

The Effect of Summer Practice on the Specialty Preferences of Students of the Physiotherapy and Rehabilitation Department Duygu ILGIN GÜNDÜZ*¹, Onur ÜSTÜN²

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This study was conducted to determine the effect of summer internships on students' professional field preferences in the physiotherapy and rehabilitation department. A total of 72 (39.78%) students participating in their first face-to-face summer internship were included in this cross-sectional study. The data collection form prepared by the researchers was administered using a face-to-face interview technique. The form asked for sociodemographic information (9 questions), basic information about the internship (5 questions), and professional field preferences (4 questions). Before and after summer internships, the most frequently desired areas of work were "physiotherapy in sports" (29.6%-21.2%) and "physiotherapy in orthopedic diseases" (11.3%-22.9%). On the other hand, the percentage of students planning to work in neurology increased from 8.7% to 14.4% after the internship. Cases encountered during the internship (29.2%) and mentorship from clinical supervisors (25%) were identified as the main factors that positively influenced professional field preferences. In conclusion, our research data once again emphasizes the importance of including clinical summer internships in teaching plans as a factor that influences students' career choices. Our research also emphasizes the importance of case studies and clinical supervisor mentoring in expanding students' career options.

Fizyoterapi ve Rehabilitasyon Bölümü Öğrencilerinin Çalışma Alanı Tercihleri Üzerine Yaz Stajlarının Etkisi

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ABSTRACT

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Bu çalışma fizyoterapi ve rehabilitasyon bölümü öğrencilerinin mesleki çalışma alan tercihleri üzerine yaz stajlarının etkisinin belirlenmesi amacı ile gerçekleştirildi. Bu kesitsel çalışmaya ilk defa yüz yüze yaz stajını yapacak olan toplam 72 (%39.78) öğrenci dahil edildi. Araştırmacılar tarafından hazırlanan veri kayıt formu yüz yüze görüşme tekniği ile uygulandı. Formda sosyodemografik bilgiler (9 soru), staj hakkında temel bilgiler (5 soru) ve mesleki çalışma alanı tercihleri (4 soru) sorgulanmakta idi. Yaz stajlarından önce ve sonra en sık çalışılmak istenen alanlar "sporda fizyoterapi (%29.6-21.2) ve ortopedik hastalıklarda fizyoterapi (%11.3-22.9)" alanları idi. Diğer taraftan nöroloji alanında çalışmayı planlayanların sayısının ise staj sonrasında %8.7'den %14.4'e artış gösterdiği belirlendi. Staj sırasında alınan vakalar (%29.2) ve klinik süpervizörlerin mentörlüğü (%25) ise mesleki alan tercihlerini olumlu yönde etkileyen temel faktörler olarak belirtilmekte idi. Sonuç olarak araştırma verilerimiz klinik yaz stajlarının öğrencilerin mesleki alan tercihlerini yönlendiren bir faktör olarak öğretim planlarında yer almasının önemini bir kez daha vurgulamaktadır. Ayrıca öğrencilerin kariyer planlama yolculuğunda takip edilen vaka ve klinik süpervizör mentörlüğünün mesleki alan tercih çeşitliliğini artırmadaki önemine dikkati çekmektedir.

INTRODUCTION

The physiotherapy and rehabilitation education and training process includes theoretical and practical courses, as well as practical work carried out in a clinical environment (1). Clinical practice training is included in the curriculum as a graduation requirement. However, it is more than just a requirement; it is an important step in the transition from student life to professional life. Students can continue their studies in clinical settings such as hospitals, sports clubs, nursing homes, and special education and rehabilitation centers at the 2nd, 3rd, and 4th grade levels under real case and clinical environment conditions. Finally, the National Core Education Program for the Field of Physiotherapy and Rehabilitation, published in 2025, recommends that clinical applications be carried out under the supervision of a supervisor for a minimum of 1000 hours (2). Prior to clinical practice, students receive support for their career planning through theoretical and practical courses, as well as a consultation hour system at the school. Also, clinical practice helps students develop their professional identity through multifaceted experiences as they begin their four-year educational journey (3). To ensure a balanced distribution of specializations in physiotherapy and rehabilitation, it is important to understand students' career preferences and the factors that influence them. This knowledge is crucial for individual career planning and for developing future education and health policies. Previous studies have shown that the career preferences of physiotherapy and rehabilitation students are influenced by many factors and undergo a transformation throughout their education (4-11). When we divide these studies into groups, we often see that fourth-grade students focus on career choices and influencing factors (4, 7, 9, 10). Only a few studies have examined all four grades (5, 6, 11). In addition, the effects of factors such as gender (4, 6, 10, 12-14), grade level (6, 15), and institution (4) on career choices have been highlighted. However, during our literature review, we were unable to find any research showing the impact of summer internship experience, which is the most important and intensive part of students' undergraduate education, on the choice of specialization, which is one of the most important steps in career planning. Only two studies contained information about the impact of clinical practice on the choice of specialization (8, 12). However, these two studies did not comprehensively examine career choices before and after summer internships. Therefore, we conducted our study to determine the effect of summer internships on specialty preferences among physiotherapy and rehabilitation students.

