

OPHTHALMIC EDUCATION

Evaluation of Competence of Medical Students in Performing Direct Ophthalmoscopy

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Introduction: To the best of our knowledge, no Nigerian study has provided the insight into how much of direct ophthalmoscopic skill medical students acquire at the end of clinical rotations in Ophthalmology. This study sets out to explore the impact of a 4-week exposure in direct ophthalmoscopy on year five medical students. It is hoped this will form a template on feature longitudinal studies directed at how much of the acquired skills are retained till graduation when such skills are most ultimately needed.

Methods: It was a cross-sectional study of year five medical students. Students were assessed during a 10-station, 5-min Objective Structure Clinical Examination at the end of 4 weeks clinical rotation in Ophthalmology. The cup-disc ratio (CDR) was the main outcome measured. Only students who consented and granted written and verbal permission were recruited.

Results: There were 57 males and 39 females (M:F =1:0.25). Table 1

shows the age distribution. Seventy-eight (81.3%) were satisfied with teachings and tutorials on direct ophthalmoscopy. Eighty-nine (92.7%) admitted visualizing the disc in the course of tutelage. The retinal vessels were seen ophthalmoscopically by 93 (96.9%). Direct ophthalmoscopy was not considered difficulty by 87(90.6%). Forty-six (47.9%) got CDR correct on the right eye. The commonest challenge by the students was inability to estimate the CDR [Figure 1].

Discussion: The overall pass rate among our students, using the pre-set CDR range as a benchmark was 47.9% (46) and 52.1% (50) on the right and left eyes respectively. This was less than satisfactory and may have reflected self-reported challenges faced in CDR estimation by the students. In this study, 78 (81.3%) was satisfied with teachings and tutorials on direct ophthalmoscopy while 18 (18.7%) were not satisfied. This is in sharp contrast to the 22% (29/130) of respondents who felt their undergraduate ophthalmic medical education was adequate.^[1] Eighty-nine (92.7%) of our students admitted visualizing the disc in the course of tutelage while 7 (7.3%) had never seen the disc with the direct ophthalmoscope. The retinal vessels were seen ophthalmoscopically by 93 (96.9%) but not by remaining 3(3.1%). Lippa *et al.*,^[2] reported that 72% to 82% were able to visualize various parts of the fundus and 59% felt comfortable visualizing some aspect of the fundus which increased to 76% after further fundoscopic training. In conclusion, the outcome of this study provided additional data to facilitate curriculum design in teaching ophthalmoscopy to undergraduate Nigerian medical students. We suggest that as funduscopy is such an important clinical skill, medical students should be given specific teaching protocol.

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Perceived Influence of Update Courses on Part One Fellowship Examination-Success

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Background: Update courses are organized with the intention of improving understanding of the topics being discussed. It is assumed that the desired effect should be achieved.

Introduction: Update courses made compulsory in ophthalmology pre part one fellowship examination are optics and refraction, clinical ophthalmology, and neuro-ophthalmology. This study was conducted to assess the candidates' views on the program.

Methods: The study was both a quantitative and a qualitative survey. Semi structured questionnaire was distributed to consultants and resident doctors who converged at the Ophthalmological Society of Nigeria Conference at Asaba Delta state 2013. Only those who had attempted the part 1 exam were eligible. Those who did not wish to complete the questionnaire were excluded from the study. The following information was collected from the questionnaire: Bio-data, status, fellowship obtained, if the candidate participated in update courses, If the courses improved understanding, If part 1 exam had been passed, which college? Number of attempts after the courses that candidate passed, if it could have been possible for

Table 1: Age distribution

Age	Frequency	Percent
20.00	5	5.2
21.00	7	7.3
22.00	18	18.8
23.00	14	14.6
24.00	9	9.4
25.00	5	5.2
26.00	5	5.2
27.00	11	11.5
28.00	7	7.3
29.00	7	7.3
30.00	3	3.1
31.00	3	3.1
32.00	1	1.0
33.00	1	1.0
Total	96	100.0

