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Sodium-Glucose Cotransporter-2 inhibitor (SGLT2i) Prescription Rates Amongst Diabetologists for Type 2 Diabetes Patients with Albuminuric Diabetic Kidney Disease: A Real-World Study at a Diabetes Center in Bangkok

Peachaphol Chongvoranond, Yotsapon Thewjitcharoen, Waralee Chatchomchaun, Ekgaluck Wanothayaroj, Siriwan Butadej, Soontaree Nakasatien, Sirinate Krittiyawong, Thep Himathongkam

Diabetes, Thyroid, and Endocrine Center, Vimut-Theptarin Hospital, Bangkok, Thailand

Abstract

Background. Despite the beneficial effects of SGLT2i in reducing kidney disease progression and mortality in people with diabetic kidney disease (DKD), the use of SGLT2i in this population remains low.

Objective. To explore the prescription rates of SGLT2i in type 2 diabetes (T2D) patients with albuminuric DKD and to assess clinician-perceived barriers to prescribing SGLT2i.

Methodology. A retrospective study of all medical records of T2D patients with albuminuric DKD and eGFR ≥20 ml/min/1.73m^2 in 2023 who had been treated by 13 diabetologists was conducted at Vimut-Theptarin Hospital, a private tertiary diabetes center in Bangkok. In cases of no documentation of non-prescribed SGLT2i, treating physicians were contacted to explore the reasons.

Result. A total of 282 medical records were reviewed (mean age 65.9 ± 10.0 years, A1C 7.5 ± 1.2 %, duration of diabetes 19.7 ± 10.4 years, mean eGFR 68.3 ± 24.1 mL/min/1.73 m^2, median UACR 151 (IQR 309) mg/g Cr, RAS inhibitors usage 80.1%). The SGLT2i prescription rate was 58.9% in 2023. Coronary artery disease, age ≥65 years, eGFR <60 mL/min/1.73 m^2, optimal A1C and LDL control, use of thiazolidinedione were associated with SGLT2i prescription. Clinical inertia (31.9 %) was the most common reason for not prescribing SGLT2i in eligible patients, followed by cost concerns (18.1%) and frailty of patients (15.5%).

Conclusion. Prescribing SGLT2i to T2D patients with albuminuric DKD remains suboptimal among diabetologists due to clinical inertia, medication costs, and frailty. Our study underscores actions aimed at improving SGLT2i prescription rates in routine practice.

Key words: sodium-glucose cotransporter 2 inhibitors (SGLT2i), prescription rates, diabetic kidney disease, real-world data, Thai

INTRODUCTION

Over the last decade, sodium-glucose cotransporter 2 inhibitors (SGLT2i) which were initially developed as an anti-diabetic medication has transitioned to include organ protection in their action, particularly protection of the heart and kidney.[1] The results of landmark clinical trials demonstrated that various SGLT2is were associated with consistent reductions in kidney disease progression, as measured by a composite outcome comprised of progression to end-stage kidney disease (ESKD), doubling of creatinine, severity of albuminuria, and reductions in cardiovascular events.[2-9] The latest 2022 Kidney Disease Improving Global Outcomes (KDIGO) guideline for diabetes management in chronic kidney disease and 2024 KDIGO guideline for the evaluation and management of chronic kidney disease recommended SGLT2i as the preferred first-line pharmacologic therapy for patients with type 2 diabetes (T2D) and chronic kidney disease (CKD) regardless of glycemic control based on high-quality evidences from randomized controlled trials.[10,11] SGLT2i treatment should be initiated when the estimated glomerular filtration rate (eGFR) is ≥20 mL/min/1.73 m^2 and continued until renal replacement therapy. Nevertheless, in routine care,

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Corresponding author: Peachaphol Chongvoranond, MD
Vimut-Theptarin Hospital, 3850 Rama IV Road, Prakanong, Klongtoey, Bangkok, 10110 Thailand
Tel. No.: 668-2348-7000
E-mail: peachapl@hotmail.com
ORCiD: https://orcid.org/0009-0001-6048-3716

multiple barriers hamper the adoption of guidelines as seen with earlier medications in cardiovascular diseases.[12-14]

While renin-angiotensin system (RAS) inhibitors, the standard of care in CKD patients for more than 3 decades, provide clear renoprotective effects by reducing systemic and intraglomerular pressures, the mechanisms in which SGLT2i improves renal hemodynamics are not completely understood. Evidences suggested that SGLT2i may act on many different cells inside the kidney and decrease energy consumption by proximal tubular cells.[15] Interestingly, these benefits are observed in patients with or without diabetes and across a spectrum of renal function.[16] Therefore, SGLT2i has been established as one of the four pillars of therapy in the management of CKD in people with T2D along with RAS inhibitors, finerenone, and glucagon-like peptide-1 receptor agonists (GLP-1 RAs).[17]

Since its approval in Thailand in 2014, SGLT2i prescription rates have increased over time; however, estimates of SGLT2i use remain low in CKD people with diabetes due to various factors.[18] When compared to the usage rate of RAS inhibitors which had been reported at about 40-60% in people with diabetes and CKD, it is estimated that the use of SGLT2i remains <20% in these population from previous reports all over the world.[19-22] Moreover, there are disparities based on elderly, non-white race, gender, reimbursement system, and low-income eligible patients.[23-25] Therefore, this study aimed to 1) explore prescription rates of SGLT2i in T2D with albuminuric diabetic kidney disease (DKD) 2) examine associated factors with receiving SGLT2i, and 3) assess clinician-perceived barriers to prescribing SGLT2i.

