

Factors affecting Career Choice among Medical Students

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ABSTRACT

Background: The career decisions of medical students have a significant impact on the future of healthcare delivery. It is crucial to understand the factors that influence their career choices in order to guide medical education and workforce planning effectively. A range of personal, academic, and environmental factors contribute to the career choices of medical students. Exploring these factors can offer valuable insights into addressing workforce needs and ensuring the optimal delivery of healthcare. **Objective:** To investigate the factors influencing career choices among medical students in terms of family influence, school influence, gender influence and peer influence. **Study Design:** Cross-sectional survey. **Settings:** Department of Community Medicine, MMC Mirpur Khas Pakistan. **Duration:** February 2022 to August 2022. **Methods:** All the medical student from years 1st MBBS and BDS to Final years of education of either gender was included. A structured questionnaire was administered to collect quantitative data on demographic information, academic performance, personal interests, values, and factors influencing career choices and was distributed among the study participants. Semi-structured interviews were also conducted with a subset of participants to delve deeper into their career decision-making processes, to explore the personal experiences, influential factors, and perceptions related to career choices. SPSS version 26 was used for the data analysis. **Results:** Among the 150 students, 51 (34.0%) were younger than 20 years old, while 99 (66.0%) were older than 20 years old. 50 individuals (33.3%) were males and (66.7%) were females, while out of all 7.9% students were married. Out of all 49.3% strongly agree that parents and their education influence their children's career guidance, while 41.3% simply agree. Only 4.0% are uncertain about this influence, and 5.3% disagree. In terms of career guidance in schools, 33.3% students were strongly agreeing with this concern, while 41.3% simply agree, 14.0% expressed uncertainty about the issue, while 10.7% disagree. According to the influence of gender on students' career choices, 31.3% candidates were strongly agreeing that gender impacts career decisions, while 40.7% simply agreed, 16.0% expressed uncertainty about this influence, while 8.0% disagree. Regarding the importance of peer advice on careers among fellow students, 24.7% of students strongly agreed that peer advice is essential, while 39.3% simply agreed. Furthermore, 20.0% expressed uncertainty about the significance of peer advice, while 12.0% disagreed. **Conclusion:** Study underscore the complexity of career decision-making among medical students, influenced by familial, educational, gender-related, and peer dynamics. Further research/interventions in career guidance programs may benefit from addressing these varied influences comprehensively.

Keywords: Factors, Gender choice, Peer advice, Career guidance, medical students.

INTRODUCTION

The process of choosing a career is complex and personalized, differing for every individual. It is

shaped by cognitive influences and the social environment in which the person is situated.^{1,2} As young people near the completion of their secondary education, the decision ahead becomes a major concern. Both parents

and their children place great significance on this choice as it will have a profound impact on their lives. Every student, at some stage, faces the challenge of selecting a career path.¹ Choosing a medical specialty is a crucial decision that has a profound impact on the lives of medical students. The multitude of available specialties and subspecialties often causes confusion for many medical students today.³ This confusion of multiple options can make the decision-making process highly challenging. Additionally, for many students, this phase represents a transition, where their initial career preferences upon entering medical school may undergo complete transformation by the time they graduate.³

The field of medicine stands out as one of the most esteemed and sought-after professions globally, largely due to its potential for offering both financial stability and social recognition.⁴ Despite this widespread appeal, it is evident that various factors, including personal aspirations, familial expectations, peer influence, and socioeconomic background, play significant roles in influencing students' decisions to pursue a career in medicine across the globe.^{4,5} It is crucial to comprehend how family dynamics impact the self-confidence in career decision-making among secondary career students. Studies have indicated that families, particularly parents, wield significant influence in recognizing their children's talents and guiding their educational paths.^{6,7}

The family environment serves as the primary context for personal growth and development. Many medical students perceive their parents as having a substantial impact on their career decisions, while others actively involve their parents in making career choices.^{6,8} Gender significantly influences the choice of medical specialties, as males and females possess distinct aptitudes, social roles, and preferences that guide their career decisions.⁹ With an increasing number of females entering the medical profession, this aspect has gained heightened significance. Numerous studies have revealed that men tend to gravitate towards surgical specialties more frequently than women.¹⁰