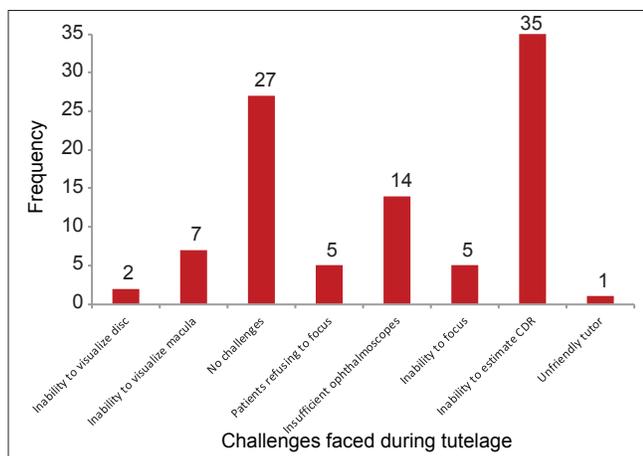


Figure1: Challenges faced during tutelage

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the courses should continue. The statistical analysis was done using SPSS version 20.^[1]

Results: Altogether, 84 respondents filled and returned the questionnaires. 44 (52.38%) were males while 40 (47.62%) females. 51 (60.71%) were consultants and 33 (39.29%) resident doctors. 21 (41.18%) of the consultants were fellows of both National and West African Colleges. 16 (31.37%) fellows of National College, and 14 (27.45%) were fellows of West African College.

Result of Quantitative Survey: The mean age of the male residents who responded to the survey was 36.41 years standard deviation (SD) ± 6.07 (Range 31–56 years), the modal age was 31.00 years. Whereas the mean age of the female residents that responded to the questionnaire was 35.25 years SD ± 4.00 (range 30–42), while their modal age is 31 years. There was no statistically significant difference between the ages of male and female residents' $P > 0.05$. Mean age of consultants 45.22 years SD ± 6.44 . Modal age is 40 years. Range is 36–60 years. No statistically significant difference between the ages of male and female consultants in the study.

Results of the Qualitative Survey: In response to the comments made by those that filled the questionnaire. A 53-year-old female consultant stated "more time should be given for practical sessions during the courses". A 36-year-old female consultant stated I quote "I think the courses help to have a broad understanding of the subjects, gives opportunity for interaction, questioning/clarification between residents, trainers and residents from other centers so you learn what they do in their centers. If people had not taken the courses, some would still pass but it will be more difficult. A 46-year-old male consultant commented "the course should have a geographical spread". A 39-year-old male resident says I quote "the topics of the courses should be taught by the consultant to their resident early enough in their career/training". A 38-year-old female resident commented that "I think residents should be allowed to attend the courses as close as possible to the exams, even if it means submitting evidence of attendance after they have submitted their forms". A 48-year-old male consultant commented that "the update courses should continue". Majority of the respondent also held similar views. 24 (28.57%) of the respondent passed the fellowship exam in <1 year, while 48 (57.14%) passed between 1 and 2 years after attending the update courses. $P = 0.023$ (fisher exact).

Discussion: The advantages of attending update courses is for better understanding of ophthalmology. It is not only to pass fellowship examinations but also to manage eyes diseases better. A good number of the respondents in this study agreed that the update courses were very helpful by having greater in-depth and understanding of ophthalmology after attending the courses. This also reflected in the few number of attempts before passing the exams. It is encouraging however especially to the teachers that the courses have been found very helpful and should continue. Similar to this study is update courses for general practioners (GP), and GP registrars and practice nurses directed by Lucy, Jenkins and James Cave.^[2] The GP update course is run entirely by GPs. They trawl through all the journals, and do all the legwork, to bring them up to speed on the latest issues, literature, research, and guidelines in general practice. The GP update course is designed to be very relevant to clinical practice and to help them meet the requirements for their appraisal and revalidation. They make it all entertaining too, without compromising the contents.^[2] Hammersmith Hospital London has been running magnetic resonance cholangiopancreatography (MRCP) Part 1. Part 2 and Program of All-inclusive Care for the Elder^[3] revision courses for doctors and medical students for over 10years and consistently gets excellent feedbacks. They aim to provide structure and core knowledge that underpins the doctors and medical students' exam preparation and success. Their lecturers are carefully selected for expertise in teaching, and their course content is specifically tailored to the MRCP syllabus and format.^[4]

Conclusion: Update courses have been found useful by majority of persons who participated in the study and should continue. There should be reorganization of mode of delivery with greater emphasis

on practical sections.

Recommendations: The courses should be decentralized. Emphasis should be placed on practical sections in all the courses. Early continuous advertisement of the courses should be undertaken. An objective assessment of the pass rate after attending the courses is suggested. Residents should liaise with their NARD presidents and CMDs for sponsorships for the courses.

