



An Overview of Family Support for Treatment Adherence Among Patients with Diabetes Mellitus

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Abstract

Diabetes mellitus is a chronic disease characterized by elevated blood glucose levels due to impaired insulin production or utilization. Effective management requires long-term treatment, patient adherence, and strong family support. While family support is known to improve patients' well-being, most previous studies have been quantitative and have not explored patients' lived experiences qualitatively. This study aimed to explore and describe the forms of family support that influence treatment adherence among patients with diabetes mellitus. A qualitative case study design was employed. Data were collected through semi-structured interviews with three participants, focusing on the types and forms of family support, including emotional support, informational support, instrumental support, and appraisal support. Inclusion criteria included families actively supporting patients with type 2 diabetes mellitus and patients who were adherent to treatment, defined by regular monthly check-ups, consistent medication intake, and confirmation from family members. Data credibility was ensured through triangulation. Four themes emerged from the analysis. Emotional support consisted of encouragement and reassurance, informational support included education on self-care and healthy living, instrumental support involved practical assistance with medication and diet, and appraisal support was reflected through verbal praise and recognition. Findings indicate that consistent family involvement enhances treatment adherence, reduces stress, increases knowledge of self-care, fosters motivation, improves quality of life, and lowers the risk of complications.

INTRODUCTION

Diabetes mellitus is a condition in which the body is unable to produce sufficient insulin or cannot use insulin effectively, leading to elevated blood glucose levels (Brutsaert, 2025). According to the World Health Organization (World Health Organization (WHO), 2024) insulin is the hormone responsible for regulating blood glucose. Uncontrolled hyperglycemia is a common consequence of poorly managed diabetes and, over time, can damage multiple organ systems, particularly the nerves and blood vessels and complications may affect nearly every organ and are associated with an increased risk of premature mortality overall (Dwi & Rahayu, 2020). Recent data from the District Health Office (Dinas Kesehatan, DINKES) of Malang estimate that the number of patients diabetes mellitus reached approximately 65,525 cases by mid-2024. The Malang DINKES also recorded 1,814 diabetes mellitus cases in Bululawang Village in 2024. Overall, diabetes mellitus ranks second among the most commonly reported conditions in public health records for Bululawang Village.

Diabetes mellitus is a chronic illness that is rarely curable (Suprayitna et al., 2023). Consequently, patients diabetes require continuous treatment, self-management, and sustained education and support (Galuh & Prabawati, 2021). Diabetes management comprises pharmacological and non-pharmacological approaches (Widiasari et al., 2021). Treatment is inherently long-term and demands patience, defined here as the patient's readiness to adhere to therapy for the prescribed duration (Ariani et al., 2022). Among people with type 2 diabetes

mellitus, treatment adherence is associated with better glycemic stability (Ramadona et al., 2021). Adherence also plays a pivotal role

in establishing habits that reinforce concordance with therapeutic recommendations (Prasetya et al., 2023), ultimately contributing to better quality of life for patients diabetes mellitus (Zanzibar & Akbar, 2023).

Nevertheless, many patients are not consistent with their treatment regimens and often assume medication is needed only when blood glucose is high, which increases the risk of complications. In this context, family support becomes a crucial factor in improving treatment adherence and enhancing the quality of life of patients with type 2 diabetes mellitus (Marethalina et al., 2025). In type 2 diabetes mellitus, family support is a key determinant of adherence to therapy (Azizah et al., 2023). Among people with diabetes mellitus, active family involvement in care is associated with improved glycemic control and related outcomes, including increased diabetes knowledge, stronger perceived family support, better medication adherence, enhanced self-management, and greater self-efficacy in undertaking care (Karingga et al., 2024). Family support can improve quality of life and reduce the risk of diabetes-related complications; higher levels of family support are linked to better quality of life among patients diabetes mellitus (Handayani et al., 2024). Notably, family support can take four forms: emotional, informational, instrumental, and appraisal support (Rosyidah & Haryanti, 2025)

Research conducted by Syatriani et al., (2023) explains that strong family support makes it easier for most patients to undergo routine treatment. In line with research conducted by Mardiono & Sidik, (2024) it shows a relationship between family support and medication adherence in patients with type 2 diabetes mellitus. Research conducted by Sari et al., (2023) also found that many patients received family support to undergo treatment. While numerous investigations highlight the role of family support in adherence, most have characterized the association at a general level and relatively few have explored how such support is enacted in day-to-day life (Busebaia et al., 2023).