MATERIAL AND METHODS

This cross-sectional, descriptive study was conducted with 72 volunteers (39.78%) from a total of 181 Manisa Celal Bayar University (MCBU) Health Sciences Faculty (HSF) Department of Physiotherapy and Rehabilitation (DPR) students (total number of students in all classes: n= 672; who will be doing their internship in face to face for the first time: n= 181), according to the inclusion criteria, from May to November of 2022.

The entire population was invited to participate in the study to reach the largest possible sample size. The inclusion criteria were: 1) Being a student who will continue his or her education in the 2021-2022 academic year in formal and secondary education programs at MCBU, HSF, DPR; 2) Being an 18-year-old student or older; and 3) Being a student who will complete FZT 2142 Clinical Summer Practice-I face-to-face for the first time (n = 50; 69.4%), and to have completed FZT 2142 Clinical Summer Practice I online and to complete FZT 3142 Clinical Summer Practice II face-to-face in the summer of 2022 (n = 22, 30.6%). Finally, students had to volunteer to participate in the research by signing and agreeing to the informed consent form. The exclusion criteria were as follows: not meeting the inclusion criteria; being a student who has completed the FZT 2142 Clinical Summer Practice I course in a face-to-face setting; having completed or having already completed the FZT 4122 Clinical Practice course; and failing to answer any questions despite signing and agreeing to the informed consent form.

This study adhered to the principles of the Declaration of Helsinki and was approved by the MCBU, Faculty of Medicine, Health Sciences Ethics Committee (Approval Number: 11/05/2022-

20.478.486/1333). After informing the students of the purpose of the study, the methods, the possible risks and benefits, the protection of personal data, and the contact information, written consent was obtained for their participation in the study. Then, data collection was carried out using a three-part data collection form and a face-to-face interview technique that took about 10 minutes. The form was administered twice, once before and once after the summer internship.

The data collection form consisted of a total of 3 parts and was developed by the researchers through a literature review. The developed first draft of data collection form was evaluated by the researchers for all questions by the researchers to include “Appropriateness of grammar?, The clarity and unambiguity of items?, The correct spelling of words?, The correct structuring of the sentences?, Appropriateness of font size and space?, Legible printout?, Adequacy of instruction on the instrument?, The structure of the instrument in terms of construction and well- thought out format?, Appropriateness of difficulty level of the instrument for the participants?, Reasonableness of items in relation to the supposed purpose of the instrument?” questions. It was aimed to achieve 100% agreement for each question. Modifications and refinements were made according to the comments received to facilitate better understanding and to organise the sequence of questions (16).

In the first part, with a total of 9 questions, the socio-demographic data of the students (age (year), sex (female, male), body weight (kg), height (m), body mass index (kg/m^2), class year and program (formal-secondary education)), whether there is a health professional in the family or not, and the factors that positively and/or negatively influence the preference for the DPR when choosing a university were recorded. In the second part, the information about the students' practice was evaluated with a total of 5 questions, and in the third part, the students' choices about their specialty preferences were evaluated with a total of 4 questions (4-13, 15, 17-20).

All collected data were entered into Microsoft Excel and cross-checked for the presence of errors to maintain accuracy, and then imported into the IBM SPSS Statistics 26.0 program. Data were presented using frequencies (n) and percentages (%) for categorical variables, and minimum and maximum values, means and standard deviations (SD) for numerical variables.