Keywords: Part one fellowship exams, success, update courses

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Why Study Medicine?

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Introduction: The hope of medical education is to produce well motivated lifelong learners interested in improving themselves for the service of mankind. Motivation means "to move" to action, an internal state that arouses, directs, and sustains goal-oriented behavior^[1] and desire or want that energizes and directs goal-oriented behavior or influence of needs and desires on the intensity and direction of behavior.^[2] Motivation can be categorized as intrinsic (from within) or extrinsic (from outside a person).^[2,3] Intrinsic motivation involves doing something with self-conviction, determination or willingness e.g. from goals set by the individual, etc. In extrinsic motivation, individuals are aroused by external factors, e.g. praises and recognition. Intrinsic motivation is preferred to the extrinsic. The focus of this study is on the motives behind studying medicine.

Methods: This was a descriptive study to assess reasons involving a group of medical students. All the options fell into intrinsic or extrinsic motivation. Results were analyzed using SPSS version 16.

Result: There were 35 females and 48 males. Table 1 illustrates the frequency of the different options.

Discussion: This study showed that majority of the students demonstrated altruistic tendency. This suggests that they will continue in the line of the profession, go into research for greater understanding of the field and improved patient care. Daniel and O'Brien^[3] got similar responses. Many also demonstrated materialistic tendency. Crossley and Mubarik^[4] found that medical students were significantly more likely to be motivated by factors relating to career opportunities, patients care, working with people, use of personal skill and interest in science. To get the maximum from this education, the environment has to be enabling to ensure that those who opt for medicine are primarily motivated by intrinsic factors.

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Table 1: Factors that influenced choice of medicine

S/no	Options	Strongly agree (%)	Weakly agree (%)	Total agree (%)	Strongly disagree (%)	Weakly disagree (%)	Total disagree (%)
1*	The love of science	55 (66.3)	23 (27.7)	78 (94.0)	5 (6.0)	0 (0.0)	5 (6.0)
2*	Relevance to life	73 (88.0)	6 (7.2)	79 (95.2)	2 (2.4)	2 (2.4)	4 (4.8)
3*	It is interesting	41 (49.4)	32 (38.6)	73 (88.0)	7 (8.4)	3 (3.6)	10 (12)
4	Status reasons	30 (36.1)	23 (27.7)	53 (63.9)	15 (18.1)	15 (18.1)	30 (36.1)
5	To make money	14 (16.9)	30 (36.1)	44 (53.0)	17 (20.5)	22 (26.5)	39 (47.0)
6*	Curiosity about discoveries	38 (45.8)	29 (34.9)	67 (80.7)	7 (8.4)	9 (10.8)	16 (19.3)
7*	It permits learning	56 (67.5)	14 (16.9)	70 (84.3)	7 (8.4)	6 (7.2)	13 (15.5)
8*	It is challenging	58 (69.9)	13 (15.7)	71 (85.5)	7 (8.4)	5 (6.0)	12 (14.5)
9	Social pressure from family/friends and/community	3 (3.6)	13 (15.7)	16 (19.3)	54 (65.1)	13 (15.7)	67 (80.7)
10	It is the family tradition	3 (3.6)	3 (3.6)	6 (7.2)	66 (79.5)	11 (13.3)	77 (92.8)
11	Good employment opportunity	38 (45.8)	25 (30.1)	63 (75.9)	13 (15.7)	7 (8.4)	20 (24.1)
12	Be able to get job overseas	8 (9.6)	14 (16.9)	22 (26.5)	36 (43.4)	25 (30.1)	61 (73.5)
13	Stable location	7 (8.4)	15 (18.1)	22 (26.5)	49 (59.0)	12 (14.5)	61 (73.5)
14*	To save life	74 (89.2)	8 (9.6)	82 (98.8)	1 (1.2)	0 (0.0)	1 (1.2)
15*	Sympathy for the sick	64 (77.1)	17 (20.5)	81 (97.6)	2 (2.4)	0 (0.0)	2 (2.4)
16*	To be able to apply personal skills	43 (51.8)	29 (34.9)	72 (86.7)	5 (6.0)	6 (7.2)	11 (13.3)
17	Job security	44 (53.0)	25 (30.1)	69 (83.1)	8 (9.6)	6 (7.2)	14 (16.9)
18	No physician in the family	2 (2.4)	15 (18.1)	17 (20.5)	58 (69.9)	8 (9.6)	66 (79.5)

*(Intrinsically motivating factor)