The novelty of the present study lies in its use of an in-depth qualitative case study of a single family affected by diabetes mellitus, yielding narrative accounts, lived experiences, and concrete strategies spanning emotional, informational, instrumental, and appraisal support. These findings are expected to provide practical insights that can guide healthcare professionals and other families in strengthening treatment adherence among patients with diabetes mellitus. In this study, the participating family had experience caring for a person with diabetes mellitus, and their support was associated with sustained clinical stability over approximately five years. Based on this background, this study aims to explore and analyze the forms of family support in increasing medication compliance in diabetes mellitus patients.

RESEARCH METHODS

The research design employed in this study was a qualitative method using a case study approach. Qualitative research emphasizes aspects that cannot be measured precisely or absolutely, focusing instead on obtaining in-depth data and understanding a particular phenomenon (Ratnaningtyas et al., 2023). The main objective of this approach is to provide a comprehensive understanding of conditions within their natural context, offering detailed descriptions of what truly occurs in the field according to reality (Fadli, 2021). This method was chosen to allow researchers to explore the forms of family support provided to care for patients with type 2 diabetes mellitus in Bululawang Village, Malang Regency.

The sampling technique applied was purposive sampling, which involves selecting participants based on specific criteria or research objectives. The inclusion criteria consisted of families who actively provided support to diabetes mellitus patients and were willing to participate in the study, as well as type 2 diabetes mellitus patients who were assessed as compliant with treatment based on routine monthly check-ups, compliance in taking medication as prescribed, and confirmation from family members. In qualitative research, primary data sources are utilized, and data collection techniques include participant observation, in-depth interviews, and documentation (Sugiyono, 2023). This study employed semi-structured interviews, focused on exploring in depth the types and forms of family support provided to patients with diabetes mellitus, allowing the researcher to improvise or expand upon predetermined questions, thereby ensuring flexibility and contextual adaptability during the data collection and analysis process.

This research has been reviewed with the letter of permit no. E.5.d/310/Vokasi-UMM/XII/2025. Before the interview begins, the purpose and intent of the research are explained first, and an informed consent process is carried out, which is then signed by the patient and family. To ensure data validity, triangulation of sources was applied, which involves verifying data obtained through interviews by cross-checking information from multiple participants and comparing it with observational findings (Sugiyono, 2023). Following data collection, data analysis was carried out through a systematic process of organizing, structuring, and interpreting the data obtained from interviews, field notes, and other relevant sources to ensure clarity and communicability of findings (Sugiyono, 2023). The analytical process consisted of three main stages: data reduction, data presentation, and conclusion drawing (Sugiyono, 2023).

RESULT

Based on in-depth interviews conducted in July to August 2025 with three participants, four main themes of family support emerged: emotional support, informational support, instrumental support, and appraisal support (appreciation).

a. Theme 1: Emotional Support

Across all three participants, emotional support was expressed through encouragement, reassurance, and efforts to reduce anxiety and stress. Representative excerpts include:

- P1/5 : *“Ya awalnya saya menenangkan bapak waktu dikasih tau dokternya supaya bapak tetap semangat dalam menjalani kehidupan sehari hari”*. (“At first, I calmed my husband when the doctor informed us, so he would stay motivated in his daily life.”)
- P1/7 : *“Ya saya kasih semangat supaya bapak tetap semangat dalam menjalani kehidupan sehari hari gitu dan bapaknya kemudian tenang udah ga begitu panik lagi”*. (“I encouraged him so he remained motivated in daily activities, and then he became calmer and less panicked.”)
- P1/9 : *“Terus mengingatkan bapak untuk jaga pola makan, dan saya selalu masak sayur sayuran, selebihnya saya kasih semangat biar bapak ga stress”*. (“I kept reminding him to maintain his diet, I always cooked vegetables, and I gave encouragement so he wouldn’t feel stressed.”)
- P1/15 : *“Ya waktu awal awal saya menenangkan itu seperti menasehati, ya saya bilang tenang saja pak jangan terlalu dipikirkan yang penting jaga pola hidup gitu...”* (“In the beginning I comforted him with advice— ‘Stay calm, don’t overthink it; what matters is keeping a healthy lifestyle....’”)

- P1/35 : “*Ya itu saja, selebihnya kasih semangat biar ga terlalu mikirkan, biar ga terlalu memikirkan ya saya tenangin gitu...*” (“That’s it, mostly encouragement so he wouldn’t overthink; I tried to keep him calm.”)
- P2/5 : “*Yaiya... diberikan dukungan supaya ga stres...*” (“Yes... we provided support so he wouldn’t be stressed.”)
- P2/6 : “*Ya yang membantu istri saya untuk... supaya tidak stress gitu...*” (“What helped was my wife... so I wouldn’t feel stressed.”)
- P2/46 : “*Ya diberikan dukungan supaya ngga ... apalah... supaya ga stres*” (“Yes, support was given so I wouldn’t be... you know... stressed.”)
- P3/4 : (*berpikir lama*) “*Keluarga memberi semangat ke ayah, menenangkan gitu supaya tidak kepikiran*” (“(after a long pause) The family encouraged my father, reassured him so he wouldn’t dwell on it.”)

Based on the analysis of key statements, the resulting themes and subthemes are displayed in the table below.

Table 1. Emotional Support

Keywords	Subthemes	Theme
Encouragement to persist with daily life; creating calm; providing mental/psychological aid	Positive motivation; mental support	Emotional Support

b. Theme 2: Informational Support

Participants consistently described the provision of health-related information and reminders concerning healthy lifestyles and treatment routines.

- P1/8 : “*Ya selalu mengingatkan bapak untuk rutin periksa ke dokter, trus ya biasanya mengingatkan minum obat setiap hari..*” (“I always reminded him to see the doctor regularly and to take his medication every day.”)
- P1/9 : “*Terus mengingatkan bapak untuk jaga pola makan, dan saya selalu masak sayur sayuran, selebihnya saya kasih semangat biar bapak ga stress*” (“I reminded him to keep his diet, and I always cooked vegetables; the rest was encouragement so he wouldn’t be stressed.”)
- P1/17 : “*Ada, ya saya ingatkan untuk menjaga pola makan juga*” (“Yes, I reminded him to maintain his diet as well.”)
- P1/18 : “*Ya saya ingatkan gabole makan yang manis manis terus saya masakin sayur sayuran. Kata dokternya disuruh makan sayur sayuran yang banyak gitu*” (“I reminded him not to eat sweet foods and cooked vegetables for him. The doctor told us to eat plenty of vegetables.”)
- P1/27 : “*Ya saya ingatkan minum obat tiap kali mau makan. Saya siapkan obatnya juga disamping piring makan biar ga lupa*” (“I reminded him to take his medication before meals. I also put the medicine beside his plate so he wouldn’t forget.”)
- P1/40 : “*Iya mengingatkan saja untuk periksa lalu bapaknya pergi periksa sendiri*” (“Yes, I just reminded him to get checked, and then he went on his own.”)
- P2/4 : “*Yaitu diingatkan periksa, tiap bulan kontrol terus disarankan makan sayur sayuran yang banyak, gaboleh tidur diatas jam 9... olahraga... yang penting*” (“I reminded him to check up, every month control, it is recommended to eat vegetables, don’t sleep above 9 o’clock, exercise... which is important”)

makan sayur sayuran yang banyak, saya minum obat setiap hari (“He was reminded to get checked, do monthly follow-ups, eat plenty of vegetables, avoid sleeping after 9 p.m., exercise... the key is eating many vegetables; I take my medicine every day.”)

