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ANALYSIS OF EXPECTATIONS AND SATISFACTION OF PHYSICIANS (PROVISORS)-INTERNS IN UKRAINE AT THE STAGE OF PRIMARY SPECIALIZATION – INTERNSHIP TRAINING

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Ключові слова: *лікарі (провізорів)-інтерни, денна частина інтернатури, заочна або практична частина інтернатури*

Ключевые слова: *врачи (провизоры)-интерны, очная часть интернатуры, заочная или практическая часть интернатуры*

Abstract. Analysis of expectations and satisfaction of physicians (provisors)-interns in Ukraine at the stage of primary specialization – internship training. *Sichkoriz O.Ye., Zimenkovsky A.B., Gutor T.G. The aim of the study is to identify the expectations of physicians (provisors)-interns for postgraduate education and assess their satisfaction with the course of primary specialization (internship). The sociological cross-sectional study was performed in 2021 by surveying interns of Danylo Halytsky Lviv National Medical University majoring in the following medical specialties: “Medicine” and “Pediatrics”, “Dentistry”, “Pharmacy”. The survey took place in two groups: applicants at the beginning of the internship (n=655) and after completion of the internship (n=623). Statistical methods (which are represented with confidence intervals calculated by the Fisher’s angular transformation method), structural-logical analysis and a systematic approach were used. The study revealed that the most effective form of training in the full-time internship cycle are practical classes and conferences for physicians(provisors)-interns; the least effective form is independent work. The main factors that prevented the interns from mastering the professional knowledge, skills and abilities of the internship cycle are limited opportunities for independent supervision of patients, material and technical equipment of the clinical base of the department and the interns’ own inertia. Certain shortcomings in the organization of the practical part of the internship on the basis of the hospital / pharmacy were established, namely: lack of supervision of patients, lack of practical activities, unsatisfactory material and technical equipment and disinterest of the staff in the training of interns. According to interns, the ideal model of internship should be available, that would provide the optimal amount of theoretical knowledge and relevant practical skills and would be as relevant to the future work of the physician as possible. Applicants emphasize the qualitative component of obtaining postgraduate medical education: the use of new treatment protocols, training in hospital of the third level of medical care, the possibility of doing internships abroad. Such sociological surveys among physicians (provisors)-interns on their satisfaction and compliance with expectations are an important component of the development of an optimized Model of postgraduate education of doctors / provisors in Ukraine, which will improve the quality of primary specialization (internship), the ultimate goal of which is health preservation and improvement of the life expectancy of Ukrainian citizens.*

Реферат. Аналіз очікувань та задоволеності лікарів (провізорів)-інтернів в Україні на етапі первинної спеціалізації – інтернатури. *Січкоріз О.Є., Зіменковський А.Б., Гутор Т.Г. Метою дослідження є з’ясування очікувань лікарів (провізорів)-інтернів щодо здобуття післядипломної освіти та оцінка їх задоволеності курсом первинної спеціалізації (інтернатури). Соціологічне кросекційне дослідження проводилось у 2021 році шляхом анкетування інтернів Львівського національного медичного університету імені Данила Галицького за лікарськими спеціальностями: «Лікувальна справа» та «Педіатрія», «Стоматологія», «Фармація». Анкетування відбувалося у двох групах: здобувачів на початку навчання в інтернатурі (n=655) та після завершення інтернатури (n=623). Використано статистичні методи (аналіз відносних величин, які представлено з довірчими інтервалами, розрахованими за методом кутового перетворення Фішера), структурно-логічний аналіз та системний підхід. Дослідженням встановлено, що найефективнішою формою навчання на денному*