On the other hand, it has been reported that one of the primary predictors identified was the influence of peer advice, encouragement, and peer education.¹¹ Despite this, students indicated that they do not actively seek validation of their career decisions from their peers. However, students may feel pressured to choose certain specialties based on the preferences of their peers or to conform to societal norms. Peer influence can also come from older students or senior physicians who may offer guidance or pressure students towards particular specialties. There is a significant research gap in the field of career choices among medical students, particularly in Pakistan. This includes the impact of gender, school environment, family, and peer pressure. Recognizing

these elements is vital for creating focused interventions and support structures to assist students in making well-informed career decisions. Therefore, this study aims to assess the factors influencing career choices among medical students, specifically examining the influences of family, school, gender, and peer's pressure. This study may be helpful to identify the challenges and hurdles that students face when selecting their desired medical specialties. Understanding these factors can lead to the development of interventions aimed at promoting diversity and equality within medical specialties. Additionally, the study's findings can inform the creation of medical education policies and adjustments to the curriculum to better reflect the needs and goals of future healthcare professionals in Pakistan.

METHODS

This cross-sectional survey was carried out at the Community Medicine Department of Community Medicine, MMC Mirpur Khas, over a duration of six months from February 2022 to August 2022. All the medical student from years 1st to Final years of education in equal number from each section of either gender was included. Students who declined to participate in the study were excluded. Written or verbal informed consent was obtained from all participants, with assurance of confidentiality regarding their information. Each student underwent a face-to-face interview, allowing for a comprehensive exploration of their perspectives. Additionally, students were given the option to complete a structured questionnaire independently, providing flexibility in data collection. The structured questionnaire was developed based on factors identified in the literature review, covering various aspects of career choice including gender influence, school environment, parental influence, and peer pressure. All demographic data pertaining to the students, as well as information relevant to the study objectives, were gathered through a questionnaire-based study proforma. Subsequently, SPSS version 26 software was employed for both data entry and analysis.

RESULTS

A total of 150 medical students were surveyed, with 34.0% of the students being under 20 years old and 66.0% over 20 years old. In terms of gender, 33.3% were male and 66.7% were female. Regarding marital status, 8.7% were married, and 91.3% were single. Father's educational level varied, with 2.0% being illiterate, 4.0% having primary education, 4.7% completing matric, 16.0% having intermediate education, 22.7% holding bachelor's degrees, 34.0% having master's degrees, and 16.7% possessing other educational qualifications. The educational status of the mothers is presented in Table 1.

Table 1: Demographic characteristics of the students (n=150)

Variables		Frequency	Percent %
Age groups	<20 years	51	34.0%
	>20 years	99	66.0%
Gender	Male	50	33.3%
	Female	100	66.7%
Marital status	Married	13	8.7%
	Single	137	91.3%
Father educational status	Illiterate	3	2.0%
	Primary	6	4.0%
	Matric	7	4.7%
	Intermediate	24	16.0%
	Bachelor	34	22.7%
	Master	51	34.0%
	Other	25	16.7%
Mother educational status	Illiterate	8	5.3%
	Primary	22	14.7%
	Matric	15	10.0%
	Intermediate	21	14.0%
	Bachelor	27	18.0%
	Master	36	24.0%
	Others	21	14.0%

Table 2: Family influence on the career choice of medical students (n=150)

Questioner regarding family influence	Frequency	Percent
Parental influence impacts children's career guidance at school	Strongly Agree	74 49.3%
	Agree	62 41.3%
	Uncertain	6 4.0%
	Disagree	8 5.3%
Education of the parents influences children's career choices	Strongly Agree	58 38.7%
	Agree	68 45.3%
	Uncertain	17 11.3%
	Disagree	5 3.3%
	Strongly Disagree	2 1.3%
The parent-child relationship quality influences children's career decisions	Strongly agree	41 27.3%
	Agree	72 48.0%
	Uncertain	33 22.0%
Values and beliefs of the parents shape children's career choices	Disagree	4 2.7%
	Strongly Agree	35 23.3%
	agree	73 48.7%
	Uncertain	19 12.7%
	Disagree	22 14.7%
Family members serve as role models for children	Strongly Disagree	01 0.7%
	Strongly Agree	43 28.7%
	Agree	68 45.3%
	Uncertain	16 10.7%
	Disagree	14 9.3%
Connectedness and expectations of the parents influence children's career choices	Strongly Disagree	9 6.0%
	Strongly Agree	35 23.3%
	Agree	65 43.3%
	Uncertain	28 18.7%
Businesses of families can influence the career choice	Disagree	16 10.7%
	Strongly Disagree	5 3.3%
	Strongly Agree	46 30.7%
	Agree	39 26.0%
How many of your relatives have been in the profession that you have	Uncertain	29 19.3%
	Disagree	28 18.7%
	Strongly Disagree	8 5.3%
	None	23 15.3%
	One	27 18.0%
	Two	31 20.7%
	More than two	68 45.3%

