

Evaluation of Medical Students' Perception of Dermatology as a Choice of Specialization

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Abstract

Background: Students' choice of specialization has been noted to be influenced by the amount of exposure they have to a particular topic. The foundation of understanding dermatology depends on the extent of the amount of exposure they have as students. This study aims to find out the general perception of the pioneer set of medical students of the dermatology lectures received and if this has influenced their consideration of dermatology as a choice of specialization.

Methods: Pioneer students of two new medical schools in Rivers State were given a self-administered structured questionnaire to seek the student's perception of the lectures received.

Result: Sixty-four percent of the total students were females. The majority, 98.7 % were single and within the 18-24 years age group. A majority, 69.3% of the total pioneer medical students found the lectures interesting, 60% of the students understood what was taught most times, 97.3% had their knowledge increased, and 81.3% had gained more confidence. However, only 18.6% considered dermatology as a choice of specialization. Majority of the students who considered dermatology as a choice of specialization were influenced by the lectures received..

Conclusion: Dermatology lectures received by the pioneer students were found to be interesting, and increased their knowledge and confidence in the management of skin diseases; however, few considered dermatology as a choice of specialization.

Keywords: Assessment, Dermatology, Medical, Perception, Students

Évaluation de la perception de la dermatologie par les étudiants en médecine comme choix de spécialisation

Contexte: Il a été constaté que le choix de spécialisation des étudiants est influencé par le degré d'exposition qu'ils ont à un sujet particulier. Les fondements de la compréhension de la dermatologie dépendent de l'étendue de l'exposition qu'ils subissent en tant qu'étudiants. Cette étude vise à apprécier la perception qu'ont les étudiants en médecine générale des cours de dermatologie reçus et si cela a influencé leur choix de la spécialisation.

Méthodes: Les étudiants en médecine générale de deux nouvelles écoles de médecine de l'État de Rivers ont reçu un questionnaire structuré auto-administré pour apprécier leur perception des cours reçus.

Résultat: Soixante-quatre pour cent du total des étudiants étaient des femmes, 98,7 % étaient célibataires et appartenaient à la tranche d'âge de 18 à 24 ans. Une majorité, 69,3 % des étudiants ont trouvé les cours de dermatologie intéressants, 60 % ont compris la plupart du temps ce qui était enseigné, 97,3 % ont vu leurs connaissances augmenter et 81,3 % ont gagné en confiance. Cependant, seuls 18,6 % considèrent la dermatologie comme un choix de spécialisation. La même proportion (18,6 %) a été influencée par les conférences reçues pour prendre cette décision, une plus grande majorité (78,6 %) de ces derniers considérant positivement la dermatologie comme choix de spécialisation.

Conclusion: Les cours de dermatologie reçus par les étudiants pionniers se sont révélés intéressants et ont accru leurs connaissances et leur confiance dans la gestion des maladies de la peau; cependant, peu d'entre eux

envisageaient la dermatologie comme un choix de spécialisation.

Mots-clés: Évaluation, spécialisation en dermatologie, perception des étudiants

Introduction

Students' choice of specialization is influenced by the amount of exposure they have to the particular topic.¹ This can come via the books they read and the amount of understanding they receive from being taught during tutorials and lectures. The foundation of understanding dermatology depends on the extent of the amount of exposure they have as students.

Perception of people about things can influence their decision-making and behavior.² Perceptions are influenced by beliefs, values, experiences, and biases, and can significantly impact decision-making processes.² Lectures received by medical students form part of their experiences. This can ultimately influence their choice of specialization.³ This is important to the general growth of dermatology as medical students are the future dermatology educators.

This study aims to find out the general perception of pioneer medical students about the dermatology lectures received and how this influenced them in considering dermatology as a choice of specialization. The pioneer students are important in starting up a good foundation in dermatology hence their responses would be taken into consideration in future planning.