RESULTS AND DISCUSSION

In our study, we examined how the first summer of clinical practice affected students' opinions about their career plans. According to the purpose of this study, we analyzed data from 72 volunteer students (39.78%) who met the inclusion criteria (mean age: 20.72 ± 1.2 years, 19-25 years; body mass index: $21.56 \pm 3.2 \text{ kg}/\text{m}^2$, $16.71\text{--}31.23 \text{ kg}/\text{m}^2$; 66.7% (n = 48) were female; and 20.8% (n = 15) had a family member who was a healthcare worker). These students were selected from a total of 181 students who were doing their first summer internship in a clinical setting.

Previous studies have identified several reasons why students choose the DPR. These reasons include interest in the field of physiotherapy (17, 19), good job opportunities (17, 18), economic reasons (12), university entrance exam scores (17), and the prestige of the profession (19). Similarly, in our study, the most important factors that positively influenced students' university preferences were interest in the field, entrance exam scores, and the profession's prestige. Conversely, economic reasons, such as unemployment and the fear of not being hired by an official institution, were cited as significant negative influences on students' university choices (Table 1).

Table 1. Factors that positively and negatively influence the choice of university.

Variable	n (%)**
Factors that positively influence the choice of university (n=98*)	
Personal interest in the field	33 (33.70)
Sufficiency of the university exam score for this department	17 (17.30)
Prestige of the profession	15 (15.30)
Physiotherapy and rehabilitation following an illness or injury suffered by someone around	6 (6.10)
Having someone in the family-circle doing this profession	5 (5.10)
High number of job opportunities	4 (4.1)
High probability of going abroad	4 (4.1)
Having opportunities for this field in the city (such as the presence of thermal waters)	4 (4.1)
Not wanting the university exam score to be wasted	3 (3.1)
To upgrade associate degree diploma to bachelor's degree	2 (2.0)
High salaries	2 (2.0)
Pressure from family-relatives-environment	1 (1.0)
To study at a university close to the family	1 (1.0)
Other	1 (1.0)
Factors that negatively influence the choice of university (n=112*)	
Worrying about being unemployed	38 (33.90)
Worrying about being appointed to an undesirable place or not being appointed through PPSE	16 (14.30)
Worried about working in the private sector	11 (9.80)
Concern that the salary may not be sufficient	7 (6.30)
Worrying about whether university education will be sufficient in professional life	27 (24.10)
Lack of interest in the field	7 (6.30)
Other causes	6 (5.40)

n (%): Number (Percentage); *: Higher than the total number of patients due to multiple selections; PPSE: Public Personnel Selection Exam; **: Percentages may not add to 100 due to rounding.

In our study, while students were making their university preferences, previous studies reported that students in the DPR, especially those in the fourth year, experience anxiety about finding a job and hopelessness (6, 15). This occurs alongside an increasing number of graduates and the fact that newly graduated physiotherapists take longer to find employment and face employment difficulties (21). Additionally, Amin et al. reported that 60.2% of physiotherapy students preferred to work abroad due to good educational opportunities, 24.4% due to more specialization options, and 15.3% due to financial opportunities (4). In our study, most students indicated that they planned to open a private clinic, both before and after the summer internship. Apart from this plan, many students planned to work in the private sector and abroad. Additionally, although the probability was low, the number of students planning to work in a government institution by being appointed to the the public personnel selection exam (PPSE) after the summer internship increased (Table 2). According to the results of the aforementioned studies and our research, it is believed that arrangements should be made to improve the level of awareness of students about entrepreneurship and employment opportunities in the private sector in their educational plans. As a result, students' preference for working in the private sector due to national conditions, as stated in the recently published core education program, once again highlights the need to ensure that teaching plans include the acquisition of management skills (2).

Also, there was low compatibility between the location of their summer internship and the area in which they planned to pursue a career after graduation (38.9%: n = 28; FZT 2142 Clinical Summer Practice I, and 25%: n = 18; FZT 3142 Clinical Summer Practice II). This may be related to the increase in physiotherapy and rehabilitation departments and students in recent years, which has decreased the number of clinics available for students to choose for their summer practice in accordance with their career plans. In this case, it can be considered an important indicator of the impasse between the number of graduates and employment at the national level. Therefore, in collaboration with educational institutions, professional organizations, accreditation associations, graduate physiotherapists, and student representatives, measures should be taken in national health

and education policies to address the decreasing employment opportunities in parallel with the increasing number of students after graduation.

Table 2: Main Preferences of Students about Their Career.

