*Knowledge and Practice of Fundoscopy Among Medical Doctors in Port Harcourt, Nigeria

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Background: Ophthalmic fundoscopy assesses the optic disc, the vessels, the retinal background, the macula and the retina periphery with the purpose of arriving at a conclusion that the eye is normal or otherwise. It is of diagnostic, therapeutic and follow-up significance. Detailed fundus examination is an integral part of comprehensive clinical care in neurological examination of patients. Many clinical entities manifest early characteristic changes in the fundus of the eye. Every medical doctor is expected to be able to use the ophthalmoscope to detect common pathological changes. However, more often than not fundoscopy is seen as an exclusive specialized skill of the ophthalmologist.

Aim: The aim of this study was to evaluate knowledge and practice of fundoscopy among medical doctors present at the Ordinary General Meeting of the Nigerian Medical Association (Rivers State branch) held in Port Harcourt on 30th June 2014.

Methods: Self-administered questionnaire was the research instrument. One hundred and twenty-five respondents who verbally consented were recruited for the study. Questions asked tested the Knowledge (13 questions) and Practice (7 questions) of the medical doctors on matters relating to fundoscopy. Participants' knowledge were graded as Good for scores of 75% and above, Fair for 50% - 74% score and Poor for scores less than 50%. Respondents' demographic data, responses and corresponding scores were entered into computer soft ware—Scientific Package for Social Sciences (SPSS) version 20 and subsequently analyzed.

Results: A total of 125 physicians participated in this study. Eighty six were males and 39 females (M:F = 2.2:1). Maximum age of participants was 61years and minimum was 25 years. The mean age was 37.9 ± 8.4 years. There was no statistically significant difference in the age distribution of the participants (p = 0.604). The mean duration of medical practice experience of the participants was 11.5 ± 8.7 years. The highest number of years of experience was 37 years while the least was one year. Over 50% of the physicians had less than 11 years of working experience. Over 75% of the physicians were general practitioners while 23% were specialists in various areas of medical practice. Thirty-five medical doctors (28%) had good knowledge of fundoscopy, while knowledge of 43 participants (34.4%) was fair and 47 (37.6%) had poor knowledge of fundoscopy. The level of practice of fundoscopy among 19 (15.2%) participates in this study was good, 20 (16%) had fair practice while 86 (68.8%) had poor practice level.

Discussion: Dilated fundus examination is an integral part of the clinical care and neurological examination of patients.[1] In addition, preoperative assessment by a vitreo-retinal specialist is advisable in those with predisposing retinal pathology[2]. Despite the fact that fundoscopy is a key element of full neurological examination, the experience in medical evaluation of patients is that fundoscopy is rarely, if ever, performed [3,4]. This study reveals that fundoscopy is an under-performed examination in medical evaluation of patients among medical practitioners in Port Harcourt, Nigeria. This finding corroborates the study of Khandekaret al in the North Sharqiya region of Oman[3]. Although the sample size of the Oman study was small, the common phenomenon in the two studies is that practicing medical doctors have inadequate knowledge and poor practice of fundoscopy. This study is also in line with the findings of Rajiv Raman et al.[5], Schulz et al.[6] and Yusuf et al [7] on the poor knowledge and practices of fundoscopy among medical practitioners. There

is therefore need to develop different methods of teaching to help trainees acquire basic clinical skills and medical practitioners to maintain and utilize the skill of fundoscopy. In this study, 37.6% of the study population had poor knowledge of fundoscopy. This reveals the need for training medical doctors and especially General Practitioners on the use of direct ophthalmoscope.

Conclusion: Our study demonstrates that knowledge and practice of fundoscopy among medical practitioners in Port Harcourt is poor and far from ideal. Therefore, refresher courses emphasizing the acquisition of the skill in fundoscopy and the provision of ophthalmoscopes in our General Practitioners' clinics are necessary.

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This abstract was first published in our August 2017- Volume 1 Number 1 edition between page 47 and 48 with the omission of the name of one of the authors (Fiebai B) which is now reflected in this piece.