

Dimensions and Gaps of Social Support for Type 2 Diabetes Mellitus Patients in a Rural *Prolanis* Setting: A Qualitative Study

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ABSTRACT

Background: Type 2 diabetes mellitus is a major public health burden in Indonesia, with Central Java reporting a prevalence higher than the national average. Beyond metabolic complications, patients often face psychological burdens and social constraints that influence the capacity for effective self-management. Social support was widely recognized as a determinant of diabetes outcomes. Therefore, this study aimed to explore the dimensions and gaps of social support among type 2 diabetes patients enrolled in the *Prolanis* program at Cilongok I PHC.

Method: A phenomenological method was adopted, and data were collected through in-depth interviews with purposively selected patients, transcribed verbatim, and analyzed thematically to identify patterns across patient, family, and healthcare worker perspectives.

Result: Four dimensions of social support were identified, namely emotional, appraisal, instrumental, and informational support. Emotional support was commonly expressed through empathy and encouragement, but remained normative, lacking psychological depth and safe spaces for patients to articulate fear or distress. Appraisal support was limited to clinical feedback, with no structured mechanisms for patients to provide input and low confidence to voice concerns. Instrumental support was present through routine services and transportation assistance, but it was constrained by long waiting times, physical discomfort during procedures, limited family accompaniment, and financial as well as geographic barriers. Informational support was conveyed through brief counseling and WhatsApp reminders. However, educational activities were inconsistent, predominantly administrative, and occasionally countered by misinformation from peers.

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INTRODUCTION

Diabetes mellitus (DM) is a chronic metabolic disease characterized by hyperglycemia and disturbances in carbohydrate, lipid, and protein metabolism from impaired insulin secretion, action, or both. Globally, DM contributes significantly to premature mortality and is a leading cause of blindness, cardiovascular disease, and kidney failure.(1) In 2022, the proportion of adults aged >18 years living with diabetes reached 14%, doubling from 7% in 1990. Furthermore, 59% of adults aged 30 years and older with diabetes were not receiving any medication for the condition. Type 2 diabetes mellitus (T2DM) is the most prevalent form, resulting from ineffective insulin utilization and leading to persistently elevated blood glucose levels when untreated. This metabolic dysfunction causes progressive damage to nerves and blood vessels, yet

remains largely preventable through appropriate lifestyle modifications and risk-reduction strategies.(1)(2) Indonesia ranks fifth worldwide in the number of adults aged 20–79 living with DM, a position unchanged since 2021. The number reached 20.4 million in 2024 and is projected to be 28.6 million by 2050.(3)(4) In Central Java, the prevalence of DM is 12.5%, higher than the national average of 10.3%, making this condition a top priority in non-communicable disease (NCD) control.(5) According to the 2023 Central Java Health Profile, Banyumas Regency reported 22,766 DM cases,(6) with Cilongok I Primary Health Center (PHC) documenting the highest number of patients in the district.(7)

The chronic nature of DM, its complications, and the psychological distress, heighten the need for sustained self-management support to maintain patients' quality of

life.(8)(9) Social support plays a central role in the daily self-care of individuals with T2DM and has been shown to directly improve the quality of life of patients in rural settings.(10) Evidence consistently shows that higher levels of social support are associated with better adherence to dietary recommendations, physical activity, and medication regimens.(11)(12) Without adequate social support, patients often struggle to maintain these demanding regimens, leading to suboptimal health outcomes and increased healthcare burdens.(12)(13)

Social support for individuals with Type 2 DM generally includes three core dimensions, namely emotional, informational, and instrumental. These dimensions influence how patients interpret, respond to, and manage the condition collectively.(14) Emotional support offers reassurance, empathy, and a sense of belonging that help patients cope with distress and sustain motivation in the face of a demanding chronic disease. Furthermore, emotional and practical support from family members can significantly enhance patient motivation, emotional well-being, and recovery outcomes.(14)(15) Informational support provides essential guidance on diet, physical activity, symptom recognition, and treatment routines, enabling patients to make informed decisions and maintain effective self-management behaviors. Instrumental support includes tangible assistance, such as reminders to adhere to medications, help in preparing appropriate meals, or assisting to engage in daily activities or exercise.(14) Appraisal support refers to the provision of constructive feedback and accurate judgments about a person's situation, helping patients to reflect on the condition, gain affirmation, and feel encouraged. These four forms of social support can develop a "buffering effect," in which the resources offered to an individual strengthen the health outcomes and lessen the harmful impact of the stressors.(16)

An understanding of these dimensions and their gaps is crucial, as unmet support needs may hinder patient empowerment, reduce engagement in self-management, and compromise the long-term effectiveness of *Prolanis* (Program Pengelolaan Penyakit Kronis/chronic disease management program). In Indonesia, the *Prolanis* program represents a key primary care initiative for chronic disease management. Within this program, social support is shaped by interpersonal relationships and also rooted in routine services, communication systems, and program structures. Despite its central role, limited evidence has examined how the different forms of support are experienced by patients in rural primary care settings and where gaps persist within the *Prolanis* context.