	Before the Practice	After the Practice
The areas where students would most like to work before (n= 115*) and after (n= 118*) their practice	n (%)	n (%)**
Physiotherapy and Rehabilitation in Sports Health	34 (29.60)	25 (21.20)
Physiotherapy and Rehabilitation in Orthopedic Diseases	13 (11.30)	27 (22.90)
Yoga-Pilates	12 (10.40)	9 (7.60)
Manual Therapy/Osteopathy/Chiropractic	10 (8.70)	10 (8.50)
Physiotherapy in Neurological Diseases	10 (8.70)	17 (14.40)
Aquatherapy	9 (7.80)	6 (5.10)
Physiotherapy and Rehabilitation in Pediatrics	8 (7.00)	6 (5.10)
Physiotherapy and Rehabilitation in Cardiopulmonary Diseases	6 (5.20)	2 (1.70)
Physiotherapy and Rehabilitation in Rheumatologic Diseases	4 (3.50)	2 (1.70)
Physiotherapy and Rehabilitation in Geriatrics	2 (1.70)	3 (2.50)
Physiotherapy and Rehabilitation in Animal Health	2 (1.70)	-
Other	2 (1.70)	5 (4.20)
Physiotherapy and Rehabilitation in Pelvic Floor Health	1 (0.90)	5 (4.20)
Physiotherapy and Rehabilitation in Mental Health	1 (0.90)	1 (0.80)
Physiotherapy and Rehabilitation in Lymphedema	1 (0.90)	-
Reasons why students choose the fields they would most like to work in before (n= 83*) and after (n= 96*) their practice	n (%)**	n (%)**
Cases taken during the practice period	4 (4.80)	28 (29.20)
Mentoring by the practice supervisor	5 (6.00)	24 (25.00)
An illness, disability, etc. suffered by a relative, friend or family member	7 (8.40)	1 (1.00)
Attended a scientific event such as a congress-symposium-panel etc.	6 (7.20)	4 (4.20)
Realizing the research field in this field	11 (13.30)	4 (4.20)
Feeling of shortage of physiotherapists in this field	8 (9.60)	5 (5.20)
Better salaries for physiotherapists in this field	6 (7.20)	8 (8.30)
High prestige of this area	17 (20.50)	10 (10.40)
High probability of going abroad	6 (7.20)	6 (6.30)
Other	13 (15.70)	6 (6.30)
The workplace where students plan to work before and after their practice (Before/after the practice: n=85*/85*)	n (%)**	n (%)**
In an official institution affiliated to the state (state/ university hospital, etc.)	14 (16.50)	18 (21.20)
In a private institution (private hospital, branch center, sports club, etc.)	16 (18.80)	14 (16.50)
In personal private clinic	25 (29.40)	29 (34.10)
Abroad	14 (16.50)	10 (11.80)
As an academic	4 (4.70)	1 (1.20)
Doing a master's degree while working in the private sector	4 (4.70)	8 (9.40)
Doing a master's degree while working in a state-affiliated official institution	2 (2.40)	2 (2.40)
Doing a master's degree abroad	2 (2.40)	1 (1.20)
Engaging in a profession other than physiotherapist	1 (1.20)	-
Other	3 (3.50)	2 (2.40)

n (%): Number (Percentage); *: Higher than the total number of patients due to multiple selections; **: Percentages may not add to 100 due to rounding.

Previous studies have shown that physiotherapy students often want to specialize in musculoskeletal physiotherapy (4, 9, 10), manual therapy (10), and neuromuscular physiotherapy (10), while specializing in geriatrics (4) and cardiopulmonary physiotherapy (7-9) is less common. Waiserberg et al. reported that, when they first entered school, students wanted to work in sports and pediatrics. However, in subsequent years, interest in pediatrics continued, while interest in sports decreased and interest in rehabilitation increased (11). Similar to the results of the study by Waiserberg et al. (11), Reeve et al. also reported that students' career preferences changed after entering school (9). This change has been attributed to educators/clinicians, cases encountered in clinical practice, different physiotherapy specialties, and increasing clinical experience and

competencies (9). Similarly, Janaudis-Ferreira et al. found that students prefer to work less frequently in areas where they have limited experience and job opportunities (20). Additionally, Torres Sánchez et al. reported that one month of clinical practice increased interest in the field (8), and Oruk et al. reported that clinical practice reduced students' anxiety levels (22). In our study, we observed that students often completed their summer internships in hospitals and encountered cases in the fields of orthopedics and neurology (Table 3). Similar to previous studies, the fields in which students frequently received cases during their summer practice, such as physiotherapy and rehabilitation in sports health and orthopedic diseases, were among those in which they planned to work after graduation. More students wanted to work in physiotherapy and rehabilitation for neurological diseases after graduation than before summer practice. Students had very low rates of preference for the other fields in which they received very few cases during their summer practice (Table 2).