According to the survey findings, almost half of the participants (49.3%) expressed strong agreement regarding the impact of parental influence on career guidance at school, and an additional 41.3% agreed. Similarly, a significant percentage (38.7%) strongly agreed that parental education affects children's career decisions, with 45.3% in agreement. The quality of the relationship between parents and their children was recognized as influential, with 27.3% strongly agreeing and 48.0% agreeing. Furthermore, 23.3% strongly believed in the influence of parental values and beliefs, and 48.7% agreed. The majority of respondents viewed family members as role models for career choices. Moreover, over half of the students strongly agreed or agreed that parental connectedness, expectations, and family business have an influence on career choices, as illustrated in Table 2

Concerning the school influence on medical students' career choices, 33.3% strongly agreed that career guidance in school addresses students' career confusion, with an additional 41.3% in agreement. Regarding the impact of school location on career choices, 20.0% strongly agreed, and 48.0% agreed. Furthermore, 28.7% strongly agreed that students should explore different workplaces for career exploration, and 41.3% agreed. About the positive influence of career guidance in school on decision-making skills, 26.7% strongly agreed, and 44.0% agreed. Furthermore, over 50% of students strongly agreed and agreed that inviting career experts to provide guidance, the influence of teaching quality on career choices, mentors providing introductory insights into professions, and the importance of school guidance and counseling to students all impact career choices, as shown in Table 3.

Table 3: School influence on the career choice of medical students (n=150)

Questioner regarding school influence	Frequency	Percent
The school's career guidance program is designed to alleviate students' uncertainty about their future careers	Strongly Agree	50 33.3%
	Agree	62 41.3%
	Uncertain	21 14.0%
	Disagree	16 10.7%
The location of the school has an impact on students' career preferences	Strongly Agree	30 20.0%
	Agree	72 48.0%
	Uncertain	30 20.0%
	Disagree	16 10.7%
Students to explore various workplaces in order to broaden their understanding of potential career paths	Strongly Agree	43 28.7%
	Agree	62 41.3%
	Uncertain	33 22.0%
	Disagree	10 6.7%
The career guidance provided by schools serves to improve students' ability to make informed decisions about their future careers	Strongly Agree	40 26.7%
	Agree	66 44.0%
	Uncertain	19 12.7%
	Disagree	21 14.0%
Schools often enlist the expertise of career professionals to offer guidance to students	Strongly Agree	42 28.0%
	Agree	59 39.3%
	Uncertain	23 15.3%
	Disagree	16 10.7%
The quality of teaching significantly influences students' career choices in a positive manner	Strongly Agree	56 37.3%
	Agree	48 32.0%
	Uncertain	21 14.0%
	Disagree	18 12.0%
Teachers, in their role as mentors, introduce students to a diverse range of professions	Strongly Agree	55 36.7%
	Agree	51 34.0%
	Uncertain	16 10.7%
	Disagree	15 10.0%
School guidance and counseling services are pivotal in shaping students' career decision-making processes.	Yes	102 68.0%
	No	29 19.3%
	Not Sure	19 8.0%

A significant number of survey participants feel that both boys and girls are driven by similar motivations for career guidance. Moreover, over 80% of the students strongly agreed or agreed that gender influences students' career decisions. Additionally, 53.4% concurred that male students often harbor higher ambitions compared to females, while 56.7% believed that girls are contending with boys in professions traditionally dominated by males. Nearly half, 49.3%, expressed the view that societal norms influence career choices differently for boys and girls, and an equal percentage agreed that women are

predominantly viewed as homemakers and men as breadwinners. Furthermore, over half of the respondents agreed that women tend to prioritize careers related to caring for others, and that gender norms impact career choices in terms of masculinity and femininity, as outlined in Table 4

Table 4: Gender influence on the career choice of medical students (n=150)