Previous studies have shown that patients with multiple unmet social needs, such as food insecurity or lack of transportation, tend to have uncontrolled diabetes, with those having three or more needs showing a 59% higher risk of poor glycemic control.(17) Similarly, unmet social support needs have been associated with increased psychological burden, with studies showing that a significant proportion of individuals with type 2 DM experience diabetes-related distress, particularly in the absence of adequate emotional or financial support.(18) Although these results show the importance of social and structural support, patients with diabetes were largely treated as a homogeneous group and paid limited attention to how support functions within specific programmatic and rural contexts. Therefore, this study aimed to explore the dimensions and gaps of social support among patients with type 2 DM in a rural *Prolanis* setting, to generate context-specific insights for more responsive, participatory, and empowerment-oriented primary care interventions.

METHOD

Study design

A qualitative study method was adopted to explore the dimensions and gaps of social support experienced by T2DM patients participating in the *Prolanis* program. Data were collected from 25 July 2023 to 14 August 2023 at Cilongok I PHC. The location was selected based on the consideration that the area had the highest number of DM patients in Banyumas province, according to the 2022 Banyumas health profile

Data Collection

Data collection was conducted through in-depth interviews with the respondents. The key respondents were the DM patients, selected using purposive sampling, with specific criteria relevant to the study's goal. The inclusion criteria were patients with DM who had been diagnosed at least 6 months ago, aged 20 years and older, participating in the *Prolanis* program and living in the same home with the family. Respondents who were unable to communicate fluently and unavailable for three consecutive visits were excluded. A healthcare worker responsible for the *Prolanis* program at Cilongok I PHC and four family members of the patients, as the supporting respondents, were also interviewed.

In-depth interviews were conducted in person, with each session taking approximately 60 minutes. Follow-up interviews were conducted when additional clarification or further exploration of developing issues

was needed. All interviews were audio-recorded with the respondents' consent and transcribed verbatim.

In-depth interviews were based on a semi-structured guide, which was developed according to relevant literature and the theoretical framework of social support. This included emotional, appraisal, instrumental, and informational dimensions. The questions were designed in accordance with the study objectives to explore patients' experiences, identify the forms of support received, and examine existing gaps. Open-ended questions were used to elicit in-depth and contextual responses, supplemented by follow-up questions to clarify and deepen respondents' answers. The guide was further refined to ensure contextual relevance to the *Prolanis* program and the rural setting, including considerations of linguistic clarity and cultural sensitivity through discussions within the study team.

Data analysis

Data were analyzed using thematic analysis, and all interviews were audio-recorded and transcribed verbatim. Subsequently, the interviews were read repeatedly to achieve data familiarity and a comprehensive understanding of the respondents' experiences. Units of meaning relevant to the study objectives were identified and labeled through an inductive open-coding process. Codes with similar meanings were grouped into categories using constant comparison, which were then organized into main themes. The development of themes was guided by a conceptual framework of social support, which included emotional, evaluative, instrumental, and informational dimensions, including the identification of existing gaps.

The coding and data management processes were facilitated using OpenCode software to organize transcripts, store codes, and support categorization. However, interpretation remained the responsibility of the analysts. Source triangulation was applied by including patients, family members, and healthcare workers to ensure credibility. The coding results and developing themes were discussed among the study team to reach consensus and minimize subjective bias.

Ethical consideration

Anthropometric measurements followed an Ethical approval was obtained from the Ethics Committee of the Faculty of Health Sciences, Jenderal Soedirman

University, with ethic number 794/EC/KEPK/VI/2023. Written consent was obtained from all respondents before the interviews.