P2/13 : *“Ya ndak diantar hanya diingatkan saja buat periksa”* (“No one accompanied me; I was just reminded to get checked.”)

P2/32 : *“Ya diingatkan minum obat sama dikontrol sendiri”* (“Yes, I was reminded to take my medication and monitor myself.”)

P3/5 : *“Ya dari keluarga setiap harinya mengingatkan untuk minum obat sebelum makan dan ibu selalu menyiapkan obat disebelah piring makan ayah”* (“Every day the family reminds him to take medication before meals, and my mother always places the medicine next to my father’s plate.”)

P3/11 : *“Biasanya juga mengingatkan tidak boleh makan yang manis dan mengingatkan untuk olahraga setiap harinya dan mengingatkan untuk periksa ke dokter”* (“We usually remind him to avoid sweets, to exercise daily, and to see the doctor.”)

P3/13 : *“Emmm tidak, ayah berangkat sendiri jadi hanya diingatkan untuk rutin periksa ke dokter agar gula darahnya stabil”* (“Umm, no—he goes on his own. We just remind him to routinely visit the doctor to keep his blood glucose stable.”)

The themes and subthemes identified from the key statements are presented in the table below.

Table 2. Informational Support

Keywords	Subthemes	Theme
Reminders for routine control/clinic visits, timely medication, diet maintenance; advice to exercise; health information	Treatment education; healthy-lifestyle education	Informational support

c. Theme 3: Instrumental Support

Families provided tangible assistance, particularly with meal preparation, portion control, and medication management and procurement.

P1/9 : *“Terus mengingatkan bapak untuk jaga pola makan, dan saya selalu masak sayur sayuran, selebihnya saya kasih semangat biar bapak ga stress”*. (“I kept reminding him to maintain his diet, and I always cooked vegetables; the rest was encouragement so he wouldn’t be stressed.”)

P1/22 : *“Ya lebih banyak sayurinya dan lauknya, nasinya dikit kira kira satu centong”*. (“There are more vegetables and side dishes; the rice is just a small ladle.”)

P1/27 : *“Ya saya ingatkan minum obat tiap kali mau makan. Saya siapkan obatnya juga disamping piring makan biar ga lupa”* (“I reminded him to take his medicine before meals. I put the medicine next to his plate so he wouldn’t forget.”)

P1/31 : *“Iya, tiap habis beli sendiri”* (“Yes, every time we buy, we get it ourselves.”)

P1/43 : *“Ya engga sampe kehabisan soalnya saya cek sendiri tiap mau habis obatnya”* (“We never run out because I check the supply myself when it’s about to run low.”)

- P2/7 : *"Iya memberikan obat itu setiap hari supaya ga apa? (sambil mikir...) gula darahnya tinggi"* ("Yes, I take the medicine every day so that... (thinking)... my blood sugar doesn't go high.")
- P2/9 : *"Yaiya disamping disiapkan istri saya ya saya sendiri, kalo istri saya lupa ya saya sendiri..."* ("Yes, my wife prepares it; if she forgets, I do it myself.")
- P2/16 : *"Ya dimasakkan sayuran setiap hari"* ("Vegetables are cooked every day.")
- P2/18 : *"Itu porsinya ya ditakar, nasinya sedikit dan sayuranya yang banyak"* ("Portions are measured, little rice and lots of vegetables.")
- P2/33 : *"Ya istri saya nyiapin obatnya.. ya kadang saya sendiri yang nyiapin"* ("My wife prepares the medicine... sometimes I prepare it myself.")
- P2/38 : *"Ya beli sendiri, istri yang membelikan"* ("We buy it ourselves—my wife purchases it.")
- P3/5 : *"Ya dari keluarga setiap harinya mengingatkan untuk minum obat sebelum makan dan ibu selalu menyiapkan obat disebelah piring makan ayah"* ("Every day the family reminds him to take his medicine before meals, and my mother puts the medicine next to his plate.")
- P3/7 : *"Yaaa beli ke apotek biasanya ibu yang berangkat ke apotek"* ("Yes, we buy it at the pharmacy; usually my mother goes.")
- P3/8 : *"Eemmm ga pernah soalnya ibu selalu memperhatikan dan langsung beli biar ga kehabisan obat jadi tetap minum rutin obat setiap hari"* ("We never run out; my mother pays attention and buys it right away so he can keep taking it daily.")
- P3/9 : *"Emmm setiap hari ibu selalu masak sayur sayuran buat ayah dan keluarga"* ("Every day my mother cooks vegetables for my father and the family.")
- P3/10 : *"Tau porsinya ditakar setiap mau makan, nasinya dikit dan sayuranya yang banyak"* ("We know the portions—measured before eating, little rice and lots of vegetables.")