METHODOLOGY

The present study is a retrospective analysis of medical records obtained by 13 diabetologists at Vimut-Theptarin Hospital, a private diabetes center in Bangkok, Thailand. (Baseline characteristics of all diabetologists are shown in Supplement Data Table 1). Over 1,400 registered people with T2D follow-up regularly at our diabetes center in 2023. Inclusion criteria included T2D patients with albuminuric DKD who were regularly followed up at least 3 times in 2023. Patients ages <15 years or >80 years, patients with normoalbuminuria, eGFR <20 mL/min/1.73 m^2, patients with type 1 diabetes mellitus and other types of diabetes were excluded. Albuminuric DKD was defined as a diagnosis of T2D and CKD with increased albuminuria by urine albumin-creatinine ratio (UACR) ≥30 mg/g Cr. The severity of increased albuminuria was categorized into moderately increased albuminuria (UACR 30-300 mg/g Cr) and severely increased albuminuria (UACR >300 mg/g Cr). The CKD-EPI equations for eGFR were used to calculate glomerular filtrate rate from serum creatinine and eGFR was categorized per KDIGO guideline (Stage 1 – eGFR above 90 mL/min/1.73 m^2, Stage 2 – eGFR of 60 to 89 mL/min/1.73 m^2, stage 3a - eGFR of 45 to 59 mL/min/1.73 m^2, Stage 3b – eGFR of 30 to 44 mL/min/1.73 m^2, Stage 4 – eGFR of 16 to 29 mL/min/1.73 m^2).[25] A subgroup analysis was also conducted based on age group as more than 65 years, severity of albuminuria, and eGFR less than 60 mL/min/1.73 m^2. The clinical algorithm for the in-hospital use of SGLT2i and management of type 2 diabetes with diabetic kidney disease is presented in Supplement Data Figure 1.

Information on patient characteristics including demographics, comorbidities, prescribed medications, and laboratory data was retrieved from October to December 2023. Among albuminuric DKD patients who did not receive SGLT2i in 2023, the reason for not receiving SGLT2i was extracted from medical records. In cases of no documentation of non-prescribed SGLT2i, treating physicians were contacted for reasons. The proportion of SGLT2i prescriptions was re-assessed again at 6 and 12 months after the index visit in 2023 to see the trend of SGLT2i prescription. This study was approved by the Institutional Review Board (IRB) committee of Vimut-Theptarin Hospital (EC No.3-2024).

Statistical analyses

Continuous variables were summarized as mean ± standard deviation (SD) or median (interquartile range, IQR) while categorical variables were summarized using count and percentages. The *t-test* or analysis of variance was applied to compare differences in means among groups. The Chi-squared test was used to compare differences in percentages between groups. Variables analyzed in the univariate analysis included age ≥65 years, gender, A1C <7.0%, insulin usage, and eGFR based on previous literatures for associated factors in SGLT2i prescription.[23,24] Factors achieving a *p*-value <0.1 were included in the multivariate models to determine associated factors with SGLT2i prescription among albuminuric DKD patients. A *p*-value of <0.05 was considered statistically significant. All analyses were conducted using Statistical Package for the Social Sciences (SPSS), version 24 (IBM Corp., Armonk, NY, USA).

RESULT

A total of 1,196 medical records were screened in 2023 and 282 patients with albuminuric DKD were recruited based on inclusion criteria as shown in Figure 1. The details of studied patients (female 37.9%, mean age 65.9 ± 10.0 years, A1C 7.5 ± 1.2%, duration of diabetes 19.7 ± 10.4 years, mean eGFR 68.3 ± 24.1 mL/min/1.73 m^2, median UACR 151 (IQR 309) mg/g Cr, insulin usage 35.5%, RAS inhibitors usage 80.1%) are presented in Table 1.