RESULT AND DISCUSSION

Respondents characteristics

A total of ten patients with type 2 DM participated as key respondents in this study, supported by four family members and one healthcare worker in the *Prolanis* program. Although the inclusion criteria allowed respondents aged 20 years and above, the population of DM patients in the study area predominantly consisted of adults. Consequently, most respondents in this study were middle-aged and older adults. The patients ranged in age from 42 to 76 years. The duration of diabetes diagnosis varied widely, from 1 year to 38 years, showing diverse experiences in disease management and adaptation. Similarly, participation in the *Prolanis* program ranged from 1 to 12 years.

Four supporting respondents were included in this study, consisting of family members and a healthcare worker. The family respondents included three spouses of patients, aged between 50 and 58 years, comprising two males and one female. These individuals provided complementary perspectives on the daily support experienced by patients within the household context.

A healthcare worker from the PHC, aged 29 years, was included to provide insights into the implementation of the *Prolanis* program and the provision of support from the healthcare system. This respondent has been working at the community health center since 2017 and participated in the *Prolanis* program for the past year. The inclusion of both family members and a healthcare provider allowed for triangulation of perspectives, enriching the understanding of social support across interpersonal and institutional levels.

Dimensions of social support and identified gaps

Analysis showed four major dimensions of social support experienced by rural patients participating in the *Prolanis* program, which included emotional, appraisal, instrumental, and informational. Respondents obtained these four dimensions of social support from health workers, family, and peers. However, deeper analysis showed several gaps that could influence the effectiveness of diabetes self-management and patient empowerment.

Table 1. Key respondent characteristic

Code	Sex	Age (years)	Duration of disease (years)	Duration in <i>prolanis</i> (years)	Comorbidities
IU1	Female	48	2	2	None
IU2	Female	57	10	5	Hypertension
IU3	Female	42	1	1	None
IU4	Female	47	7	7	Hypertension, cholesterol
IU5	Female	57	3	3	Cholesterol
IU6	Female	56	10	10	None
IU7	Female	53	2	2	None
IU8	Male	75	5	5	Prostate, heart disease
IU9	Female	71	38	12	Asthma
IU10	Male	76	19	10	Skin itching

Table 2. Characteristics of supporting respondents

Code	Sex	Age	Role
IP1	Male	58	Spouse of TP
IP2	Female	58	Spouse of FN
IP3	Male	50	Spouse of SF
IP4	Female	29	PHC's health worker

Emotional support and its gaps

The emotional support received by the key respondents was expressions of empathy, attention, trust, understanding, and affection that make individuals feel valued, safe, and emotionally secure. Many respondents described healthcare providers as offering attentive listening, empathetic communication, and encouragement that helped reduce anxiety and foster confidence in self-management. Responsiveness from healthcare workers also contributed to patients' sense of being supported, particularly when new symptoms or concerns arose.

"The doctor listens to my complaints and tells me what should be reduced or avoided, which makes me feel encouraged. The doctor explains what I should and shouldn't eat, so I feel happy..." (IU1, 48 years old)

"From what I see, if someone has complaints, the doctor quickly responds. For example, if someone has tingling sensations, they are advised to take morning walks." (IU3, 42 years old)

Emotional support was crucial for DM patients in mitigating the psychological distress often associated with managing a chronic disease. A previous study showed the relationship between healthcare workers' roles and *Prolanis* visits, where friendly and supportive healthcare workers motivated patients to attend *Prolanis* sessions.(19) Other studies showed that emotional support from healthcare

professionals, family, and friends could enhance resilience and self-efficacy, helping patients to cope with these stressors.(13)(20) Based on the interview with the key respondents, family members, specifically spouses, also provided emotional reassurance through daily reminders and acceptance.

"My husband is even stricter. For example, if I don't sleep at night, he reminds me. He also keeps an eye on my diet." (IU3, 42 years old)

"My husband never looks down on me for having this condition. He always supports and encourages me." (IU2, 57 years old)

Despite the presence of positive emotional interactions, several gaps in emotional support were evident. Emotional support from family members tended to be normative and focused on simple reassurance rather than addressing deeper psychological needs, such as fear of death, worry about future complications, or concerns for the children. The following statement was expressed by a supporting respondent (the patient's husband), who described the limited understanding of the wife's disease due to the relatively short duration of marriage.

"Yes, my husband just tells me not to be scared and to take it easy, not to think too much about it (IU1, 48 years old).

