improving clinical outcomes and knowledge of participants. However, the barriers faced indicate the need for a more comprehensive and integrated approach, including improved infrastructure and cross-sector collaboration, to ensure the sustainability and effectiveness of the program more evenly. This approach is

in line with recommendations from the literature that successful chronic disease management programs require adequate social support and facilities.

#### 4. Conclusions

The implementation of the Prolanis Diabetes Mellitus Program at the Kramatsari Community Health Center in Pekalongan has successfully increased participant engagement, reduced blood pressure and blood sugar levels, and improved adherence to medication and a healthy lifestyle. The role of families is crucial to the program's success. However, several challenges remain, such as long queues for medication pickup, administrative issues, limited transportation access, and lack of support from the community and external institutions, particularly for elderly participants.

To improve the efficiency and distribution of benefits from the Prolanis Diabetes Mellitus Program, it is recommended that community health centers provide mobile health units or home visits specifically for elderly individuals with mobility difficulties and improve documentation and queue management systems by digitizing the medication pickup process. Furthermore, collaboration with the Population and Civil Registration Office is needed to facilitate participant access to official identity documents. The establishment of community-based peer support groups is also crucial to strengthen participant motivation and participation, which will be further supported by increased cross-sectoral involvement, including village officials, community organizations, and educational institutions, in health education and mobilization activities.

#### References

1. Febriawati, H., Siral, S., Yanuarti, R., Oktavidiati, E., Wati, N., & Angraini, W. (2022). Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis). *Citra Delima Scientific Journal of Citra Internasional Institute*, 6(2). <https://doi.org/10.33862/citradelima.v6i2.296>
2. Sulastri, O. D. & Prasastin, O. V. (2024). Evaluasi Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) Di Puskesmas Gambirsari Surakarta. *eprints.ukh.ac.id*
3. Raviola, R., Muchsina, W., & Gumayesty, Y. (2021). Hubungan Aktivitas Program Pengelolaan Penyakit Kronis Dengan Kepatuhan Diet Pasien Diabetes Melitus Di Puskesmas Rejosari. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 5(1). <https://doi.org/10.31004/prepotif.v5i1.1392>
4. Aryani, N. D., & Arsi, A. A. (2021). Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) Penderita Diabetes Mellitus (Studi Di Puskesmas Kebondalem Kabupaten Pemalang). *Solidarity*, 10(2).
5. Amanda, S., Arbi, A., & Arifin, V. N. (2025). Pelaksanaan Program Pengelolaan Penyakit Kronis Dalam Peningkatan Kualitas Hidup Di Wilayah Kerja Puskesmas Jangka Kecamatan Jangka Kabupaten Bireuen. *Journal of Healthcare Technology and Medicine*, 11(1).
6. Ula, S, Dini, M, Yuni, A. (2024). Asuhan Keperawatan Pada Keluarga Dengan Diabetes Militus Dan Gout Arthritis: Suatu Studi Kasus. *Studi Kasus JIM FKep*, 8(3), 47-54.
7. Susy, H. N. S, Diah, A. p. (2024). Persepsi Stakeholder Tentang Rencana Model Kebijakan Insentif Pembayaran KBK dengan Indikator RPPT Pada FKTP di Medan. *Jurnal Kebijakan Kesehatan Indonesia: JKKI*, 13(4), 224-237.
8. Rury, O, Yunan, P. K, Muhammad. f, A, Fitri, A. (2024). Kolaborasi Puskesmas Cinangka Dan Universitas Pancasila Dalam Memberikan Penyuluhan Prolanis Guna Membangun Kesadaran Masyarakat Atas Kesehatan di Desa Bulakan dan Karang Suraga. *SULUH: Jurnal Abdimas*, 5(2), 163-171.
9. Nurlaela, N., & Syafrudin, S. (2023). Analisis program kebijakan pencegahan dan pengendalian Diabetes Melitus di Puskesmas Belik Kabupaten Pemalang. *Jurnal Ilmiah Kesehatan Global*, 6(2), 101-110. <https://journal.lpkd.or.id/index.php/IKG/article/view/1344>
10. Sabrina, L. Y., & Rahayu, S. R. (2024). Determinan Pemanfaatan Program Pengelolaan Penyakit Kronis (Prolanis). *HIGEIA (Journal of Public Health Research and Development)*, 7(4), 610-624. <https://doi.org/10.15294/higeia.v7i4.68109>
11. Pebriyani, U., Utami, D., Agustina, R., & Mariyam, S. (2021). Analisis Program Pengelolaan Penyakit Kronis (Prolanis) BPJS Kesehatan pada Pasien Diabetes Mellitus di UPTD Puskesmas Kedaton Bandar Lampung 2021. *Jurnal Kesehatan Tambusai*, 3(1), Artikel 4065. <https://doi.org/10.31004/jkt.v3i1.4065>
12. Alkaff, F. F., Illavi, F., Salamah, S., Setiyawati, W., Ramadhani, R., Purwantini, E., & Tahapary, D. L. (2021). The impact of the Indonesian Chronic Disease Management Program (PROLANIS) on metabolic control and renal function of Type 2 Diabetes Mellitus patients in primary care setting. *Journal of Primary Care & Community Health*, 12, Article 2150132720984409. <https://doi.org/10.1177/2150132720984409>
13. Firdaus, D. F. S., & Nadjib, M. (2021). Analysis of Prolanis policy implementation during the COVID-19 pandemic in 2021. *IHPA Journal of Public Health Policy and Administration*, 7(3), 45-60.