циклі інтернатури є практичні заняття та конференції для лікарів (провізорів)-інтернів; найменш ефективною формою – самостійна робота. Основними чинниками, які заважали інтернам оволодіти професійними знаннями, навичками та вміннями на денному циклі інтернатури, є обмежені можливості для самостійної курації хворих, матеріально-технічне забезпечення клінічної бази кафедри та власна інертність. З'ясовано певні недоліки в організації проходження практичної частини інтернатури на базі лікувально-профілактичного закладу (ЛПЗ) / аптеки, а саме: відсутність курації пацієнтів, недостатність практичної діяльності, незадовільне матеріально-технічне забезпечення та незацікавленість працівників бази стажування в навчанні інтернів. На думку інтернів, ідеальна модель інтернатури повинна бути доступною, такою, яка б забезпечила оптимальну кількість теоретичних знань і відповідних практичних навичок, та максимально наближеною до майбутньої роботи лікаря. Здобувачі наголошують на якісному компоненті здобуття післядипломної медичної освіти: використання нових протоколів лікування, навчання в ЛПЗ III рівня надання медичної допомоги, можливість закордонного стажування. Такі соціологічні опитування серед лікарів (провізорів)-інтернів щодо їхньої задоволеності та відповідності очікуванням є важливим компонентом при опрацюванні оптимізованої Моделі післядипломної освіти лікарів/провізорів в Україні, що дозволить підвищити якість первинної спеціалізації (інтернатури), кінцевою метою якої є збереження здоров'я та збільшення тривалості життя громадян України.

It seems logical to assume that reforming of the health care system involves changing higher postgraduate medical education as well. Primarily, this applies to internships as a form of primary postgraduate training, since its main task is to obtain and improve the level of practical training of physicians (provisors)-interns in the direction of the chosen specialty and their professional readiness for independent activity in their respective field [4].

The training of specialists in the field of medical care emphasizes the need to involve them in research [2, 7], as well as participation in scientific activities to learn about the latest advances in science and medical technology, with modern developments of high evidence [3].

In modern conditions, distance learning and the widespread introduction of its elements in postgraduate medical education are becoming increasingly important [1], especially in the context of the COVID-19 pandemic, which has become a serious challenge for the educational system in general.

All this makes it especially relevant and necessary to use innovative approaches and improve methods of quality control of their practical application in the system of continuous professional development in the framework of postgraduate training in the field of health care.

The aim of the study is to identify the expectations of physicians (provisors)-interns for postgraduate education and assess their satisfaction with the course of primary specialization (internship).

MATERIALS AND METHODS OF RESEARCH

The sociological cross-sectional study was conducted by the means of a questionnaire according to a single specially developed protocol of higher medical (pharmaceutical) education students at the postgraduate level, doing internship at Danylo Halytsky Lviv National Medical University in the following specialties: “Medicine” and “Pediatrics”,

“Dentistry”, “Pharmacy”. The survey was conducted in two groups in 2021: respondents at the beginning of the internship (to find out the expectations of interns for postgraduate education) and interns who were completing the internship – to form recommendations for improving the organization of the postgraduate educational process. At the stage of primary specialization (internship) the questionnaire contained questions related to the full-time and practical course of it. The survey which took place at the beginning of the internship involved 655 interns, including 455 interns majoring in “Medicine” and “Pediatrics”, 135 individuals were interns majoring in “Dentistry” and 65 individuals – in “Pharmacy”. After completing the internship, 623 interns took part in the survey, including 364 interns majoring in “Medicine” and “Pediatrics”, 191 interns majoring in “Dentistry” and 68 interns majoring in “Pharmacy”.

The principles of voluntariness, anonymity and confidentiality were observed during the sociological research. Questionnaires were checked for reliability by means of performing pilot studies in the same groups at different times. Correlation coefficients were more than 0.80, no significant differences between similar particles were found.

Statistical methods (analysis of relative values, which are represented with confidence intervals calculated by the method of Fisher’s angular transformation – P [95% CI]%), structural-logical analysis and a systematic approach were used. The statistical calculations were performed by using software RStudio v. 1.1.442 and R Commander v.2.4-4.

RESULTS AND DISCUSSION

In the course of the study it was revealed that the determining factors that influenced the choice of applicants for the internship were: the possibility of self-realization in modern society, opportunities in the future to raise money given by parents, relatives.