The overall SGLT2i prescription rate in 2023 was 58.9% and was not changed during the study period as revealed in Figure 2. Only 12.8% of patients received RAS inhibitors, SGLT2i, and GLP-1 RAs as recommended in the KDIGO 2024 guideline. Elderly (ages of ≥65 years) and low A1C were associated with lower SGLT2i prescription rates as shown in Table 2. These factors also remained significant by multivariate analysis of associated factors in not receiving SGLT2i as shown in Table 3. Older ages of ≥65

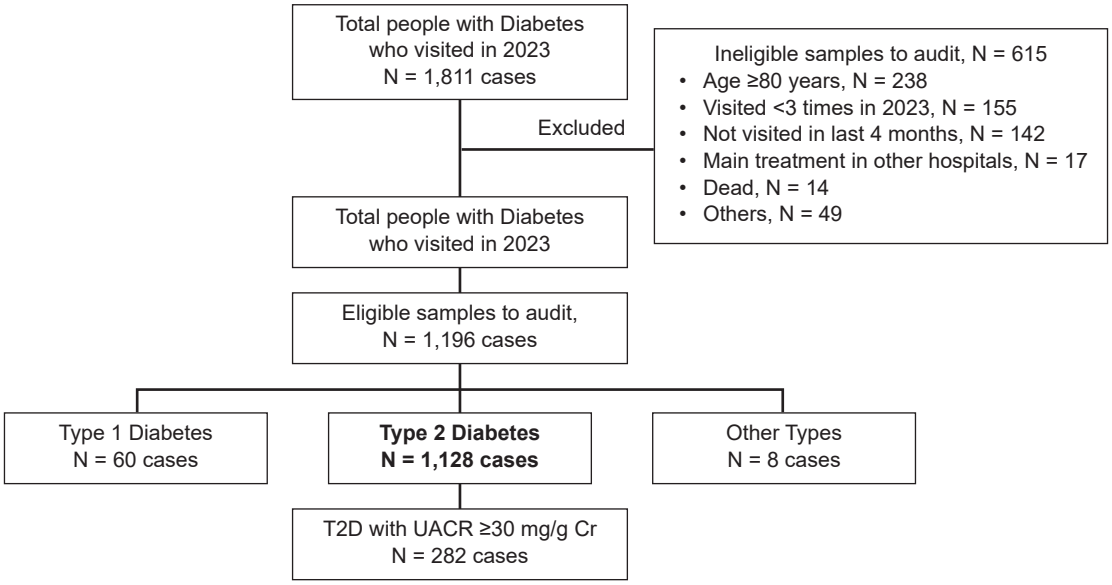

Figure 1. Flow of samples in SGLT2i study.

Table 1. Baseline characteristics of studied participants (N = 282 cases)

Variable	Mean (SD) / N (Percentage)
Female (%)	107 (37.9%)
Age (years)	65.9 (10.0)
<65	101 (35.8%)
65-74	136 (48.2%)
≥75	45 (16.0%)
Duration of diabetes (years)	19.7 (10.4)
BMI (kg/m²)	27.2 (5.1)
Active smoking (%)	23 (8.2%)
Hypertension (%)	217 (77.0%)
Coronary artery disease (%)	45 (16.0%)
Heart failure (%)	4 (1.4%)
Stroke (%)	18 (6.9%)
Peripheral artery disease (%)	29 (10.3%)
Diabetic retinopathy (%)	197 (69.9%)
A1C (%)	7.5 (1.2)
LDL (mg/dL)	79.4 (25.7)
Estimated GFR (mL/min/1.73 m²)	68.3 (24.1)
Stage 1 eGFR ≥90 mL/min/1.73 m² (%)	68 (24.1%)
Stage 2 eGFR = 60-89 mL/min/1.73 m² (%)	105 (37.2%)
Stage 3a eGFR = 45-59 mL/min/1.73 m² (%)	58 (20.6%)
Stage 3b eGFR = 30-44 mL/min/1.73 m² (%)	42 (14.9%)
Stage 4 eGFR = 15-29 mL/min/1.73 m² (%)	9 (3.2%)
Albuminuria	
Moderately increased (30-300 mg/g Cr)	197 (69.9%)
Severely increased (>300 mg/g Cr)	85 (30.1%)
RAS inhibitors (%)	226 (80.1%)
Statin (%)	272 (96.5%)
Anti-diabetic medication (%)	
Metformin	229 (81.2%)
Sulfonylurea	103 (36.5%)
Thiazolidinedione	58 (20.6%)
DPP4 inhibitor	127 (45.0%)
GLP-1 RA	53 (18.8%)
Insulin	100 (35.5%)

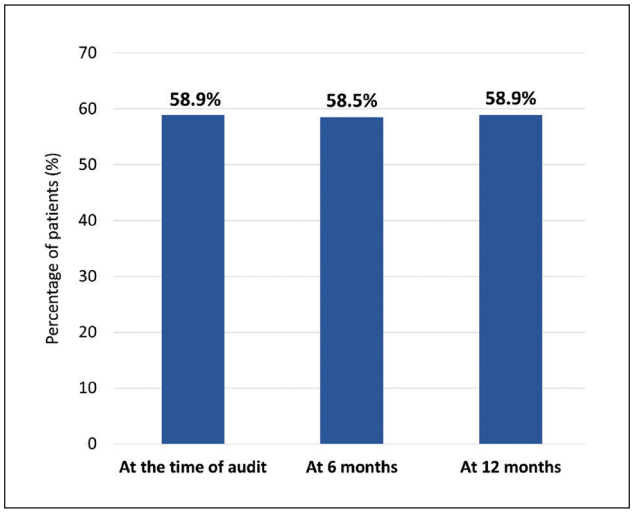

Figure 2. The overall SGLT2i prescription rate.