Questioner regarding gender influence	Frequency	Percent
Males and females have the same motivations towards career guidance	Strongly Agree	69 46.0%
	Agree	47 31.3%
	Uncertain	20 13.3%
	Disagree	13 8.7%
	Strongly Disagree	01 0.7%
Gender influences students' choice of career	Strongly Agree	69 46.0%
	Strongly Agree	47 31.3%
	Agree	61 40.7%
	Uncertain	24 16.0%
	Disagree	12 8.0%
Male students have higher career ambitions compare to girls	Strongly Disagree	06 4.0%
	Strongly Agree	28 18.7%
	Agree	52 34.7%
	Uncertain	30 20.0%
	Disagree	32 21.3%
Females are now vying with males for careers that historically favored men	Strongly Disagree	7 4.7%
	Strongly Agree	33 22.0%
	Agree	52 34.7%
	Uncertain	26 17.3%
	Disagree	32 21.3%
Expectations for careers differ for boys and girls as a result of societal norms	Strongly Disagree	7 4.7%
	Strongly Agree	30 20.0%
	Agree	44 29.3%
	Uncertain	36 24.0%
	Disagree	29 19.3%
Historical gender roles dictate that women should manage households while men should be the primary wage earners	Strongly Disagree	11 7.3%
	Strongly Agree	34 22.7%
	Agree	41 27.3%
	Uncertain	26 17.3%
	Disagree	36 24.0%
Women place emphasis on careers involving caregiving	Strongly Disagree	13 8.7%
	Strongly Agree	27 18.0%
	Agree	66 44.0%
	Uncertain	25 16.7%
	Disagree	19 12.7%
Gender identities play a role in shaping career preferences	Strongly Disagree	13 8.7%
	Strongly Agree	38 25.3%
	Agree	43 28.7%
	Uncertain	41 27.3%
	Disagree	14 9.3%
Strongly Disagree	14 9.3%	

Significant trends were observed in peer influence among medical students. More than 50% of students either strongly agreed or agreed that peer advice on careers is essential. It was also noted that female students are more influenced by peers in career choices, while male students are influenced by fellow males. Opinions varied on the reliability of information from peers, with 30.7% agreeing, 20.7% strongly agreeing, and 29.3% uncertain.

Furthermore, 39.3% agreed and 16.0% strongly agreed that students in peer groups tend to choose similar careers. Detailed results are presented in table 5

Table 5: Peer influence on the career choice of medical students n=150

Questioner regarding peer influence	Frequency	Percent
Peer advice on career is essential to fellow students	Strongly Agree	37 24.7%
	Agree	59 39.3%
	Uncertain	30 20.0%
	Disagree	18 12.0%
	Strongly Disagree	6 4.0%
The information from peers is generally deemed reliable	Strongly Agree	31 20.7%
	Agree	46 30.7%
	Uncertain	44 29.3%
	Disagree	25 16.7%
	Strongly Disagree	4 2.7%
Young women are frequently swayed by their peers when selecting careers.	Strongly Agree	31 20.7%
	Agree	47 31.3%
	Uncertain	45 30.0%
	Disagree	16 10.7%
	Strongly Disagree	11 7.3%
Young men often tend to be influenced by their male peers when making career choices	Strongly Agree	28 18.7%
	Agree	63 42.0%
	Uncertain	36 24.0%
	Disagree	19 12.7%
	Strongly Disagree	4 2.7%
Students within peer groups frequently pursue similar career paths	Strongly Agree	24 16.0%
	Agree	59 39.3%
	Uncertain	40 26.7%
	Disagree	25 16.7%
	Strongly Disagree	2 1.3%
Career behaviors modifications comes from peers	Strongly Agree	33 22.0%
	Agree	47 31.3%
	Uncertain	45 30.0%
	Disagree	20 13.3%
	Strongly Disagree	5 3.3%
Peer groups are more likely to heed career guidance from members they hold in high regard	Strongly Agree	24 16.0%
	Agree	53 35.3%
	Uncertain	36 24.0%
	Disagree	25 16.7%
	Strongly Disagree	12 8.0%