The possibility of self-realization in modern society was a key factor in choosing a specialty in internship for the majority of respondents, namely: for 69.67 [65.37-73.81]% of interns majoring in “Medicine” and “Pediatrics”, for 66.15 [54.29-77.07]% of those in specialty “Pharmacy” and 60.74 [52.39-68.79]% of interns in the specialty “Dentistry”. Almost one third of interns in the specialty “Dentistry” (31.85 [24.29-39.93]%) indicated the opportunities to raise money in the future, while for the specialty “Medicine” and “Pediatrics” this factor was decisive only for 14.95 [11.82-18.36]% of interns. 24.62 [14.99-35.73]% of future provisors, 22.96 [16.29-30.41]% of interns of the specialty “Dentistry” and only 9.45 [6.94-12.31]% of interns of the specialty “Medicine” and “Pediatrics” listened to the advice of parents and relatives when choosing a specialty in internship.

Students of higher education at the postgraduate level think it appropriate to use only the test tasks from the base Step-3 for the current and final control of knowledge in the full-time part of the internship. This was the answer of 56.48 [51.91-61.01]% of interns majoring in “Medicine” and “Pediatrics”, 63.70 [55.44-71.58]% of interns-dentists and 70.77 [59.21-81.11]% of future provisors. Mixed type of testing was chosen by 35.16 [30.85-39.61]% of interns in the specialty “Medicine” and “Pediatrics”, 24.44 [17.59-32.02]% of interns in the specialty “Dentistry” and 13.85 [6.60-23.22]% of interns in the specialty “Pharmacy”.

The results of analysis of the responses regarding the optimal number of interns in one academic group showed that 50.77 [38.71-62.78]% of interns in the specialty “Pharmacy” and 42.96 [34.75-51.37]% of interns in the specialty “Dentistry” consider the optimal number to be 7-10 people. According to 36.92 [32.55-41.41]% of interns in the specialty “Medicine”, “Pediatrics” the number of interns in the academic group should be 5-7 people.

The results of the survey showed that interns majoring in “Medicine”, “Pediatrics” and “Dentistry” want to evenly distribute the time of full-time study by semesters (this was the answer of 52.97 [48.37-57.53]% and 48.89 [40.51-57.30]% of interns of the aforementioned specialties respectively). In turn, 72.31 [60.88-82.42]% of interns of the specialty “Pharmacy” want to do the full-time internship at once (once in the course of the academic year).

Interns of all specialties, who took part in the survey, consider practical classes and participation in scientific and practical conferences, workshops to be the most effective form of training.

A sociological study found that 69.89 [65.6-74.02]% of interns majoring in “Medicine”, “Pediatrics”

have a desire to engage in research during their internship. While among interns of “Dentistry” and “Pharmacy” specialties only 34.07 [26.34-42.26]% and 16.92 [8.87-26.92]% are ready to do research work, respectively.

The distribution of answers on the organization of the practical course of the internship showed that 83.74-96.92% of the surveyed interns did not have any problems with concluding an agreement on the chosen basis of the health care facility (HCF). The main obstacle in concluding the agreement was the lack of places for interns according to the chosen specialty. This problem was faced by 16.04 [12.82-19.55]% of interns of the specialty “Medicine”, “Pediatrics”, 4.44 [1.63-8.55]% of interns of the specialty “Dentistry” and 3.08 [0.30-8.61]% of interns of the specialty “Pharmacy”. And only one (0.22 [0-0.86]%) of the surveyed interns in the specialty “Medicine”, “Pediatrics” when concluding an agreement on the chosen basis had difficulties related to the place of registration / residence.

The ability to change the base of HCF at the request of the intern is important for 77.36 [73.41-81.09]% of interns majoring in “Medicine”, “Pediatrics”, 71.85 [63.99-79.09]% of interns majoring in “Dentistry” and 60.00 [47.91-71.50]% of interns majoring in “Pharmacy”.