Methods

This is a cross-sectional descriptive study. The study population is the pioneer students of the two new medical schools in Rivers State. They were given a self-administered structured questionnaire to seek the students' perception of the lectures received after consent was obtained from participants. Questionnaires were given to the students after the dermatology posting. Data was entered into a data sheet and proportions were calculated. Tables were used to aid visualization. Inferential statistics using χ^2 was employed to find the degree of association between the students who considered dermatology as a choice of specialization and those who did not in the two schools. The p-value was set at <0.05 .

The rights of the respondents were respected and confidentiality was maintained. Post-assessment of

students is part of educational development and it is encouraged by the Department of Internal Medicine in both universities.

Results

There was a high response of 85.3%: 75 out of 88 students filled out the questionnaire. Females were 64% (48) of the total students. The majority of them were single 98.7% (74) and within the 18-24 years age group. About 74.7% (56) of the total pioneer medical students found the lectures interesting, 5.3% (4) of the students understood the lectures all the time, 60% (45) of the students understood what was taught most times, while 34.6% (26) understood sometimes. 97.3% of the students had their knowledge increased, and 81.3% had gained more confidence following the lectures; however, only 18.6% (11) considered dermatology as a choice of specialization.

All the students who considered dermatology as a choice of specialization also noted that their knowledge of dermatology improved upon receiving the lectures. They also agreed that their confidence in making diagnoses of skin lesions had improved when compared to the time they did not have any formal dermatology lectures. They all enjoyed the lectures.

The M: F was 2:5 for those who considered dermatology as a choice of specialization. The same proportion (18.6%) was influenced by the lectures to make this decision with a greater majority (78.6%) of these medical students positively considering dermatology as a choice of specialization; a lesser proportion (21.4%) not considering dermatology as a choice of specialization.

There was no significant difference between the students who considered dermatology as a choice of specialization and those who did not in the two schools ($\chi^2 = 0.9687$, p-value = 0.325008; Yates corrected $\chi^2 = 0.4714$, p value = 0.492352). There was no significant association between the students who were influenced by the lectures to consider dermatology as a choice of specialization and those who were not influenced by the lectures to consider dermatology in the two schools ($\chi^2 = 0.1414$, p-value = 0.706879; Yates corrected $\chi^2 = 0.0795$, p value =

0.777914). The reasons for finding or not finding the lectures appealing were categorized into 9; which are appreciation and correlation, interest, knowledge, lecture notes, lecturer's attitude, nil response, teaching aid, time, and understanding as seen in tables 2 and 3 below.

Retrospective analysis of lectures received: The two sets of dermatology students received lectures from the same lecturers except that the government-owned school had two extra dermatology educators. The lectures received were within two weeks excluding weekends with an average of 3 lectures per day. However, due to suddenly declared public holidays, some lectures had to be shifted to other days with not more than 4 lectures per day. The lectures received were in accordance with the approved medical curriculum with slight differences in administration.

The lectures were received from the morning hours to early afternoon with 1 hour break in between. Each lecture was slated for 1 hour, with a question-and-answer session inclusive. The lectures are physical and delivered via PowerPoint presentations while the students receive the soft copy after the lectures. Some dermatology lectures were included in the general medicine lectures, particularly for the government-owned school.

The students also learned dermatology from patients in the wards during calls and outpatients during clinics. In-patient dermatology cases are fewer when compared to outpatient cases seen in the weekly clinic. The cumulative dermatology exposure (CDE) which is defined as the number of years which the dermatology educators have been exposed to acquiring dermatology knowledge was more than 10 years for each. The CDE time typically would coincide with years that have been spent in clinical classes in medical school, years spent in residency, or any other postgraduate dermatology training and post-training experience.