The themes and subthemes identified from the key statements are presented in the table below.

Table 3. Instrumental Support

Keywords	Subthemes	Theme
Cooking as per medical advice; portion control; preparing medicines; purchasing medicines	Treatment accompaniment; physical/tangible care	Instrumental support

d. Theme 4: Appraisal (Esteem) Support

Participants emphasized praise and recognition as important for sustaining treatment engagement and self-management.

P1/44: *"Ya.. saya (berpikir lama) senang ternyata suami saya bisa mengontrol sendiri ya saya berikan pujian"* ("Yes... I (after a long pause) was happy that my husband could monitor himself; I gave him praise.")

P1/45: *"Ya saya bilang alhamdulillah bapak sudah bisa mengontrol gula darah sendiri"* ("I said, 'Alhamdulillah, you can monitor your blood sugar by yourself now.'")

P2/45: *"Ya senang la lihat suaminya bisa mengontrol sendiri... terus istri sama anak anak ya senang"* ("I was happy to see my husband manage on his own... and my wife and children were happy too.")

P3/15: *"Emm... ya... senang ibu selalu bilang ke ayah alhamdulillah ayah sudah bisa mengontrol sendiri"* ("Umm... yes... my mother often said, 'Alhamdulillah, Dad can monitor himself now.'") P3/16: *"Iya diberikan pujian dari keluarga jadi tetap semangat mengontrol gula darahnya secara mandiri"* ("Yes, he receives praise from the family, so he stays motivated to control his blood sugar independently.")

The themes and subthemes identified from the key statements are presented in the table below.

Table 4. Appraisal Support		
Keywords	Subthemes	Theme
Providing praise to the patient	-	Appraisal Support

DISCUSSION

Based on interviews with three participants, four types of family support were identified: emotional, informational, instrumental, and reward support. Emotional support emerged as the most essential for maintaining treatment adherence, as it helps patients feel motivated, supported, and more confident. Informational and instrumental support play a role in facilitating treatment implementation, such as providing information about care, assisting with dietary adjustments, and accompanying patients to routine check-ups. Meanwhile, reward support strengthens patients' motivation and confidence through recognition and praise for their efforts in therapy.

a. Emotional Support

Patients with diabetes frequently experience emotional challenges, including dissatisfaction with their condition that undermines adherence to healthy lifestyles; irritability and frustration arising from numerous restrictions; and discouragement when glycemic control does not improve despite multiple therapies. Patients may also fear complications and mortality, become bored with medication, feel disappointed, and even develop depression. Effective coping strategies can improve treatment adherence and thereby lower blood glucose levels (Surjoseto & Sofyanty, 2022). Positive coping may be nurtured by families, friends, and healthcare professionals (Safitri et al., 2021).

Interview data from all three participants indicated that, when following medical recommendations, families first offered encouragement, motivation, and reassurance. These short, seemingly simple expressions were often not spoken explicitly. However, these expressions play a role in providing positive encouragement to diabetes mellitus patients undergoing treatment. These expressions of support are an effective way to demonstrate the family's concern and attention to the patient's condition, which can boost the patient's morale during treatment. This aligns with Suhartatik, (2022), who reported that support can take the form of motivation and sustained attention for people living with diabetes. The present findings are also consistent with Putri et al., (2022), who observed that emotional support fosters patients' self-confidence, yet differ from Nugraha et al., (2025), who emphasized internal psychological coping as the primary mechanism.