According to 81.54 [71.27-89.95]% of interns in the specialty “Pharmacy” and 39.56 [35.12-44.09]% of interns in the specialty “Medicine”, “Pediatrics”, being assigned to one physician on the basis of a HCF/pharmacy supervisor is the best option for the practical training in the internship. While 56.30 [47.88-64.53]% of interns in the specialty “Dentistry” have a desire to work and gain experience from different physicians, without being assigned to any of them. Meanwhile, 86.15–97.78% of the interns would like to be able to choose a mentor-physician/curator.

The results of analysis of the respondents’ answers allowed us to determine that 67.69 [63.33-71.91]% of interns majoring in “Medicine”, “Pediatrics” are not against night shifts in specialized departments of hospitals. Meanwhile, 52.59 [44.17-60.94]% of interns in the specialty “Dentistry” want to work night shifts in specialized departments. However, 78.46 [67.73-87.52]% of “Pharmacy” interns do not want to work night shifts during the internship, only day work.

The survey revealed the desire of interns majoring in “Medicine”, “Pediatrics” (74.07 [69.94-77.99]% of interns) and “Dentistry” (66.67 [58.52-74.34]% of interns) to further acquire the skills of all available methods of functional diagnosis in the hospital, respectively to the chosen specialty. One

hundred percent of interns majoring in “Pharmacy” would like to acquire skills in quality control of medicines in accordance with the requirements of the Pharmacopoeia.

Respondents of all specialties who took part in the survey believe that interns should help the physicians of the department to fill in accounting records for educational purposes. Respondents also expressed a desire to participate in consultations, general hospital meetings/councils, meetings (conferences) of the staff. According to 90.77-98.02% of respondents, the internship should follow the principle of European mobility.

The study which included the survey of the second group of respondents after completing the internship revealed that 65.45-88.24% of interns believe that the time given for theoretical training during the internship was enough. Respondents who took part in the survey were quite positive about the work of teachers during doing internship. In particular, the applicants claim that the teachers were open to communication and available for communication (according to 92.67-100.00% of interns), the teachers were competent and well versed in the teaching material (94.23-100.00% of respondents), as well as objectively and transparently assessed knowledge (89.53-93.68% of respondents).

Only 1.37 [0.44-2.82]% of interns majoring in “Medicine”, “Pediatrics”, 2.62 [0.84-5.35]% of interns majoring in “Dentistry” and 2.94 [0.29-8.24]% of intern majoring in “Pharmacy” encountered corruption of teachers during doing internship. However, none of the respondents specified the department or the teacher who would commit acts of corruption.

The study revealed that 71.98 [67.26-76.47]% of interns majoring in “Medicine”, “Pediatrics” and 76.47 [65.74-85.71]% of interns majoring in “Pharmacy” had the opportunity to influence teachers' choice of forms and methods of teaching, and “Dentistry” this figure accounts for only 47.64 [40.61-54.73]% of respondents. The interns also testified that they had the opportunity to make suggestions and complaints during the training process. This is the answer of 84.34 [80.43-87.89]% of interns majoring in “Medicine”, “Pediatrics”, 80.88 [70.76-89.27]% of interns majoring in “Pharmacy” and 64.92 [58.03-71.52]% of interns majoring in “Dentistry”.

The results of subjective assessment of the interns level of the acquired knowledge showed that 88.24 [79.57-94.75]% of interns in the specialty “Pharmacy” are completely satisfied with the level of initial knowledge obtained in the full-time course of the internship. While in the specialties “Medi-

cine”, “Pediatrics” and “Dentistry” only 58.24 [53.14-63.26]% and 54.45 [47.37-61.44]% of interns respectively are completely satisfied.

It was found that 54.41-62.91% of interns of all specialties after completing the full-time internship cycle assess their knowledge as “good”, 27.75-39.71% assess their knowledge as “excellent”, and 4.95-13.09% of interns assess their knowledge as “satisfactory”. This assessment is confirmed by the score of the State certification in 92.67% of cases.