Discussion

This study shows a higher number of female students in the pioneer set of two new medical schools in Rivers State. This is a shift from the male dominance in medical schools as seen in other studies with a lesser female population - Bakare (39.6%) and

Statista, HPM (35%).^{4,5} But it is similar to the study done by Statista E&S (67.4%) which had a high female population.⁶ Majority were single and fell within the 18-24 years age group. This finding was similar to that of Bakare (90.8%).³

The majority of the students found the lectures interesting and appealing. Interest in the specialty has been known to influence the choice of medical education as noted by Teclessou et al.³ The majority of the respondents understood what was taught most times while none of the students claimed a lack of understanding of all the lectures throughout the posting. The understanding of the lectures contributed to making the lectures appealing as seen in this study. The major reasons for finding the lectures appealing were the time-friendly nature of the lectures, the increased knowledge acquired, the visual aids used, and the lecturers' attitude. These reasons are similar to that in a study by Wittbecker et al.⁷ The reasons why the lectures were not found pleasant were mainly the short time they had to assimilate the dermatology lectures. Alajmi et al and Ulaman et al. also noted this in their studies.^{8,9}

Poor confidence in making dermatology diagnoses was seen in 89% of US medical students, and 95.1% were noted to have poor exposure to dermatology lectures in the study carried out by Ulman et al.⁹ It has been noted that participating in dermatology activities such as clerkship and receiving of dermatology lectures have increased the interest in dermatology as seen in the study by Teclessou et al and the review done by Abdelwahab.^{10,11} The increased confidence and knowledge gained by the students was noted in the majority of students. It has been shown that active face-to-face interactions such as receiving lectures in the classroom increase knowledge and interest in the subject.^{9,10,11}

The fraction of students who considered dermatology as a choice of specialization was small. Studies carried out by other researchers showed variable figures as noted by Alajim et al. (6.6%), Teclessou et al (37.2%), Oche et al (3.8%), Hajizadeh & Mahmoodian (20.4%) and Levailant et al (2.1%).^{8,10,12,13,14} Although the reasons were not explored in this study, the reasons noted in other studies were the appeal of being a dermatologist, the

media portrayal of different specialties, and the likelihood of dermatologists' influence on patients' lives.^{7,10,13}

The reasons for not opting for dermatology have been attributed to negative perceptions such as dermatologists being lazy and it not being the career choice *ab initio*.^{11,12,15} In this study one participant had indicated one of the reasons of not finding the lectures pleasant was because it was not the participant's choice of specialization. Parental medical careers have also influenced their medical children's choice of specialty.¹³

Gender has been noted to affect the choice of specialization, with females more attracted to dermatology.^{11,13,14} This study had more females wanting to do dermatology but the female predominance in the study may explain this as it is being increasingly noted that more females are getting into medical school.^{6,15} A great majority of students were not influenced by the lectures which supports the observation that specialty choices are sometimes made before the commencement of training.¹² It is interesting to also note that a greater fraction of those who considered dermatology as a choice of specialization were positively influenced by the lectures received. This also goes to support the finding that specialty choices of medical students constantly change as they make progress in training,^{11,13,14} although this study did not determine the previous specialties considered by them.

The retrospective analysis of the lectures received showed the administration structure of the two different schools was similar, with the same lecturers which is understandable since dermatology educators are scarce within the region.⁴ It is noted from studies that there is no particular approach to teaching dermatology that is superior however a combination of enlightening and instructive methods is more successful.¹⁶ A study revealed a positive relationship between teacher specialization relevant to the grade and subject taught and student reading achievement;¹⁷ hence it is quite understandable that the teacher should be well versed as the study showed that a great majority understood the lectures as they were taught by certified professionals.

Conclusion

Dermatology lectures received by the pioneer students were found to be interesting and increased their knowledge and confidence in the management of skin diseases in the majority of them, however only few considered dermatology as a choice of specialization. Majority of the students who considered dermatology as a choice of specialization were influenced by the lectures received.

Recommendations

Dermatology educators should not be discouraged by the few numbers that are interested in the field of dermatology but should keep improving their practical and teaching skills. Dermatology should also be introduced early to the students. This may encourage more positive perceptions as their knowledge increases and they become more confident in diagnosing dermatology conditions.

