"The program is recognised for excellence in providing education to primary care physicians in the management of diabetes mellitus by South Asian Federation of Endocrine Societies (SAFES) from 2017-19"

Assessment of knowledge, attitude and practice regarding diabetes management among general practitioners in India

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INTRODUCTION

- Non-communicable diseases (NCDs) kill 38 million people each year
- In 2014 the global prevalence of diabetes was estimated to be 9% among adults (WHO, 2014) with more than 80% of diabetes deaths occur in LMICs (WHO, 2014)
- India with no exception home to more than 69.2 million people suffering from diabetes
- General practitioners are the key service providers for diabetes due to skewed distribution of specialists
- The quality of care depends on their awareness, attitude and perception regarding diabetes

So this paper aims to assess the knowledge, attitude and practice regarding diabetes and its management among general practitioners in India.

METHODOLOGY

Sample Population – 2251 general practitioners enrolled under India's biggest capacity building program i.e. Certificate Course in Evidence Based Diabetes Management (CCEBDM) in 2017 to 2018. CCEBDM is a joint collaboration program between Public Health Foundation of India (PHFI), Dr. Mohan's Diabetes Education Academy (DMDEA) and is supported by educational fund from MSD Pharmaceuticals India pvt. Ltd.

Study Design – Cross sectional survey

Data collection tool – Pretested close ended questionnaire comprising of questions related to knowledge, skill and attitude

Data collection technique – Online survey using SurveyMonkey platform

Data analysis – statistical software for social studies (SPSS version 22.0) was used for data analysis. Proportion and percentage was used for frequency distribution and Chi square (χ^2) test and ANOVA was used to assess the relation between categorical variable. P value of <0.05 was used as the level of significance.

RESULTS

Out of total, 1426 general practitioners with mean age 36 years completed the survey.

	Number (n)	Percent (%)
Sex		
	Male	953 (66.8%)
	Female	473 (33.2%)
Area of Practice		
	Cities	882 (61.9%)
	Towns	321 (22.5%)
	Villages	223 (15.6%)
Qualification		
	Without Diabetes Education	1135 (79.6%)
	With Diabetes Education	291 (20.4%)
Affiliation		
	Government	774 (54.3%)
	Private	652 (45.7%)
Experience		
	< 5 years	732 (51.3%)
	6-10 years	302 (21.2%)
	11-15 years	129 (9.1%)
	> 15 years	291 (18.4%)
Patient Load		
	General patients	571.6
	Patients with diabetes	127.9

Knowledge Assessment

Category Criteria	
Poor	Score 0 to 5
Moderate	Score 6 to 10
Good	Score 11 to 15

minimum score 0, maximum score 15

Among the sociodemographic variables, place of work ($p < 0.05$) and level of education ($p < 0.05$) are significantly associated with the higher level of knowledge.

Attitude Assessment

93% general practitioners consider it a serious problem and believe comprehensive care is the key to better management

Practice Assessment

	Number (n)	Percent (%)
Guidelines for diagnosis		
FPG ≥ 126 mg/dl	478	(33.5%)
Symptoms + PPBG ≥ 200 mg/dl	223	(15.6%)
2 hr plasma glucose ≥ 200 mg/dl	243	(17.0%)
HbA1c > 6.5	482	(33.8%)
Timing of LFT, KFT and retina check up		
Half yearly	799	(56.0%)
Yearly	591	(41.4%)
Once in two year	17	(1.2%)
Not at all	19	(1.3%)
Frequency of patient counselling		
Always	1288	(90.3%)
Half of the time	99	(6.9%)
Less than half of the time	26	(1.8%)
Never	13	(0.9%)
Frequently prescribed drug		
Biguanide	952	(66.8%)
Sulfonylureas	382	(26.8%)
Meglitinides	92	(6.5%)
Management of complicated cases		
Treat by yourself	232	(16.3%)
Refer to specialist	1194	(83.7%)

General practitioners with higher knowledge score have positive attitude and better practice.

CONCLUSION

The study indicates that the knowledge regarding diabetes and its management is suboptimal among general practitioners. This results in poor diabetes management practices at grass root level. Therefore, capacity building of general practitioners is of utmost importance to deal with the ever increasing burden of diabetes in India.