

AWARD FOR THE HIGHER SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 3rd PLACE:

18. GENDER DIFFERENCES IN ATTITUDE AND BARRIERS TO RESEARCH BY MEDICAL UNDERGRADUATE STUDENTS IN NIGERIA.



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<https://www.youtube.com/watch?v=0JIMP5Fyl7s&t=25425s>

INTRODUCTION: Medical research, one of the pillars of medical education plays a crucial impact in advancing healthcare by improving the diagnosis, treatment, and prevention of illnesses. It is important to ensure that medical students and early career physicians are involved to research outside the curriculum at an early stage of training. This early involvement has been widely known to increase one's likelihood of building a career in research. In Nigeria, the gender composition of research personnel in universities is alarming as less than a quarter are female. There is a need to describe the factors responsible for this imbalance in order to inform stakeholders on where actionable measures can be taken. **AIM:** To examine the gender differences in the attitude towards research, willingness to undertake research, and barriers to research reported by undergraduate clinical students in Nigeria. **METHODS:** Six hundred and eighty-two (682) undergraduate medical students in their fourth to sixth years of study in seven selected medical schools across Nigeria completed an electronic survey in August 2022. The survey which was hosted on REDCap was adapted from published works which addressed a similar scope and comprised of 56 items divided into five sections. Gender differences in research experience, willingness to participate in research, attitude towards research and barriers that hinder participation in research were explored using a chi-square test. Variables were collected using a 5-point Likert scale ranging from strongly disagree to agree with a "neutral midpoint" and SPSS version 25 was used in the analysis. **RESULTS:** Although an equal proportion of male and female students reported voluntary involvement in research, 56.2% of male students and 28.8% of female students perceived research as exciting and enjoyable ($p < 0.001$) and 37.5% of male students vs 47.0% of female students perceived research as being complicated. Male students were more willing to spend more than 3 months on a research project (56.0% vs 42.5%, $p < 0.001$), devote as much time to research as to medical studies (40.1% vs 28%, $p = 0.002$), and to pursue a research-oriented career in the future (49.3% vs 32%, $p < 0.001$). Overall, male students reported a higher number of barriers than female students. However, lack of personal interest in research (19.2% vs 26.9%, male vs female students, $p = 0.011$) and insufficient training in research methodology (70.1% vs 81.7%, male vs female students, $p = 0.009$) were reported more by female students. **CONCLUSION:** Although there are no gender differences in the composition of students who report prior voluntarily involvement in research, there are gender differences in the attitude and willingness as well as barriers encountered by clinical students to carry out research. Tailored measures should be

developed around the peculiar barriers expressed by female medical students.

Table. Table Displaying Attitude, Willingness, and Barriers to Research Stratified by Gender.

	Male (n=374)		Female (n=308)		p-value
Previous voluntary research experience	135 (36.1%)		107 (34.7%)		
Number of article publication					
1-2	49		26		
>2	5		5		
Attitude	Agree	Disagree	Agree	Disagree	
I find research exciting and enjoyable	210	27	89	50	<0.001*
I find research valuable	333	3	265	2	0.623
I find research complicated	141	81	145	40	0.001*
I find research time consuming	254	29	215	18	0.745
Willingness					
To engage in any form of research related task	264	25	194	23	0.185
To spend more than 3 months on a research project	224	42	131	46	<0.001*
To devote as much time as I devote to my studies	150	87	86	80	0.002*
To pursue a research-oriented career	184	61	98	79	<0.001*
Barriers					
Not enough time	231	41	193	29	0.885
Insufficient training	261	24	251	15	0.009*
Lack of mentorship	196	35	153	31	0.747
Find it difficult to combine research with studies	199	35	163	35	0.872
Lack of personal interest	71	211	82	127	0.011*

Key words: Research; Undergraduate; Medical student; Barriers; Nigeria (Source: MeSH-NLM).