By the answers of interns of all specialties the most effective form of internship is practical classes and conferences for interns/interns-pharmacists, while the least effective form is independent work. The full-time internship cycle allowed interns majoring in “Medicine”, “Pediatrics” and “Dentistry” to acquire professional knowledge and skills related to clinical and differential diagnosis, and interns majoring in “Pharmacy” – to acquire knowledge and skills in providing pharmaceutical care and conducting pharmaco-economic analysis.

The main factors that prevented interns from mastering the professional knowledge, skills and abilities in the course of full-time internship cycle are limited opportunities for patients' follow-up on their own (which may also be associated with restrictive measures during the COVID-19 pandemic), material and technical equipment of the clinical base of the department and students' own inertia (Fig. 1).

The key factor that prevented the interns majoring in the specialties “Medicine”, “Pediatrics” and “Pharmacy” from acquiring professional knowledge, skills and abilities in the full-time internship is the limited opportunities for independent supervision of patients (48.90 [43.78-54.03]% and 42.65 [31.21-54.50]% of responses, respectively). Meanwhile, 57.59 [50.53-64.50]% of interns majoring in the specialty “Dentistry” note unsatisfactory facilities and resources of clinical bases of the department.

It is alarming that own inertia of 38.24 [27.12-50.01]% of interns in the specialty “Pharmacy” and 23.90 [19.67-28.41]% of interns in the specialty “Medicine”, “Pediatrics” did not allow to fully master the knowledge and skills in the course of the full-time cycle of internship. Unsatisfactory level of knowledge obtained in the full-time internship cycle is mentioned by 30.37 [24.06-37.06]% of “Dentistry” interns and 22.06 [13.08-32.61]% of “Pharmacy” interns. It is noteworthy that insufficient support of teachers is noted by 5.88-10.44% of respondents.

According to 92.65-95.33% of interns, at specialized departments enough time is allotted to prepare for the licensed integrated exam “Step-3”. However, based on self-assessment of their own

knowledge, interns believe that they have insufficient knowledge in the following disciplines: specialties “Medicine”, “Pediatrics” – in surgery, pharmacology; specialty “Dentistry” – in ortho-

dontics and orthopedic dentistry; specialty “Pharmacy” – in practical psychology and pharmaceutical chemistry.