Table 3: Main characteristics of students about their practice.

Variable	n (%)
Place of FZT 2142 Clinical Summer Practice I (n= 74*)	
State Hospital	18 (24.30)
University Research and Application Hospital	10 (13.50)
Private Hospital	8 (10.80)
Healthy Living Center/Physical Therapy Branch Center	8 (10.80)
Special Education Center - Guidance and Research Center	5 (6.80)
Thermal Hotel (including Aquatherapy applications)	2 (2.70)
Nursing Home	1 (1.40)
Online Completed	22 (29.70)
Most Common Case Groups During FZT 2142 Clinical Summer Practice I (n= 101*)	
Orthopedic Diseases	27 (26.70)
Neurological Diseases	26 (25.70)
Child Health	7 (6.90)
Geriatrics	6 (5.90)
Sports Health	4 (4.00)
Rheumatologic Diseases	3 (3.00)
Manual Therapy/Osteopathy/Chiropractic	3 (3.00)
Cardiopulmonary Diseases	1 (1.00)
Aquatherapy Applications	1 (1.00)
Other	1 (1.00)
Online Completed	22 (21.80)
Place of FZT 3142 Clinical Summer Practice II (n= 73*)	
State Hospital	7 (9.60)
University Research and Application Hospital	5 (6.80)
Private Hospital	4 (5.50)
Healthy Living Center/Physical Therapy Branch Center	3 (4.10)
Sports Club	1 (1.40)
Special Education Center-Guidance Research Center	1 (1.40)
Nursing Home	1 (1.40)
Thermal Hotel (including Aquatherapy applications)	1 (1.40)
Practice Not Yet Done	50 (68.50)
Most Common Case Groups During FZT 3142 Clinical Summer Practice II (n= 88*)	
Orthopedic Diseases	16 (18.20)
Neurological Diseases	12 (13.60)
Sports Health	4 (4.50)
Cardiopulmonary Diseases	2 (2.30)
Manual Therapy/Osteopathy/Cariopraxia	2 (2.30)
Rheumatological Diseases	1 (1.10)
Child Health	1 (1.10)
Practice Not Yet Done	50 (56.80)

n (%): Number (Percentage); *: Higher than the total number of patients due to multiple selections; **: Percentages may not add to 100 due to rounding.

Students' plans to pursue an academic career after graduation were quite low (Table 2). Similar to these results, Narin et al. showed in their study that 67% of the students did not plan to pursue an academic career (18). Öhman et al. also reported that 5% of the students planned to work

in education but not in research. They related this situation to the fact that students follow clinically oriented role models and that clinical practice and theoretical fields are separated (12). On the other hand, in our study, we found that the number of students who wanted to work as academics after their summer internship had decreased, but that there had been an increase in the number of students who wanted to pursue graduate education while working in the private sector and in the total number of students who wanted to pursue graduate education. Additionally, Çelik et al. stated that students' awareness of academic careers is influenced by their level of information about these careers, the presence of role models in their families or close circles who have pursued graduate education, their satisfaction with their departments, and their participation in the Academic Staff and Postgraduate Education Entrance Examination. Çelik et al. recommended communicating with role models about academic careers and adding career offices, seminars, and courses (23). Based on our research, we believe that the increase in the percentage of those who want to pursue an academic career after their internship is due to this role model effect. Consistent with the data from these results, the physiotherapy and rehabilitation core education program 2025 recommended conducting clinical practice studies under the supervision of clinical supervisors who are licensed physiotherapists with at least two years of clinical or academic experience (2). In addition, the results of our study show that, on average, 1/5 of the students preferred to participate in educational activities such as professional courses, etc. before and after the summer practice. This situation can be accepted as an indicator of the students' continued interest in the field when choosing this department and their efforts to develop in their fields of interest. These findings highlight the importance of planning curricula that emphasize continuing academic career development at all levels after graduation.