years and optimal A1C <7.0 % were less likely to receive SGLT2i (OR = 0.49; CI 95% 0.27-0.88, OR = 0.51; CI 95% 0.28-0.92, respectively). The details of SGLT2i prescription rates stratified by age group, eGFR categories, severity of albuminuria, and presence or absence of established atherosclerotic cardiovascular disease (ASCVD) were demonstrated in Figure 3. Notably, only 64.8% of DKD patients with established ASCVD received SGLT2i. Among patients not receiving SGLT2i, clinical inertia was the most common reason for not prescribing SGLT2i in eligible patients, followed by medication cost, frailty of patients with multiple comorbidities, and refusal from patients as revealed in Figure 4. Only 0.9% of non-prescribed SGLT2i patients were those with previous adverse events from SGLT2i.

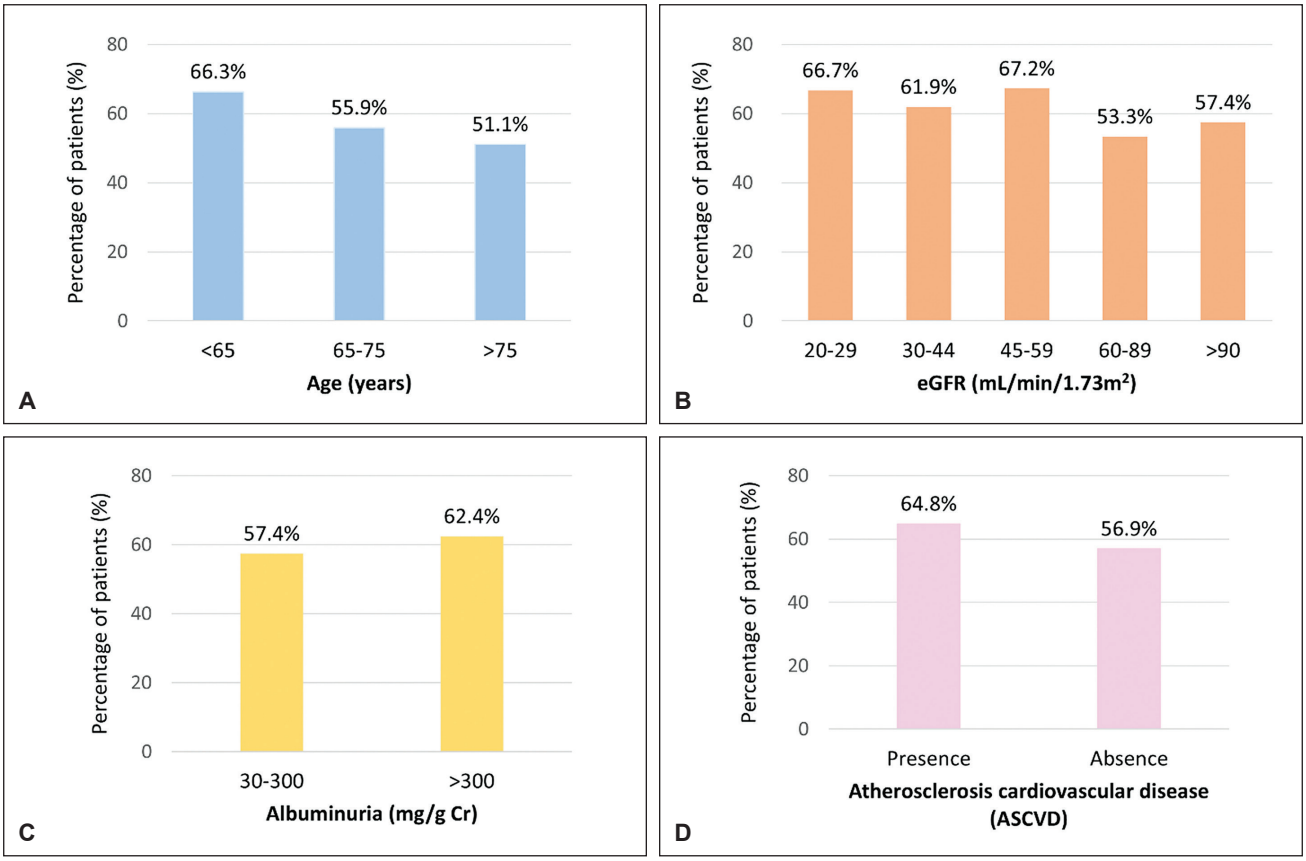

Figure 3. SGLT2i prescription rates stratified by **(A)** Age group; **(B)** eGFR categories; **(C)** Severity of albuminuria; **(D)** Presence or absence of established atherosclerotic cardiovascular disease (ASCVD).