This study suggests that simple affirmations can help patients maintain consistency with treatment. Thus, beyond reaffirming the role of emotional support noted in prior research, our findings offer concrete illustrations of everyday family communication that directly strengthens adherence. With encouragement and reassurance from close others, patients are more confident in facing their illness and maintaining routine therapy.

We infer that people with diabetes may struggle to initiate diabetes self-management in the absence of external support from significant others, particularly family members. As those closest to

the patient, families can meaningfully enhance adherence. Among the most accessible and effective forms of family assistance is emotional support, which helps patients feel less alone, more motivated, and more mindful in sustaining consistent care. In addition to stabilizing physical health, such support bolsters mental well-being and, in turn, overall quality of life.

b. Informational Support

Health education is critical to equip people with diabetes with the knowledge necessary for self-care and personal responsibility in disease management (Maranata et al., 2024). Active family participation is a key component of such education: families can motivate, supervise, and remind patients to take medication regularly and maintain a healthy lifestyle (Dewi et al., 2024). Families also play an important role in gathering and disseminating information that helps patients understand and follow treatment appropriately (Solekhah & Sianturi, 2020).

Interviews with the three participants showed that families consistently provided information related to blood glucose control. This included offering practical advice, reminders, and health information to support understanding of diabetes treatment and healthy living. These findings accord with (Saviqoh et al., 2021), who reported that most respondents received adequate informational support. This indicates that families can convey useful information that patients can process effectively.

A distinctive insight from this study is that informational support extended beyond reminders to include concrete suggestions that build positive beliefs, thereby enhancing motivation for adherence. Informational input can increase patients' suggestibility in a constructive sense and expand knowledge, enabling them to manage the illness in line with professional guidance. Adequate informational support can therefore strengthen motivation to maintain stable health, comply with therapeutic regimens, and sustain healthy behaviors (Bar et al., 2025).

We infer that people with diabetes require timely, comprehensible information about their condition and its management. Families, as the nearest support system, should play an active role in reminding patients to take medication with meals, avoid contraindicated foods or behaviors, attend clinical reviews, exercise regularly, and adhere to recommended dietary plans. Informational support should not be limited to routine reminders; it should also explain the rationale for disease management and the consequences of poor adherence. Families who provide consistent, active information coupled with positive encouragement can help patients overcome inertia or nonadherence, thereby improving knowledge, awareness, and compliance.

c. Instrumental Support

Active family participation in treatment activities, dietary management, physical activity, and constructive use of leisure time is essential. Families serve as crucial determinants of successful diabetes management (Putri et al., 2022). Family support significantly influences quality of life by encouraging disciplined dietary practices and regular medical follow-up; it also makes it easier for patients to seek practical help for disease-related challenges (Hardiansyah, Fadli, et al., 2025). When patients receive tangible, practical assistance from family members, they are more likely to follow medical guidelines consistently (Fauziansyah et al., 2025).

Interviews with the three participants indicated that families routinely fulfilled practical needs for diabetes care: procuring and preparing medication, planning diet types and portions, and providing attentive oversight. Such support was pivotal for sustaining routine care and treatment. This is in line with Hendrawati et al., (2022), who found that families committed to preparing recommended meals, maintaining dietary patterns, ensuring proper treatment, and monitoring warning signs of complications. However, Noor et al., (2022) reported a contrasting finding: some families did not differentiate food for patients with diabetes from that of other household members (e.g., low-calorie sweeteners), despite the family's central role in helping patients manage and control diabetes (Widyastuti & Rohmadani, 2024). Key elements of the family role include implementing diet plans developed with health professionals (appropriate meal timing, portion sizes, and food choices), supervising pharmacological therapy, and

supporting physical exercise. Families are therefore critical for providing motivation, sustaining engagement, and enhancing involvement in patient care (Abidin et al., 2023).