Previous studies have shown that the prestige of the field (4) personal interests (10) clinical supervisors, instructors, clinical supervision, role model effect, clinical experience (7, 12, 20, 24), job accessibility, potential salary, evidence in the literature (20), family (12), friends (12, 20) are among the factors that are effective in determining students' career choices. Similarly, in our study, we observed that prior to summer practice, students preferred the fields in which they planned to pursue careers because of the high prestige of the field, and after summer practice, they preferred the fields in which they planned to pursue careers more than the prestige of the field because of the cases they encountered during summer practice and the mentorship of the summer practice supervisor (Table 2). This may be associated with the fact that students develop through social learning by taking active responsibility in interaction with other professionals, peers and patients in clinical settings where summer practice is performed in the vocational field, as also reported by Skøien et al. (25). In line with the results of previous studies, our findings suggest that students should be directed to clinical settings where they can encounter different cases during their summer practice, and clinical supervisors should be integrated into in-service training programs to enrich their professional field preferences in career development. The latest core training program also highlights the importance of active student participation in teaching plans, the inclusion of case-based studies, and the basic training and experience requirements for clinical supervisors, in line with research findings. It recommends that clinical practice studies be conducted under the supervision of clinical supervisors who are licensed physiotherapists with at least two years of clinical or academic experience (2). This emphasizes the importance of planning teaching strategies at every level that promote continued academic career development after graduation. Additionally, teaching methods must be updated to include more diverse approaches to problem solving and clinical reasoning in order to develop clinical competencies (26). Faure et al. implemented a “structured peer-led introduction to clinical education” program with the support of third- and fourth-year students to ensure the orientation and active participation of second-year students in the transition from the classroom to the clinical setting. They reported that this program had a positive effect on the students' adaptation to clinical practice (27). At this point, we only

questioned clinical supervisors as role models within the scope of our research. However, we believe that the impact of peers who work together during internships on students' adaptation to internships and the development of their active participation as specified in the core training program should also be examined and included in career management and teaching plan development efforts.

Our study has several limitations. First, the data were obtained by examining only 39.78 percent of DPR students at one university, which makes generalizing difficult. Second, the study has a cross-sectional research design. It only examined the outcomes of second- and third-year summer practice, which was conducted in person for the first time. However, no longitudinal study has examined the career preferences of summer practice students throughout their entire four-year educational period. Third, since no questionnaire examining career preferences was available, the researchers developed a form based on a literature review to collect the data. This form was not evaluated in terms of face validity, content validity, criterion-related validity, or construct validity. However, it should be kept in mind that the percentage of agreement, an important indicator of face validity, was 100% between researchers for each question, and the final form was used after being revised according to editing suggestions. One of the researchers was an academic with over 20 years of experience in physiotherapy and rehabilitation, while the other was a student representative from our DPR. Additionally, when interpreting the data, consider that this is the first study to provide data on the subject. Nevertheless, our data are important in terms of students' career preferences because they demonstrate changes in students' opinions before and after their first summer clinical practice. Future studies should employ a multicenter design, conduct power analyses, and provide access to a larger number of students. Additionally, studies on questionnaire reliability and validity should be conducted, and the process and affecting factors should be examined using a longitudinal study design. Qualitative research designs will enable a more in-depth explanation of the answers provided (28).

CONCLUSION AND RECOMMENDATIONS

The main findings of our study are as follows: Before and after their summer internship, students frequently planned to work in the fields of sports health, physiotherapy, and orthopedic diseases, as well as physiotherapy and rehabilitation. However, after the internship, a higher percentage of students preferred to work in neurological physiotherapy and rehabilitation. We observed that students' preferences for their future specialty are positively influenced by the cases they follow, their supervisors' mentorship, and the prestige of the profession during their summer internship. Before and after the internship, most students planned to work in the private sector or to be appointed to a government institution through PPSE. The percentage of students planning to pursue graduate education after the internship increased compared to before the internship.

As a result, our study results draw attention to the role of summer practice in enriching students' career planning process, the need to update curricula. Additionally, our findings suggest that the following issues should be addressed during curriculum updates: The curriculum should include management and entrepreneurship courses, as well as career planning. Career and graduate follow-up processes should be implemented, and teaching plans should emphasize the importance of post-graduation education. Students should be encouraged to participate in internships through methods that promote active learning, such as peer education, problem solving, and clinical reasoning. There should be an emphasis on structuring case-based and clinical supervisor mentoring programs. Future studies should also address the urgent need for field research on evaluation method structuring.

Ethics Statement

This study adhered to the principles of the Declaration of Helsinki and was approved by the MCBU, Faculty of Medicine, Health Sciences Ethics Committee (Approval Number: 11/05/2022-20.478.486/1333).

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