"The situation is like this: my wife and I haven't been together for very long, so I don't really know exactly how she first developed diabetes. Daily, when she complains about feeling weak or tired, or when she seems mentally burdened or stressed, I don't fully understand it. I've only been married to her for two years." (IP1, 58 years old)

Several patients described discomfort when repeatedly questioned about disease, showing a lack of safe

emotional space to express fear or distress. These interactions made the patients feel stigmatized or overly defined by the disease. Respondents also reported limited emotional attention from the broader social environment. Some perceived that people outside the household were indifferent to the condition.

"I really don't like being asked about my blood sugar... it feels like they see me as someone 'diseased. So, to avoid being asked too much, I prefer to keep things to myself" (IU3, 42 years old).

"People around me... I don't know, they just seem like they don't care about us" (IU1, 48 years old).

The results of this study showed gaps in emotional support characterized by limited psychological depth, perceived social indifference, and insufficient safe spaces for emotional expression. The absence of adequate emotional support could lead to a high self-perceived burden, specifically in newly diagnosed patients, thereby worsening psychological distress and negatively affecting quality of life and glycemic control.(10)(13) Strengthening emotional support mechanisms that acknowledge patients' complex feelings and fears could improve the effectiveness of chronic disease management programs. For example, studies in Arab and Muslim contexts identified moderate levels of resilience, social support, and coping among patients with DM, suggesting an ongoing need for enhanced emotional support systems.(21)

Appraisal support and its gaps

Appraisal support in this study refers to feedback, recognition, and opportunities for patients to evaluate their progress or the services they receive. Respondents perceived that appraisal-related interactions did occur, primarily through clinical feedback provided by healthcare workers during routine consultations. For example, patients described receiving verbal evaluations based on their laboratory results or adherence to dietary recommendations. Some respondents also reported instances where patients expressed concerns about service procedures, such as changes in the registration system or the occasional unavailability of medication. However, some respondents showed that they rarely or never provided direct feedback to healthcare workers or the *Prolanis* program, as they are already satisfied with the services.

"If my results are good, they say it's good. But if my blood sugar is high, they remind me that I must not have been following my diet properly" (IU4, 47 years old)

"There was a complaint about changing the registration system to taking a queue number, which requires the patient to be present in person" (IU5, 57 years old)

"Rarely, maybe because we feel there has been improvement, and the condition is under control, so we are satisfied." (IU3, 42 years old)

Effective appraisal support could boost self-efficacy, which was a patient's confidence in the ability to manage diabetes effectively. Higher self-efficacy was directly connected to better self-care behaviors, including adherence to diet and exercise regimens. Evidence from recent studies showed that self-efficacy and social support significantly moderate the relationship between self-management behaviors and fasting blood glucose levels in individuals with type 2 diabetes, accounting for a substantial proportion of glycemic variation.(10)(22)

Although some evaluative feedback from healthcare workers was present, significant gaps were identified in patients' ability and confidence to express personal assessments of *Prolanis* services. Several respondents stated that the community health center never requested patient opinions, suggesting limited efforts to actively obtain patient input. Another respondent also reported the absence of a structured platform for conveying feedback or concerns.

"Oh no, never... I have never been asked for suggestions by the community health center." (IU7, 53 years old)

"There is no forum for patients to give their input." (IU4, 75 years old)

Some patients reported hesitation and feelings of inadequacy that prevented them from voicing their opinions. This hesitation reflects deeper cultural and relational gaps in patient empowerment, in which patients see themselves as passive recipients rather than care partners.

"No, I wouldn't dare... what would I even say? I don't dare. I must be aware that I'm just an uneducated person from the mountains, hahaha." (IU5, 57 years old)

The narratives showed that appraisal support was hindered by structural limitations such as the absence of feedback channels or solicitation of patient opinions, as well as perceived patient-provider power imbalances. Therefore, patients had limited opportunities to evaluate services, express dissatisfaction, or suggest improvements. These

gaps reduced the potential of appraisal support to contribute to patient empowerment and continuous service refinement. Gaps in appraisal support often manifested when patient efforts were unacknowledged or when judgmental feedback was received, leading to demotivation and feelings of failure or inadequacy.(23)

Instrumental support and its gaps

Instrumental support referred to the tangible assistance received by patients, including clinical service, medication, transportation, financial resources, and practical help that enabled respondents to engage in diabetes management. Most respondents reported that healthcare workers provided routine examinations, medication, and brief consultations. In addition to clinical care, some patients had previously received material support, such as snacks during health checks or T-shirts for exercise groups, which contributed to motivation and participation. This support was particularly vital for elderly patients who experienced a reduction in self-management abilities due to physiological changes.(24)