We infer those high levels of adherence may be enabled by consistent instrumental support, which reduces the burden of self-management and facilitates treatment execution. With sustained instrumental support from spouses, children, and siblings, patients experience direct benefits that can improve quality of life and reduce complication risk. Persistent instrumental assistance helps patients maintain stable health status.

d. Appraisal (Esteem) Support

Families convey appraisal support through respectful, affirmative speech and positive attitudes (Heriyanti et al., 2020). Such esteem-based assistance includes acknowledgment or praise for achieving particular milestones (Muthmainnah et al., 2022). As shown by Mela & Barkah, (2022), strong family support enhances adherence among people with diabetes, in part by fostering motivation and self-confidence. Conversely, inadequate family support may erode patients' motivation to recover or improve their health.

Synthesizing theoretical and empirical insights, (Basri et al., 2021) emphasized that strong motivation can kindle a desire to recover; this motivation cultivates self-efficacy and confidence, which in turn supports improvement in disease status and self-care. (Syaftriani et al., 2023) noted that patients may exhibit low motivation when behavior change relies solely on external factors without intrinsic drive; nevertheless, their study demonstrated a relationship between self-motivation and medication-taking behavior among people with diabetes.

Interviews in the present study revealed gratitude, happiness, and explicit praise for the patient's ability to control blood glucose independently and maintain stability. Patients demonstrated strong commitment to healthy living and disciplined adherence, making substantial contributions to diabetes management success. Such outcomes deserve recognition as indicators of optimal self-care. Appraisal support can cultivate enthusiasm and motivation for sustained treatment and maintenance: when efforts and progress are acknowledged, patients tend to remain committed to healthy habits, adhere to medication, and engage actively in recovery. Unlike prior work that primarily emphasized internal motivation, this study underscores how small expressions of praise from family can serve as a concrete mechanism for maintaining adherence. Appraisal support not only increases confidence but also strengthens patients' resolve to face diabetes-related challenges more positively and consistently. Achieving glycemic stability becomes a shared source of joy and motivation for both patients and families to continue providing attentive care (Chairani et al., 2025; R. Dewi et al., 2022).

We infer that robust family support can elevate quality of life among people with diabetes. When support is strong, patients feel valued, seen, and needed—factors that improve their capacity to cope effectively. Appraisal support is particularly impactful when patients adhere to recommended diets, follow healthcare advice, maintain healthy lifestyles, and remain compliant with therapy. Verbal and behavioral appreciation can build patients' self-confidence and intrinsic motivation to sustain good health management. Recognition of success encourages continued healthy habits, glycemic control, and treatment adherence. In this way, appraisal support affects psychological well-being and can help people with diabetes achieve better quality of life.

This study, however, involved only three participants from a single location, so the findings are context-specific and cannot be generalized. As a qualitative study, it cannot directly measure or prove a causal effect on treatment adherence. Nevertheless, it provides in-depth insights into family support and patient experiences, which can serve as a model for families facing similar challenges in developing strategies to support treatment adherence.

CONCLUSION

Based on the interviews conducted between July and August 2025 with three participants, this study identified four major themes describing the forms of family support influencing treatment adherence among patients with diabetes mellitus: emotional support, informational support, instrumental support, and appraisal (esteem) support. Family support plays a vital role in improving treatment adherence in patients diabetes mellitus. These four dimensions of support complement one another and collectively serve as key factors in encouraging patients to remain disciplined, optimistic, and compliant in their treatment and overall disease management.

It is expected that both patients and their families will continue to strengthen these forms of support throughout the treatment process. Families are encouraged to take a more active role in accompanying, motivating, and assisting patients in implementing healthy lifestyle practices, thereby ensuring adherence to treatment and maintaining patients' quality of life.

The findings of this study may serve as a reference for the development of broader and more diverse research that considers the social, economic, and cultural factors influencing family dynamics. Furthermore, these results contribute to expanding knowledge and scientific development, particularly in the field of Family Nursing, by highlighting the central role of family involvement in supporting adherence and holistic care for patients with diabetes mellitus.

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