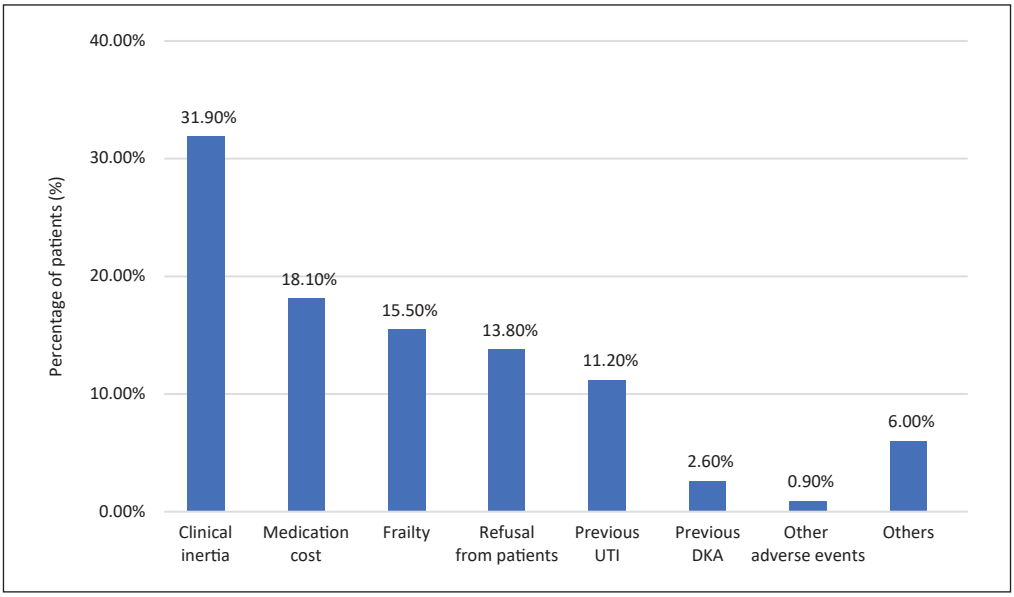

Figure 4. Reasons for not prescribing SGLT2i.

DISCUSSION

Our present study highlighted that prescribing SGLT2i to T2D patients with albuminuric DKD remained suboptimal among diabetologists in a private setting due to clinical inertia, medication costs and frailty.

SGLT2i use among DKD patients also showed a very low rate (10-20%) in diverse settings from primary care providers and specialties from previous reports all over the world.[19-25] These results underscore the need to develop interventions aimed at improving the SGLT2i prescription rates in routine practice. Even though prohibitive costs are a major issue, SGLT2i is subsidized by the government

Table 2. Comparison of patients who received SGLT2i (N = 166) and who did not receive SGLT2i (N = 116)

Variable	Patients who received SGLT2i Mean (SD) / N (Percentage)	Patients who did not receive SGLT2i Mean (SD) / N (Percentage)	*p*-value
Female	60 (36.1%)	47 (40.5%)	0.46[ı]
Age (years)	65.0 (10.1)	67.2 (9.6)	0.07[¶]
<65 years	67 (40.4%)	34 (29.3%)	
65-74 years	76 (45.8%)	60 (51.7%)	
>75 years	23 (13.8%)	22 (19.0%)	
Duration of diabetes (years)	20.4 (10.3)	18.6 (10.4)	0.14[¶]
BMI (kg/m^2)	27.4 (5.2)	26.9 (4.9)	0.43[¶]
Active smoking (%)	19 (11.4%)	4 (3.4%)	0.02[ı]
Hypertension (%)	123 (74.1%)	94 (81.0%)	0.18[ı]
Coronary artery disease (%)	33 (19.9%)	12 (10.3%)	0.03[ı]
Heart failure (%)	1 (0.6%)	3 (2.6%)	0.20[ı]
Stroke (%)	9 (5.4%)	9 (7.8%)	0.43[ı]
Peripheral artery disease (%)	15 (9.0%)	14 (12.1%)	0.41[ı]
Diabetic retinopathy (%)	116 (69.9%)	81 (69.8%)	0.99[ı]
A1C (%)	7.6 (1.2)	7.3 (1.2)	0.03[¶]
LDL (mg/dL)	76.1 (22.9)	84.0 (28.8)	0.01[¶]
Estimated GFR (mL/min/1.73 m^2)	67.3 (24.6)	69.7 (23.4)	0.41[¶]
Stage 1 eGFR ≥90 mL/min/1.73 m^2 (%)	39 (23.5%)	29 (25.0%)	
Stage 2 eGFR = 60-89 mL/min/1.73 m^2 (%)	56 (33.7%)	49 (42.2%)	
Stage 3a eGFR = 45-59 mL/min/1.73 m^2 (%)	39 (23.5%)	19 (16.4%)	
Stage 3b eGFR = 30-44 mL/min/1.73 m^2 (%)	26 (15.7%)	16 (13.8%)	
Stage 4 eGFR = 15-29 mL/min/1.73 m^2 (%)	6 (3.6%)	3 (2.6%)	
Albuminuria (mg/g)			0.24[¶]
Moderately increased (30-300 mg/g)	113 (68.1%)	84 (72.4%)	
Severely increased (>300 mg/g)	53 (31.9%)	32 (27.6%)	
RAS inhibitors (%)	139 (83.7%)	87 (75.0%)	0.07[ı]
Statin (%)	159 (95.7%)	113 (97.4%)	0.47[ı]
Anti-diabetic medication (%)			
Metformin	138 (83.1%)	91 (78.4%)	0.32[ı]
Sulfonylurea	52 (31.3%)	51 (44.0%)	0.03[ı]
Thiazolidinedione	40 (24.1%)	18 (15.5%)	0.08[ı]
DPP4 inhibitor	63 (38.0%)	64 (55.2%)	<0.01[ı]
GLP-1 RA	43 (25.9%)	10 (8.6%)	<0.01[ı]
Insulin	67 (40.4%)	33 (28.4%)	0.04[ı]

