

### More comfortable disclosing disease status

Results showed that after the intervention, 99.6% of people with T2D no longer kept their disease secret (Table 4).

Table 4. Disclosure of diabetes status before and after the intervention

	Before n (%)	After n (%)
<b>Keep the diabetes status secret</b>		
Yes	3 (1.3)	1 (0.4)
No	219 (98.7)	221 (99.6)
<b>Persons who aware of their diabetes status</b>		
Health care worker	212 (95.5)	219 (98.6)
Relatives in the household	204 (91.9)	210 (94.6)
Relatives outside the household	208 (93.7)	216 (97.3)
Friends	181 (81.5)	211 (95.0)
Community members	115 (51.8)	150 (67.6)

Persons aware of their diabetes status before and after the intervention were mainly health workers and their relatives. After the intervention, the percentage of friends and neighbors who knew their diabetes status increased compared to before the intervention, 13.5% and 15.8%, respectively.

### CONCLUSION

Our study provided evidence that diabetes club support can help to improve self-management and quality of life among people with T2D.

After having support from the diabetes clubs, the percentage of patients with poor medication adherence diminished by 17.9%, while the average adherence level rose by 18.4% compared to before the intervention. The proportion of patients who knew how to take care of their feet was 95.0%. Rates of mental distress declined from 14.9% to 5.0%, and people with T2D are more open about their disease.

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Project “Living together with chronic disease: Informal support for diabetes management in Vietnam (VALID)”

## Improvement in physical and mental health of people living with type 2 diabetes: The role of diabetes clubs

### Main findings

1. Medication adherence: After having support from diabetes clubs, the percentage of patients with poor medication adherence diminished by 17.9%, while the average adherence level rose by 18.4% compared to before the intervention.
2. Foot care: After the intervention, the proportion of patients who knew how to take care of their feet increased by 13.5%.
3. Distress: After the intervention, the proportion of patients reporting mental distress declined from 14.9% to 5.0%.
4. Disease disclosure: Up to 99.6% of patients no longer keep their disease secret. After the intervention, the percentage of friends and neighbors who knew their diabetes status increased compared to before the intervention, 13.5% and 15.8%, respectively.

Thai Binh, 2022

## OVERVIEW

Type 2 diabetes (T2D) is a prevalent health problem globally. According to the World Diabetes Federation (IDF Diabetes Atlas), in 2019, there were around 463 million people worldwide with diabetes, and this is projected to increase to 700 million people (10.9% of the adult population) by 2045. In 2019, about 4.2 million people died from diabetes, with 80% living in low- and middle-income countries. In Vietnam, the age-adjusted prevalence of diabetes (20–79 years) is projected to increase to 7.1% by 2045 [1]. Preventing dangerous complications and premature death from diabetes requires improving each patient's self-management ability. However, people living with T2D in low- and middle-income countries face a lot of unmet needs for informal care in their diabetes self-management [2].

Peer support has been identified as essential in facilitating good health behaviors and alleviating distress, thus improving self-management capacity [3]. This supportive model has been recognized to improve health outcomes in many countries, especially in resource-constrained communities [4,5]. However, there are few studies researching the effect of this supportive model on diabetes self-management in people with T2D in low- and middle-income countries.

This study was a part of the larger interdisciplinary project, Living Together with Chronic Disease: Informal Support for Diabetes Management in Vietnam (VALID), which closely cooperated with the Vietnam - Denmark Sector Strategy (SSC) project.

An intervention with a pre-post study, including monthly classes and clubs for people living with T2D, was conducted in 2 rural communes in Vietnam to provide evidence for peer support that improves self-management and quality of life in people with T2D.

## METHOD

A community intervention trial with a pre-post study was implemented with 229 people living with T2D in Vu Hoi and Viet Thuan communes, Vu Thu district, Thai Binh city, Vietnam, from 2021 to 2022.

People with T2D accepted an invitation to participate in the study. They answered questions about themselves, the knowledge and practice of disease self-management, mental disorders, and keeping their diabetes condition secret from the public.

Information on medication adherence in the treatment of T2D was based on the Morisky Medication Adherence Scale 8 questions (MMAS-8).

Information on mental distress was collected based on 20 questions (Self-Reporting Questionnaire 20 - SRQ20).

## RESULTS

### Socio-demographic and health characteristics

The majority of respondents were in the age group 61 - 70 years, followed by the age group of 71 - 80 years. There were 23.0% living alone, and 41.4% of participants were farmers. Approximately 40% of the respondents lived with T2D for one to five years, followed by those above five to ten years (35.1%) (Table 1).

Table 1. Distribution of years of living with diabetes

Years of living with diabetes	n (%)
>20 years	6 (2.7)
>10 - 20 years	46 (20.7)
>5 - 10 years	78 (35.1)
≥1 - 5 years	89 (40.1)
< 1 year	3 (1.4)

### Improvement in medication adherence

The majority of people with T2D were treated with oral medication.

There was a statistically significant increase in medication adherence before and after the intervention. The percentage of patients with poor medication adherence diminished from 25.4% in the pre-study to 7.5% post-study ( $p < 0.001$ ). Meanwhile, the average adherence level rose by 18.4% (Chart 1).

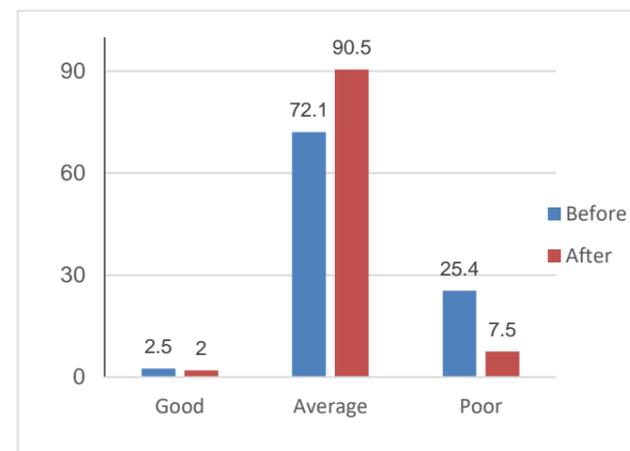


Chart 1. Medication adherence before and after the intervention

### Improvement in knowledge and practice of foot care among people with T2D

After the intervention, the proportion of patients who knew how to take care of their feet increased by 13.5%. The percentage of people with T2D who practiced not walking barefoot rose from 61.3% (before) to 78.7% (after) (Table 2).

Table 2. Distribution of knowledge and practice of foot care among people with T2D

	Before n (%)	After n (%)
<b>Know how to take care of foot</b>		
No	41 (18.5)	11 (5.0)
Yes	181 (81.5)	211 (95.0)
<b>Foot care practices</b>		
Take care feet every day	174 (96.1)	202 (95.7)
Massages/ Acupuncture	21 (11.6)	16 (7.6)
Not walking barefoot	111 (61.3)	166 (78.7)
Soaking foot with herbs/salt	56 (30.9)	55 (26.1)

### Reducing mental distress in people with T2D

The results showed that after the intervention, the proportion of people with T2D reporting mental distress declined from 14.9% to 5.0%. There was a significant decrease in the SRQ-20 with a median from 3.0 to 2.0 (Tab 3). Indicating that overall mental health improved among diabetes club members.

Table 3. Reducing mental disorders in people with T2D

	Before n (%)	After n (%)	p
Negative	189 (85.1)	211 (95.0)	<0.001
Positive	33 (14.9)	11 (5.0)	
SRQ-20 (Median - IQR)	3.0 [2.0 - 6.0]	2.0 [1.0 - 4.0]	<0.001