Diabetic Retinopathy: Knowledge, Attitude and Practice Among Physicians in Northwestern Nigeria

Shuaibu Abdulsalam,^a Aliyu Ibrahim,^b Hadiza Saidu,^c Halliru I. Umar,^d Maikudi Muazu,^e Usman T. Aliyu^e Ibrahim D. Gezawa^b and Lukman F. Owolabi ^b

^aDepartment of Ophthalmology, Bayero University Kano and Aminu Kano Teaching Hospital Kano State, Nigeria.

^bDepartment of Internal Medicine, Bayero University, Kano and Aminu Kano Teaching Hospital, Kano State, Nigeria.

^cDepartment of Internal Medicine, Murtala Mohammed Specialist Hospital, Kano State, Nigeria.

^dDepartment of Internal Medicine, Federal Medical Centre, Birnin-Kudu, Jigawa State, Nigeria.

Department of Internal Medicine, Mohammed Abdullahi Wase Specialist Hospital, Kano, Nigeria. Corresponding author: Aliyu Ibrahim, E-mail: aliyubng@yahoo.com

Background: Diabetic retinopathy is the leading cause of preventable blindness in the productive adult working population and a common microvascular complication of diabetes mellitus^[1]. It poses a considerable global public health burden, because of the growing number of people with diabetes in developing countries, despite its low prevalence at present^[2,3]. Visual loss and blindness from diabetes that often occurs during the productive years of life is usually associated with loss of independence and lack of mobility, which may limit their earning potentials or even preclude them from gainful employment^[4,5]. The aim of our study is to evaluate the level of knowledge, attitude, and practice of diabetic retinopathy screening among Physicians in Northwest Nigeria

Methods: Survey responses relating to knowledge, attitude, and practices on Diabetic Retinopathy were appropriately obtained from 105 physicians in four tertiary hospitals using a Likert-grade questionnaire. The internal consistency of the questionnaire was calculated using Cronbach Alpha coefficient. Principal components analysis was used for data reduction and grouping with the varimax rotation method, and the factors were extracted based on an Eigenvalue >1. The extracted data were analysed using the PASW ® Statistics version 18.0 (SPSS Inc., Chicago, IL). Results: The study showed that the overall proportion of respondents with good knowledge,

Table 1: Level of knowledge, attitude and practice among physicians by study sites

KAP Scores	Study Site				
	Overall N=105 (100%)	AKTH n=51 (48.6%)	MMSH n=19 (18.1%)	MAWSH n=15 (14.3%)	FMCB n=20 (19.0%)
Median Knowledge Score (IQR)	2 (0-5)	3 (1-4)	2 (1-5)	2 (0-3)	0 (0)
Proportion with Good Knowledge I	1 (%) 39 (37.1)	28 (71.8)	7 (17.9)	4 (10.3)	0 (0)
Median Attitude Score (IQR)	-4 (-20-17)	-5 (-20-6)	-4 (-8-10)	-1 (-13-17)	-5.5(-10-4)
Proportion with Good Attitude n	(%) 55 (52.4)	25 (45.5)	10 (18.2)	12 (21.8)	8 (14.5)
Median Practice Score (IQR)	5 (0-12)	4 (0-8)	4 (1-8)	6 (3-12)	4.5 (0-6)
Proportion with Good Practice n	(%) 53 (50.5)	22 (41.5)	7 (13.2)	14 (26.4)	10 (18.9)

IQR-interquartile range, AKTH-Aminu Kano Teaching Hospital, MMSH-Murtala Mohammad Specialist Hospital, MAWSH-Mohammad Abdullahi Wase Specialist Hospital, FMCB-Federal Medical Center Birnin Kudu

attitude and practice to Diabetic retinopathy were 39 (37.1%), 55 (52.4%) and 53 (50.5%) respectively (Table 1). Most of the respondents (78.8%) were aware of the most effective method of delaying the onset of DR and how often eyes should be examined (94.1%). Most of them agree that lack of ophthalmoscopes (70.6%) and dilating eye drops (50.6%) form barriers to performing a good eye examination.

Conclusion: The study showed that the level of knowledge of Diabetic Retinopathy screening among physicians practicing in Northwestern Nigeria was suboptimal despite their good attitude and practice scores. This therefore prompts the is need to improve training on eye examination in addition to provision of better facilities in our clinics, in a bid to reduce the burden of visual impairment and blindness.

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