[ı] t-test; [¶] Chi-squared test

Table 3. Univariate and multivariate analysis of factors associated with receiving SGLT2i

Variable	Univariate analysis			Multivariate analysis		
	HR	95% CI	*p*-value	HR	95% CI	*p*-value
Female	1.20	0.74-1.96	0.46			
Age ≥65 years	0.61	0.37-1.02	0.06	0.49	0.27-0.88	0.02
Duration of diabetes	1.02	0.99-1.04	0.14			
BMI	1.02	0.97-1.07	0.43			
Active smoking	3.62	1.20-10.94	0.02	1.19	0.83-1.72	0.35
Hypertension	0.67	0.38-1.20	0.18			
Coronary artery disease	2.15	1.06-4.37	0.03	2.31	1.02-5.20	0.04
Heart failure	0.23	0.02-2.22	0.20			
Stroke	0.68	0.26-1.77	0.43			
Peripheral artery disease	0.72	0.34-1.56	0.41			
Diabetic retinopathy	1.00	0.60-1.68	0.99			
Optimal A1C <7.0 %	0.58	0.36-0.93	0.03	0.51	0.28-0.92	0.03
Optimal LDL <70 mg/dL	1.76	1.07-2.89	0.03	2.07	1.18-3.63	0.01
eGFR <60 mL/min/1.73 m^2	1.53	0.94-2.52	0.09	1.87	1.06-3.31	0.03
Severely increased albuminuria	1.23	0.73-2.08	0.44			
RAS inhibitors	1.72	0.95-3.09	0.07	1.75	0.89-3.45	0.10
Statin	0.60	0.15-2.38	0.47			
Anti-diabetic medication						
Metformin	1.35	0.74-2.47	0.32			
Sulfonylurea	0.58	0.36-0.95	0.03	0.61	0.34-1.09	0.09
Thiazolidinedione	1.73	0.93-3.20	0.08	2.14	1.07-4.28	0.03
DPP4 inhibitor	0.50	0.31-0.81	<0.01	0.63	0.35-1.12	0.11
GLP-1 RA	3.71	1.78-7.73	<0.01	2.35	0.98-5.63	0.06
Insulin	1.70	1.02-2.83	0.04	0.73	0.37-1.43	0.36

or third-party payers in many countries. However, the adoption rate of SGLT2i by clinicians and patients was still low.

In this study, optimal A1C <7.0 % was an associated factor that was less likely to receive SGLT2i. The landmark trials supported the use of SGLT2i regardless of glycemic control in eligible patients, especially DKD patients.[16] However, many practicing physicians considered this drug exclusively as anti-diabetic agent and limited its use in DKD patients due to its limited glucose-lowering effect despite its renoprotective action. Previous studies also suggested that clinical inertia, limited knowledge, and insufficient treatment review may have contributed to the low SGLT2i prescription rates.[26-28] Collecting essential data regularly especially the use of organ protective drugs could be one of the possible solutions to leverage the use of SGLT2i among DKD patients.[29] Moreover, technology-assisted team-based care with regular feedback could reduce clinical inertia.[30] Management system with adding an alert to the electronic health record could significantly increase SGLT2i prescriptions as shown in a recent study in patients with heart failure.[31]

Based on our present study, an eGFR of <60 mL/min/1.73 m^2, underlying coronary artery disease, optimal LDL control, and use of thiazolidinedione were factors associated with SGLT2i prescription. Patients with DKD have a greater risk of cardiovascular complications, with DKD due to T2D becoming a major cause of ESKD requiring renal replacement therapy.[32] It should be emphasized that most landmark clinical trials included participants with mainly an eGFR of 30–45 mL/min/1.73 m^2.[2-9] In this study, optimal LDL control (LDL <70 mg/dL) and use of thiazolidinedione related with more prescription of SGLT2i could be explained by the features of patients in this study which required multiple drugs to control glucose, lipid and the higher proportion of established ASCVD.