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Table 1: Comparison of the students of the two schools

Characteristics	School A	School B
Ownership	State Government owned	Privately owned
Year of Dermatology Study	5th year	6th year
Response Rate	85.4%, 41 out of 48	85 % (34 out of 40)
Dermatology Educators:	4	2
M: F Ratio	3:5 (36.6%:63.4%)	6: 11(35.3%: 64.7%)
Dermatology as a choice of specialization	6 out of 41(14.6%)	8 out of 34(23.5%)
Influenced by lectures (those who chose dermatology)	5 out of 6 (83.3%)	6 out of 8 (75%)

Table 2: Positive responses from pioneer students (Lectures were appealing)

<p>APPRECIATION & CORRELATION Could relate clinical cases to lecture (1)g (2)p Could relate with skin diseases that have also affected the individual (1)p</p>	<p>INTEREST Fun 1(p) Less tedious (1)g Creative (1)</p>	<p>KNOWLEDGE Enlightened on the management approach (1)p Informative (1)p Increased knowledge (1)p</p>
<p>LECTURE NOTES Simplified (1)p</p>	<p>LECTURERS' ATTITUDE Easy going (1)p Friendly (1)g 1(p) Interactive Q&A (1)p Punctual (3)g</p>	<p>NIL RESPONSE Nil response (1)p</p>
<p>TEACHING AID Good examples (1)g Pictures (5)g Poetry (1)g</p>	<p>TIME Enough time for other personal issues (1)g Enough time to cover topics (1)p Exclusively taught alone (1)p Short time of lecture (2)g Time-friendly lecture schedule (1)g</p>	<p>UNDERSTANDING Content of teaching (2)g Increased understanding (1)p</p>

g- Government, p-Private, Q&A-Question and Answers

Table 3: Negative responses from pioneer students (Lectures were not appealing)

<p>APPRECIATION & CORRELATION Cases on clinic days (Friday) are predominantly skin cases (1)p Difficulty in pronouncing terms (1)p Few dermatology cases admitted (1)p</p>	<p>INTERESTS Boring (1)g Not interested in the topics taught (1)p Not the choice of specialization (1)p Sleepy (1)g</p>	<p>KNOWLEDGE -</p>
<p>LECTURE NOTES Too many lecture slides (1)p</p>	<p>LECTURERS' ATTITUDE Lecturers were too fast (1) p</p>	<p>NIL RESPONSE -</p>
<p>TEACHING AID -</p>	<p>TIME Clash of priorities (re-sit exams on going with lectures (1)g Long lecture time (1)g (1)p Not enough time to assimilate (2)g (4)p Rushed lectures due to short time (5)p</p>	<p>UNDERSTANDING Complex topics making it difficult to understand (1)p Impaired by not having enough time (2)g (4)p Too many terms (4)p</p>

Table 4: Analysis of lecturers

	Highest qualification	CDE (years)	NOL (G)	NOL (P)	Average lecture slides
1 st	Fellow WACP, Consultant Dermatologist	28	11	11	90
2 nd	Masters in Dermatology, Specialist Registrar Dermatology	19	13	7	29
3 rd	Member WACP, Specialist Registrar Dermatology	15	5	-	28
4 th	Member WACP, Specialist Registrar Rheumatology	13	1	-	41

WACP- West African College of Physicians, NOL- Number of Lectures, CDE- Cumulative Dermatology Exposure

APPENDIX 1: QUESTIONNAIRE

ASSESSMENT OF STUDENTS' PERCEPTION OF DERMATOLOGY LECTURES

Kindly fill in the biodata and respond to the questions

Biodata

- Gender: Male Female
- Age: 18-24 25-34 >35
- Marital status
Single Married Separated Divorce

Main Questions

- Did you enjoy the dermatology lectures during the internal medicine and dermatology posting?
Yes No
- State the reasons for your answer

- Did you understand what was taught during the dermatology lectures?
Always Most of the time Sometimes Never
- Did your knowledge and management of skin lesions improve from the lectures received?
Yes No
- Have you gained more confidence in making the diagnosis of skin lesions? Yes No
- Do you consider dermatology as a choice of specialization in the future? Yes No
- Did the lectures that you have received influence you in considering dermatology as your choice of specialization? Yes No

Thank you for your time,