14. Ningsih, S., & Masrul, M. (2023). Senam Prolanis dan deteksi dini faktor risiko penyakit degeneratif di Desa Kebondowo, Semarang. *Jurnal Pengabdian Masyarakat Berkemajuan*, 5(1), 89–96. <https://doi.org/10.31764/jpmb.v5i1.23471>
15. Rahayu, S., & Wulandari, F. (2022). Pengenalan makanan tinggi serat dan indeks glikemik sebagai edukasi Prolanis di Sleman. *Community Empowerment*, 7(1), 55–62. <https://doi.org/10.31603/ce.v7i1.10245>
16. Yuliana, S., & Ilyas, R. (2022). Edukasi pengendalian DM pada peserta Prolanis di Kota Ternate. *Jurnal Pengabdian kepada Masyarakat Pamulang (JPdL)*, 4(2), 34–40. <https://doi.org/10.32493/jpdl.v4i2.23458>
17. Fifah, N., & Putri, D. (2023). Kemampuan manajemen diet pada anggota Prolanis DM di Puskesmas Jabon. *Jurnal Ilmu Keperawatan (JIKEP)*, 5(2), 98–105. <https://doi.org/10.53859/jikep.v5i2.1413>
18. Sabiti, F. B., Febrinasari, N., & Santoso, A. (2021). Peningkatan Kepatuhan Pengobatan dan Program Pengelolaan Penyakit Kronis (Prolanis) pada Pasien Lansia di Fasilitas Kesehatan Primer Kota Semarang. *Community Empowerment*, 6(4), 568–571. <https://doi.org/10.31603/ce.4555>
19. Mayang Setyaningsih, Jannesie Sellya Tiara, Ambarura, E., & Elisabet Margaretta Simangunsong. (2023). Kepuasan Peserta Program Pengelolaan Penyakit Kronis (Prolanis) Di Puskesmas Ngesrep Kota Semarang: Preliminary Study. *Jurnal Pranata Biomedika*, 2(1), 70–79. <https://doi.org/10.24167/jpb.v2i1.10136>
20. Manninda, R. (2021). Analisis Dampak Program Pengelolaan Penyakit Kronis (Prolanis) dalam Meningkatkan Outcome Klinis Pasien Diabetes Melitus Tipe 2 di Puskesmas Jakarta, Indonesia. *Jurnal Ilmu Kefarmasian Indonesia*, 19(2), 237–241. <https://doi.org/10.35814/jifi.v19i2.4590>
21. Jamiat, N., Humnah, H., & Triarti, C. (2024). Pendampingan Aktifitas Senam Kaki bagi Peserta Prolanis Diabetes Melitus di Wilayah Kerja Puskesmas Kujangsari Kota Bandung. *PengabdianMu: Jurnal Ilmiah Pengabdian kepada Masyarakat*, 9(5), 839–843. <https://doi.org/10.33084/pengabdianmu.v9i5.5918>
22. Wijaya, V. S., & Maharani, C. (2025). Analisis Program Kebijakan Pencegahan dan Pengendalian Diabetes Melitus di Puskesmas Belik Kabupaten Pemalang. *Inovasi Kesehatan Global*, 2(1), 166–177. <https://doi.org/10.62383/ikg.v2i1.1344>
23. Kristianto, F. C., Sari, D. L., & Kirtishanti, A. (2021). Pengaruh program penanggulangan penyakit kronis (prolanis) terhadap kadar gula darah pasien diabetes melitus tipe 2. *CoMPHI Journal: Community Medicine and Public Health of Indonesia Journal*, 2(1), 8-14.
24. Putri, A. D., & Wulandari, E. (2023). Evaluasi Dampak Program Prolanis terhadap Kendali Gula Darah Penderita DM. *Jurnal Promosi Kesehatan Indonesia*, 18(1), 45–53. <https://doi.org/10.20473/jpki.v18i1.2023>
25. Ningsih, R. D., Yuliana, S., & Hartati, F. (2021). Exploring Patient Experience in Chronic Disease Program: A Qualitative Study in Indonesia. *Indonesian Journal of Public Health*, 9(3), 120–130. <https://doi.org/10.20473/ijph.v9i3.2021>
26. Sari, M. P., & Nugraheni, R. K. (2024). Persepsi Pasien terhadap Implementasi Program Prolanis di Wilayah Urban: Studi Kualitatif. *Jurnal Kesehatan Masyarakat Nasional*, 19(1), 65–72. <https://doi.org/10.22146/jkmm.v19i1.2024>
27. Ahmad, M., & Wilkins, S. (2024). *Purposive sampling in qualitative research: A framework for the entire journey*. *Quality & Quantity*, 59(2), 1461–1479. <https://doi.org/10.1007/s11135-024-02022-5>
28. Nyimbili, F., & Nyimbili, P. (2024). *Types of purposive sampling techniques with their examples and application in qualitative research studies*. *British Journal of Multidisciplinary and Advanced Studies*, 5(1), 1–13. <https://bjmas.org/index.php/bjmas/article/view/808>
29. Qomaruddin, & Sa'diyah, H. (2024). Kajian teoritis tentang teknik analisis data dalam penelitian kualitatif: Perspektif Spradley, Miles dan Huberman. *Journal of Management, Accounting and Administration*, 1(2), 77–84. <https://doi.org/10.52620/jomaa.v1i2.93>
30. BPJS Kesehatan. (2021). *Panduan Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis)*. Jakarta: BPJS Kesehatan.
31. International Diabetes Federation. (2023). *IDF Diabetes Atlas, 10th Edition*. Brussels: IDF. <https://diabetesatlas.org/>
32. Kementerian Kesehatan Republik Indonesia. (2022). *Profil Kesehatan Indonesia Tahun 2021*. Jakarta: Kemenkes RI.