DISCUSSION

Career selection among medical students is a nuanced and multifaceted process. The factors impacting career selection in this group involve a thorough examination of the influences that mold their professional paths. Several prominent factors emerge from the literature and empirical findings, each playing a pivotal role in shaping students' career decisions. This study has been done to explore the factors influencing career choices among medical students in terms of family influence, school influence, gender influence and peer influence. In this study, survey findings revealed that more than half of the participants expressed strong agreement or agreement regarding the influence of parental guidance on career

decisions at school, the impact of parental education on children's career choices, and the significance of the quality of the parent-child relationship in shaping career choices. Additionally, a notable portion (23.3%) strongly believed in the influence of parental values and beliefs, with 48.7% in agreement. The majority of respondents also perceived family members as influential role models for career decisions. Furthermore, over half of the students strongly agreed or agreed that parental connectedness, expectations, and family business have an impact on career choices. Consistently, Jasmon et al,⁶ observed a significant relationship between parental expectations, self-efficacy, and career exploration in children. Conversely, Din MU et al,¹² reported that parents' education and socioeconomic status influence the career choices of medical graduates. They found that parents' agreement with their children's chosen career path, driven by a desire for social status and recognition, is a prevalent influencer. Additionally, parents' resources serve as a motivating factor for career choices, and students often seek their consultation before finalizing their career paths.¹² few other studies also found parental influence on career choice.^{13,14} Griffin B et al,¹⁵ observed that medical students who perceive their parents' anticipation of pursuing a prestigious career in line with family or cultural norms may experience greater uncertainty regarding their career path upon entering medical school.

This study emphasizes the crucial role of schools in shaping medical students' career paths. Many students indicated that school career guidance effectively reduces confusion and influences their career decisions. Additionally, they recognized the impact of school location and emphasized the importance of practical career exploration. Furthermore, numerous students acknowledged the positive influence of school career guidance on their decision-making abilities. These findings are consistent with previous research underlining the significance of structured career guidance programs in helping students navigate the complexities of making career decisions.¹⁶⁻¹⁸

A significant number of survey participants feel that both boys and girls are driven by similar motivations for career guidance. Moreover, over 80% of the students strongly agreed or agreed that gender influences students' career decisions. Additionally, 53.4% concurred that male students often harbor higher ambitions compared to females, while 56.7% believed that girls are contending with boys in professions traditionally dominated by males. Nearly half, 49.3%, expressed the view that societal norms influence career choices differently for boys and girls, and an equal percentage agreed that women are predominantly viewed as homemakers and men as breadwinners. Furthermore, over half of the respondents

agreed that women tend to prioritize careers related to caring for others, and that gender norms impact career choices in terms of masculinity and femininity.

This study underscores the complex interplay between gender and career choices among students. A substantial proportion of survey participants perceive that both boys and girls are motivated by similar factors when it comes to career guidance, the majority of students recognize the influence of gender on career decisions, significant proportion of respondents acknowledge gender disparities in career ambitions, with many believing that male students tend to harbor higher aspirations, students also perceive a shifting landscape where girls are increasingly competing with boys in professions traditionally dominated by males. In the comparison Heiligers PJ et al¹² observed that the both gender and living with a partner independently influence choices, yet they do not interact. Thus, living with a partner holds equal significance for male and female students when making their preferences. Our findings also align with Japanese study by Kawamoto R et al¹⁹ as Japanese medical students have divided their motivations for specialty preference based on gender. Women showed a significant preference for gynae and OBS, pediatrics and psychology compared to men. Conversely, men exhibited a significant preference for surgery and orthopedics compared to women.

In this study Significant trends in peer influence among medical students were observed in this study. More than half of the students acknowledged the importance of peer advice in career decisions, indicating the influential role peers play in shaping career choices. Interestingly, gender differences were noted, with female students being more influenced by peers in career decisions, while male students are influenced by fellow males. This aligns with findings from previous studies by Ogunleye et al. and Mtemeri et al., which highlight the influential roles of both parents and peers in shaping career choices.^{20,21} However, in contrast, Oduh et al. observed that peer mentorship had minimal impact on the career choices of medical students.²²

CONCLUSION

The study highlights the intricate nature of career decision-making among medical students, which is influenced by factors such as familial, educational, gender-related, and peer dynamics. Future research and interventions aimed at improving career guidance programs would benefit from addressing these diverse influences in a comprehensive manner.

LIMITATIONS

Study possesses several limitations specifically limited study sample size.

SUGGESTIONS / RECOMMENDATIONS

Longitudinal studies are recommended to track the career trajectories of medical students over time, allowing for a deeper understanding of how various influences shape career choices throughout their educational and professional journey.

CONFLICT OF INTEREST / DISCLOSURE

None.