“During check-ups, blood is drawn, blood pressure is checked, the doctor examines, and then provides medication. They ask about complaints, whether my blood sugar is rising or falling, like a consultation.” (IU4, 47 years old)

“After blood tests, free snacks were given, and exercise respondents received T-shirts.” (IU2, 57 years old)

Although respondents generally acknowledged receiving routine clinical services, the experiences showed significant instrumental gaps. Healthcare workers consistently provided basic clinical care, such as blood pressure checks, blood sampling, medication dispensing, and brief consultations. These services were perceived as helpful and essential for monitoring diabetes. However, several older respondents described the physical burden associated with repeated blood draws and the delays in receiving laboratory results. Long waiting times further intensified this burden, specifically for older respondents who experienced fatigue and discomfort during prolonged procedures. A supporting respondent described the experience regarding the queuing system at the health facility, showing frequent changes in service procedures, which were perceived as confusing and inconvenient.

“Already in pain from being pricked repeatedly, and the results only come out next month.” (IU4, 75 years old)

“Too long... waiting 2 hours... waiting a long time just for the blood draw again.” (IU7, 53 years old)

“A few days ago, when it came to taking queue numbers, some people had already taken them right after dawn, which felt very early. Then, over time, the system changed; they said the queue numbers would start being distributed at 6 a.m. But after only one or two times, it changed again; they said there was no need to use queue numbers anymore, and that whoever arrived first would be served directly. It's quite complicated. Personally, I prefer taking queue numbers first because it feels more orderly” (IP2, 48 years old)

Instrumental support from family members was generally limited to logistical assistance, particularly transportation to and from the health center. However, this assistance rarely extended to active accompaniment or hands-on support during clinic visits. Others attended services entirely independently due to having a vehicle, showing a reliance on personal capacity rather than family support. A supporting respondent explained the wife's participation, describing work-related constraints, leading the patient to depend on practical arrangements such as taking a queue number in advance. The trust in the wife's physical capacity supported her independent access to care. In the household setting, instrumental tasks, such as preparing diabetes-friendly meals, were performed entirely by the patients, with minimal shared responsibility.

“Sometimes my husband takes me, but then he goes straight to work.” (IU7, 53 years old)

“Who prepares the food at home? Me, I do it myself.” (IU1, 48 years old)

“Sometimes I don't know the schedule for her follow-up visits, specifically when I have to work, so usually I just come to the health center early in the morning to take a queue number, then leave for work. My wife is still relatively young, around 42 years old and still energetic. God willing, I feel comfortable letting her go on her own.” (IP3, 50 years old)

Respondents faced additional structural barriers related to transportation costs, distance, and economic constraints. Monthly expenditures for travel and BPJS payments increased financial strain. Given these recurring costs, some respondents depended on irregular financial support from the children. Distance also forced respondents

to depart extremely early to meet fasting requirements for laboratory tests.

"Yes, I pay every month, fifty thousand for BPJS... If I use an ojek, it's fifty-fifty each time. From here to there is far, back and forth... We who live far... we leave at 4 a.m. to reach there by 6 or half past 7. If we're late, the 12-hour fasting window is wasted" (IU5, 57 years old)

The results of this study showed that instrumental support was present but uneven and often insufficient. Clinical services were available, but not always comfortable or elderly-friendly and family support existed but was limited to transportation rather than active assistance. Furthermore, geographical and financial barriers continued to restrict equitable access to care. These gaps showed the need to strengthen structural, logistical, and economic support mechanisms to ensure effective instrumental support for diabetes management in rural *Prolanis* settings. Economic stability, educational opportunities, and the broader neighborhood were key social determinants that shaped a patient's capacity to engage in self-care and mobilize support.(25) When unmet health-related social needs such as food insecurity, housing instability, or financial strain persisted, patients' ability to adhere to diabetes management was further constrained.(26) These structural challenges reinforced the importance of addressing environmental and socioeconomic barriers alongside interpersonal support.