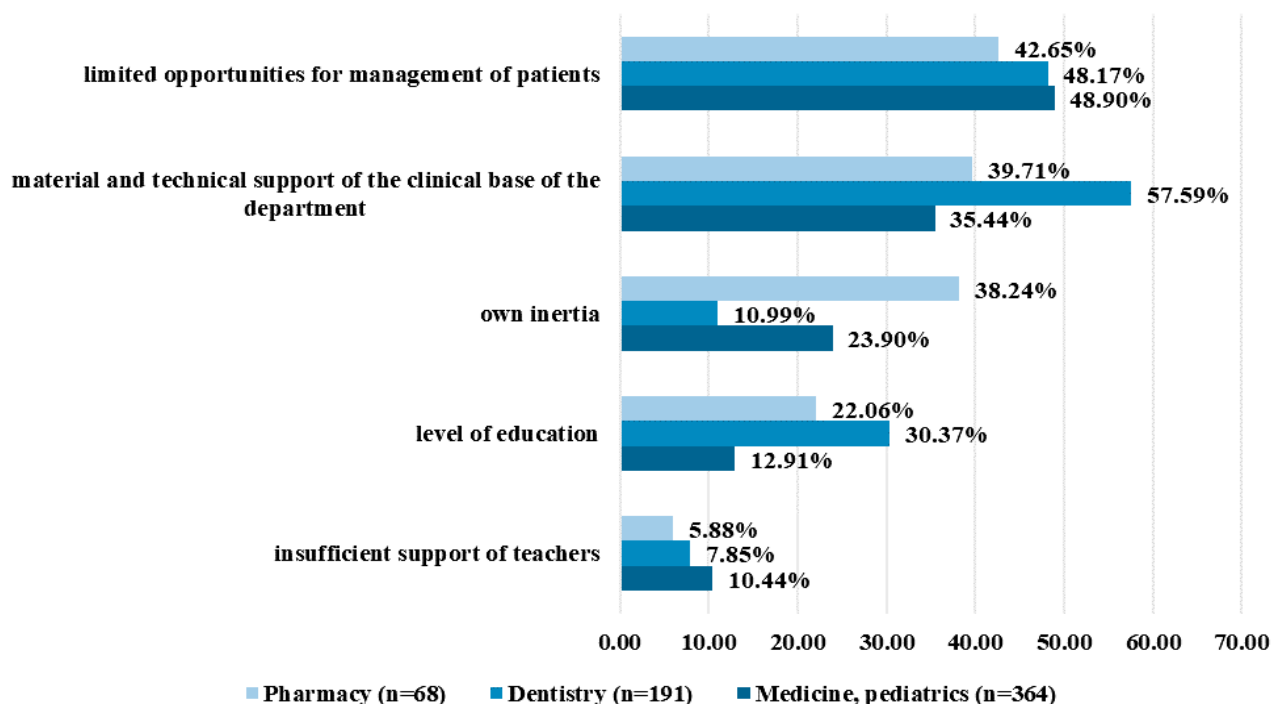


Fig. 1. Distribution of answers according to the factors that prevented the acquisition of professional knowledge, skills, abilities in the course of full-time internship cycle, % (the number of answers was not limited)

A sociological study found that 81.15-89.71% of surveyed interns-provisors and interns-pharmacists would advise their colleagues to do internship at Danylo Halytsky Lviv National Medical University.

The analysis of the results of the survey on the practical part of the internship showed that 75.00 [70.43-79.31]% of interns majoring in “Medicine”, “Pediatrics” and 67.65 [56.14-78.17]% of interns majoring in “Pharmacy” had full access to patients to the manufacture of extemporaneous drugs to acquire practical skills in relation to the chosen specialty. Only 47.64 [40.61-54.73]% of the “Dentistry” interns answered affirmatively about the availability of access to patients. Approximately one third of “Dentistry” interns (31.94 [25.53-38.71]%) had access to patients, but not to the desired extent, and 19.37 [14.09-25.27]% had access to only a few patients.

Respondents noted that all HCF doctors were friendly and answered all questions completely (71.73-91.18% of respondents believe so). Only 7.85 [4.47-12.08]% of “Dentistry” interns indicated that

they had to obtain all the necessary training information on their own to acquire full practical skills.

Respondents who were involved in practical activities and had the opportunity to fully acquire all the necessary practical skills for the selected specialty included 64.40 [57.49-71.02]% of interns majoring in Dentistry, 77.20 [72.75-81.36]% of interns majoring in “Medicine”, “Pediatrics” and 86.76 [77.75-93.71]% of interns majoring in “Pharmacy”. About 25% of “Dentistry” interns (24.08 [18.30-30.39]%) noted that they did not have the opportunity to acquire all the necessary practical skills in full, mainly due to the lack of necessary equipment in the hospital.

The study found that 64.56 [59.58-69.39]% of the interns of the specialties “Medicine” and “Pediatrics” had access to all the functional diagnostic methods available in the hospital, and they had the opportunity to acquire the skills of functional diagnosis in patients. Meanwhile, 63.24 [51.51-74.22]% of “Pharmacy” interns had the opportunity to acquire the skills of quality control of medicines

in accordance with the requirements of the Pharmacopoeia, as they had access to all available methods.