Our study is similar to earlier studies in Caucasian populations in which older adults were less likely to be prescribed SGLT2i despite beneficial effects in reducing morbidity and mortality in comparison with younger patients with relatively preserved renal functions.[24] In the elderly population, the use of SGLT2i might be limited due to frailty, concern for side effects including euglycemic diabetic ketoacidosis, risk of genitourinary infection, and concerns for lower urinary tract infection. However, our present study highlighted clinical inertia among diabetologists as the most common barrier for low prescription rates. The safety and efficacy of SGLT2i in older adults is well established if a sick-day management plan as an integral part of the diabetes education program is enforced as a part of quality diabetes care.[33,34] However, both direct costs from diabetes complications and indirect costs incurred through loss of productivity or earnings should be incorporated into decision-making when selecting medications to avoid clinical inertia.[35,36]

Due to suboptimal prescription resulting mostly from clinical inertia amongst diabetologists of SGLT2i to T2D patients with albuminuric DKD, our study revealed that endocrinologists preferred use of SGLT2i more than internists. Further analysis of the characteristics of the diabetologists found that no significant difference in prescription rates of SGLT2i with regards to age, year of practice, subspecialties and number of cases per month as shown in Supplement Data Table 2.

There were limitations which influenced our results. First, the retrospective nature of the study and a single data source from a private diabetes center should be acknowledged. Second, we only included patients with albuminuric DKD with ages less than 80 years old from our inclusion criteria for annual audit diabetes care. Third, evaluated care gaps of SGLT2i prescription rates were done at one point in time. Some patients may have discontinued SGLT2i medications due to intolerance or adverse reactions from other hospitals before recruiting in this cohort. Fourth, this research included patients with at least 3 follow up visits per year, and may have excluded patients with well-controlled HbA1c who only come for visits 2 times per year based on ADA recommendations, and this might have potentially skewed the sample towards a slightly higher HbA1c. Finally, data on patient's socioeconomic status and healthcare payers were not available in this study.

CONCLUSION

Prescribing SGLT2i to T2D patients with albuminuric DKD remains suboptimal among diabetologists, with barriers including clinical inertia, medication costs, and concerns of adverse events and polypharmacy. Our findings emphasize that actions should be made to increase awareness and monitoring systems should be put in place to overcome barriers in prescribing SGLT2i among DKD patients.

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Statement of Authorship
All authors certified fulfillment of ICMJE authorship criteria.

CRediT Author Statement
PC: Conceptualization, Software, Writing – original draft preparation; **YT:** Methodology, Writing – review and editing, Supervision; **WAC:** Formal analysis; EW: Investigation; **SB:** Data Curation, Project administration; **SN:** Resources, Visualization; **SK:** Writing – review and editing; **TH:** Writing – review and editing, Funding acquisition.

Data Availability Statement
Datasets generated and analyzed are included in the published article.

Author Disclosure

The authors declared no conflict of interest.