Informational support and its gaps

Informational support included the health-related guidance provided to patients regarding disease management, medication use, diet, physical activity, and *Prolanis* activities. Most respondents described receiving information from healthcare workers through brief counseling and WhatsApp announcements. Routine reminders played a role in helping patients adhere to monthly activities. Health workers also shared examination results and progress during *Prolanis* gatherings. Information on diet and medication use was also commonly provided. These results were consistent with studies showing that quality nursing services led to higher patient satisfaction when expectations, such as friendly service, timely check-ups, prompt medication provision, and attentive listening from doctors, were met. Healthcare workers' support served as a reference for respondents to change behavior, adhere to *Prolanis* visits, and manage the disease effectively.(19)

"Ladies, don't forget tomorrow, the 25th is for hypertension, the 26th is for diabetes mellitus. The first Friday of the month is for exercise, don't forget, it's important." (IU2, 57 years old)

"...the results are shared, and then we discuss the condition of the sick person, whether there has been any improvement." (IU8, 75 years old)

"From the doctor, they tell me not to eat too many fried foods and avoid too much sugar. I also ask which fruits are allowed, and the doctor explains." (IU2, 57 years old)

Family members participated in providing informational support, mainly through reminders. However, family-provided advice often included non-evidence-based information.

"Sometimes my husband reminds me of the medication schedule, like what time I should take it each day." (IU4, 47 years old)

"They also share information about herbal medicine. They suggest not only taking prescribed medication but also drinking herbal remedies, like homemade herbal drinks." (IU5, 57 years old)

Despite receiving information, respondents identified multiple gaps that limited the understanding and consistent application of diabetes management. Some respondents reported that educational activities within *Prolanis* were inconsistent or infrequent. This result suggested that informational support from health workers was episodic rather than continuous, reducing opportunities for reinforcement and skill-building. Although WhatsApp was used to disseminate information, its content was predominantly administrative, focusing on schedules rather than providing health education.

"The educational activities in Prolanis are not always there... rarely, not often." (IU1, 48 years old)

"In the WhatsApp group, it's mostly just Prolanis schedules... for health information... I don't think there is any." (IU3, 42 Years old)

A concerning gap was the influence of peer advice that contradicted medical recommendations, leading to unsafe medication practices. This showed vulnerability to misinformation from non-medical sources, potentially undermining treatment adherence and glycemic control.

"I have a friend who is a midwife who advised me not to take too much medicine... so instead of three times a day I sometimes take it only once." (IU3, 42 Years old)

Informational support in *Prolanis* was available but often repetitive and administratively oriented. Respondents faced several gaps, including limited frequency of educational sessions, overdependence on schedule-based WhatsApp reminders, and exposure to inaccurate peer advice. These gaps showed a need to strengthen continuous, evidence-based, and more accessible educational strategies, both in-person and digital, to enhance diabetes self-management capacity. The results of this study were consistent with a previous report that access to comprehensive diabetes education, such as diet regulation, physical activity, medication adherence, blood glucose monitoring, and stress management, remained a challenge. Evidence from community-based education programs showed that patients with longer disease duration tended to have better foundational knowledge, yet struggled to sustain long-term self-care. Regular educational sessions in *Prolanis* improved respondents' knowledge about diabetes and promoted active participation in disease management. Adequate informational support empowered patients to make informed decisions and actively participate in their care.(28)(29)

In general, the results showed that while emotional, appraisal, instrumental, and informational support were present within the *Prolanis* program, these supports were often fragmented, superficial, or constrained by structural and relational barriers. The co-occurrence of gaps across all four dimensions suggested that social support in rural *Prolanis* settings did not functioned optimally as an integrated mechanism to strengthen patient empowerment and sustained diabetes self-management. This study was limited by its qualitative design and focus on a single rural *Prolanis* setting, which could restrict the generalizability of results to other areas or health system contexts with different social and organizational characteristics. These results implied that health promotion strategies within *Prolanis* should move beyond information delivery toward a more holistic method that strengthened emotionally responsive communication, patient appraisal mechanisms, family participation, and community-based education to address both interpersonal and structural gaps in social support.

CONCLUSION

This study identified emotional, appraisal, instrumental, and informational support as key dimensions of social support experienced by *Prolanis* respondents.

Although these forms of support are present, clear gaps were identified. Emotional support lacks psychological depth, appraisal support is limited by the absence of formal feedback mechanisms and low patient confidence, instrumental support is constrained by physical, financial, and logistical barriers, and informational support is inconsistent and occasionally influenced by misinformation. *Prolanis* should strengthen structured health education, establish simple patient feedback channels, improve service flow and medication availability, enhance family participation, and expand community-based support to reduce geographic and financial barriers. Addressing these gaps requires shifting from a primarily biomedical focus toward a more participatory, empowerment-oriented health promotion method. Improving social support can enhance patient autonomy, adherence, and long-term diabetes control in rural communities.

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Conflict of Interest

The authors declare no conflict of interest.

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