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REFERENCES

1. Obadeji A, Olofintoye T, Oluwole O. Career in medicine: what factors influence medical students. *J Contemp Med Edu*. 2014;2:218-.
2. Irene D, Nuhu MA. Gender as a factor in the career choice readiness of senior secondary school students in Ilorin metropolis of Kwara State. *Niger Int J Humanit Soc Sci* 2012;2:17-24
3. Mann-Isah NA, Ameen N, Jassim G. Career choices among medical students and factors influencing their choices. *Global journal of health science*. 2019 Mar 25;11(4):132.
4. Abe EN, Chikoko V. Exploring the factors that influence the career decision of STEM students at a university in South Africa. *International Journal of STEM Education*. 2020 Dec;7:1-4.
5. Jothula K, Ganapa PD., Sreeharshika, Naidu NK, Abhishek P. Study to find out reasons for opting medical profession and regret after joining MBBS course among first year students of a medical college in Telangana. *Int J Community Med Public Health*. 2018
6. Jasmon A, Masturah F, Nugraha NS, Syakurah RA, Afifah A, Siburian R. Parental influences on medical students' self-efficacy and career exploration in collectivist culture. *Journal of Education and Health Promotion*. 2020 Jan 1;9(1):222.
7. Zahedani ZZ, Rezaee R, Yazdani Z, Bagheri S, Nabeiei P. The influence of parenting style on academic achievement and career path. *J Adv Med Educ Prof*. 2016;4:130-4
8. Beladina ES. Pengaruh Karakteristik Sosiodemografi Orang Tua Terhadap Dukungan Pemilihan Karir Anak Pada Mahasiswa Fakultas Kedokteran Mahasiswa. *Fakultas Kedokteran Universitas Sriwijaya*. 2018.
9. Bhatti MT, Ashar A. Career choices among medical students; does gender influence?. *Pakistan Armed Forces Medical Journal*. 2019 Jun 25;69(3):483-89.
10. Heiligers PJ. Gender differences in medical students' motives and career choice. *BMC medical education*. 2012 Dec;12:1-1.
11. Mtemeri J. Peer pressure as a predictor of career decision-making among high school students in Midlands Province, Zimbabwe. *Global Journal of Guidance and Counselling in Schools: Current Perspectives*. 2020;10(3):120-31.
12. Din MU, Rana UK, Maqbool S, Din JR, Hazyefa M, Raza MA. Parents influence on career choice of medical undergraduates. *The Professional Medical Journal*. 2022 Jul 31;29(08):1268-74.
13. Kazi AS, Akhlaq A. Factors affecting students' career choice. *Journal of Research & Reflections in Education (JRRE)*. 2017;11(2).
14. Koech J, Bitok J, Rutto D, Koech S, Okoth JO, Korir B, et al. Factors influencing career choices among undergraduate students in public universities in Kenya: A case study of university of Eldoret.

- International Journal of Contemporary Applied Sciences. 2016; 3(2):50-63.
15. Griffin B, Hu W. Parental career expectations: effect on medical students' career attitudes over time. *Medical education*. 2019 Jun;53(6):584-92.
 16. Brown KM, Huggett KN. The challenges of career choice and readiness for practice. *Academic Medicine*, 2019; 94(2), 162-167
 17. Siddiky MR, Akter S. The Students' Career Choice and Job Preparedness Strategies: A Social Environmental Perspective. *International Journal of Evaluation and Research in Education*. 2021 Jun;10(2):421-31.
 18. Loan DT, Van NT. Career guidance in secondary schools—a literature review and strategic solutions for Vietnamese rural areas. *American International Journal of Social Science*. 2015;4(5):135-43.
 19. Kawamoto R, Ninomiya D, Kasai Y, Kusunoki T, Ohtsuka N, Kumagi T, Abe M. Gender difference in preference of specialty as a career choice among Japanese medical students. *BMC medical education*. 2016 Dec;16:1-8.
 20. Ogunleye T. The study of peer pressure and parental influence on the choice of career among secondary school students in Ogun State. *International Journal of Educational Research*. 2018 Dec 11;5(1):147-52.
 21. Mtemeri J. Peer pressure as a predictor of career decision-making among high school students in Midlands Province, Zimbabwe. *Global Journal of Guidance and Counselling in Schools: Current Perspectives*. 2020;10(3):120-31.
 22. Oduh WA, Agboola JO, Eibhalemen FA. Influence of peer group on the career choice of Secondary School Students in South Senatorial District of Edo State, Nigeria. *International Journal of Humanities, Social Sciences, and Education(IJHSSE)*, 7 (6), 214. 2020;221:2349-0381.