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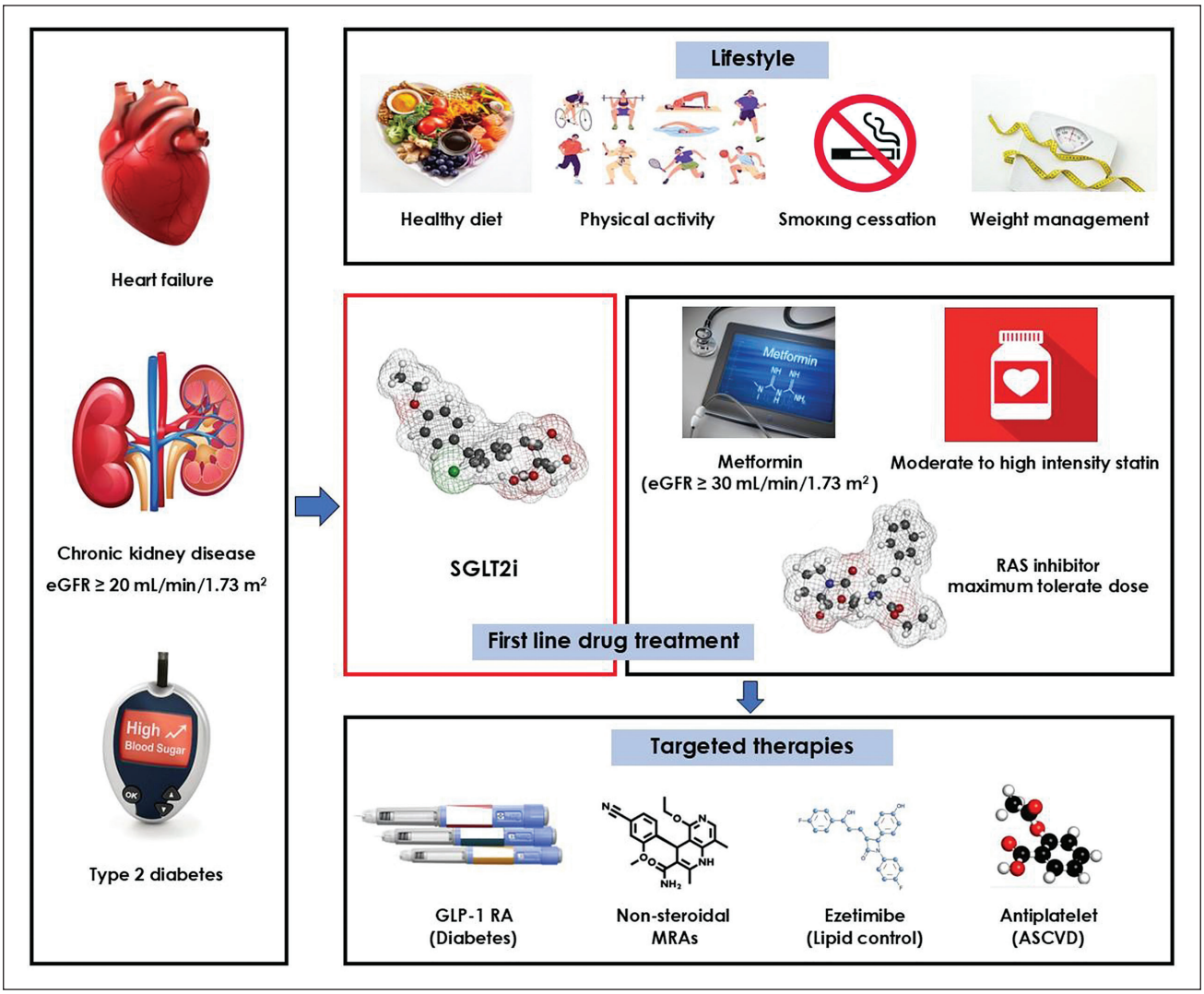
SUPPLEMENT DATA



Supplement Data Figure 1. In hospital clinical algorithm for the use of SGLT2i and management of type 2 diabetes with diabetic kidney disease.

Adapted from KDIGO 2024 Clinical Practice Guideline for the evaluation and management of chronic kidney disease.

Supplement Data Table 1. Characteristics of all 13 diabetologists in Vimut-Theptarin Diabetes, Thyroid and Endocrine Center

Variable	Mean (SD) / N (Percentage)
Age (years)	58.2 (13.1)
Age group	
≤40 years	1 (7.7%)
41-50 years	3 (23.1%)
51-60 years	2 (15.4%)
61-70 years	5 (38.5%)
≥70 years	2 (15.4%)
Sex (Female)	4 (30.8%)
Subspecialties	
Endocrinologist	7 (53.8%)
Internist	6 (46.2%)
Years of practice in diabetology (%)	
≤5 years	0
6-10 years	2 (15.4%)
11-20 years	2 (15.4%)
21-30 years	2 (15.4%)
>30 years	7 (53.8%)
Estimated number of T2D patients per month (%)	
≤10 cases per month	2 (15.4%)
11-30 cases per month	2 (15.4%)
31-50 cases per month	3 (23.1%)
51-100 cases per month	4 (30.8%)
>100 cases per month	2 (15.4%)

Supplement Data Table 2. Comparison between diabetologists among high rate of SGLT2i prescription (rate ≥60%) and low rate of SGLT2i prescription (rate <60%)

Variable	Diabetologists with high rate of SGLT2i prescription (N = 8) Mean (SD) / N (Percentage)	Diabetologists with low rate of SGLT2i prescription (N = 5) Mean (SD) / N (Percentage)	*P*-value
Age (years)	57.4 (14.9)	59.4 (10.8)	0.79
Age group			0.83
≤40 years	1 (100%)	0	
41-50 years	2 (66.7%)	1 (33.3%)	
51-60 years	0	2 (1000%)	
61-70 years	4 (80%)	1 (20%)	
≥70 years	1 (50%)	1 (50%)	
Sex (Female)	1 (25%)	3 (75%)	0.09
Subspecialties			0.07
Endocrinologist	6 (85.7%)	1 (14.3%)	
Internist	2 (33.3%)	4 (66.7%)	
Years of practice in diabetology			0.79
≤5 years	0	0	
6-10 years	2 (100%)	0	
11-20 years	1 (50%)	1 (50%)	
21-30 years	0	2 (100%)	
>30 years	5 (71.4%)	2 (28.6%)	
Estimated numbers of T2D patients			0.80
≤10 cases per month	2 (100%)	0	
11-30 cases per month	1 (50%)	1 (50%)	
31-50 cases per month	2 (66.7%)	1 (33.3%)	
51-100 cases per month	1 (25%)	3 (75%)	
>100 cases per month	2 (100%)	0	