Every fourth intern majoring in "Dentistry" (24.08 [18.30-30.39]% of respondents) states that they did not have access to any methods of special diagnostics (radiography, electroodontometry, TER-test, etc.) available in the hospital. At the same time, 30.37 [24.06-37.06]% of interns of the specialty "Dentistry" acquired the basics of ultrasound diagnostics, and 29.41 [19.26-40.72]% of interns of the specialty "Pharmacy" acquired the basics of physical, chemical methods, organoleptic and written control.

71.73-73.63% of the respondents fully acquired the skills of filling in the necessary accounting and reporting documentation, 22.51-27.94% acquired the skills of filling in the documentation, but not all that is necessary for practical activities.

It was established that 84.07-97.06% of interns of the mentioned specialties note the absence of conflict situations during the practical course of the internship. At the same time, 2.62-8.52% of interns had conflicts with the head of the department (pharmacies); 2.62-2.75% of interns had conflicts with the physicians of HCF, and 2.09-3.30% of interns had conflicts with patients. Interns explain the existence of conflict situations with patients as being caused by the presence of the aforementioned patients in a state of intoxication and their inappropriate behavior.

The study found that 73.90-95.59% of interns are completely satisfied with the organization of work of physicians-interns, provisors-interns on the basis of HCF / pharmacies for doing the practical course of the internship (Table).

Distribution of answers regarding the organization of practical course of the internship on the basis of the HCF/pharmacy, %

Answers	Medicine, Pediatrics (n=364)	Dentistry (n=191)	Pharmacy (n=68)
Yes, completely satisfied	73.90 [69.27-78.28]	79.58 [73.59-84.98]	95.59 [89.47-99.14]
Yes, although there were some shortcomings	20.33 [16.36-24.61]	16.75 [11.81-22.37]	4.41 [0.86-10.53]
No, bad organization of work was	5.77 [3.61-8.39]	3.67 [1.47-6.79]	0

Poorly arranged work whereas 20.33 [16.36-24.61]% of interns majoring in "Medicine", "Pediatrics", 16.75 [11.81-22.37]% of interns majoring in "Dentistry" and 4.41 [0.86-10.53]% of interns majoring in "Pharmacy" note certain shortcomings in the organization of the practical course of the internship on the basis of the HCF/pharmacy, namely: lack of supervision of patients, lack of practical activities, unsatisfactory material and technical equipment and lack of interest in the staff in the training of interns. At the same time, 5.77 [3.61-8.39]% of interns majoring in "Medicine", "Pediatrics" and 3.67 [1.47-6.79]% of interns majoring in "Dentistry" indicate poorly arranged work of interns on the basis of HCF.

The performed sociological study allowed to determine that 83.24 [79.24-86.90]% of interns majoring in "Medicine", "Pediatrics" and 95.59 [89.47-99.14]% of interns majoring in "Pharmacy" believe that the HCF/pharmacy in which they were doing internship can be recommended as a basis for training physicians/pharmacists in the relevant specialty, as they fully meet expectations and have a high level of training, while only 65.45 [58.57-

72.01]% of respondents majoring in "Dentistry" think so. On the other hand, 25.13 [19.25-31.51]% of interns majoring in "Dentistry" emphasize the need for certain corrective actions in the organization of work of interns on the basis of HCF, namely: to involve interns in health activity more and improve the base of material and technical equipment.

After completing internship, 57.42 [52.31-62.45]% of interns majoring in "Medicine", "Pediatrics", 59.16 [52.12-66.02]% of interns majoring in "Dentistry" and 82.35 [72.47-90.42]% of interns majoring in "Pharmacy" consider themselves to be fully prepared for independent health activity / in the sphere of pharmacy (Fig. 2).

Those who emphasize their readiness for independent practice at the superficial level (due to lack of sufficient competence in the necessary areas of activity) account for 40.11 [35.14-45.19]% of interns majoring in "Medicine", "Pediatrics", 34.03 [27.49-40.89]% of interns majoring in "Dentistry" and 14.71 [7.36-24.04]% of interns majoring in "Pharmacy". At the same time, 2.47-6.81% of the interns surveyed consider themselves not ready for independent practical activities.

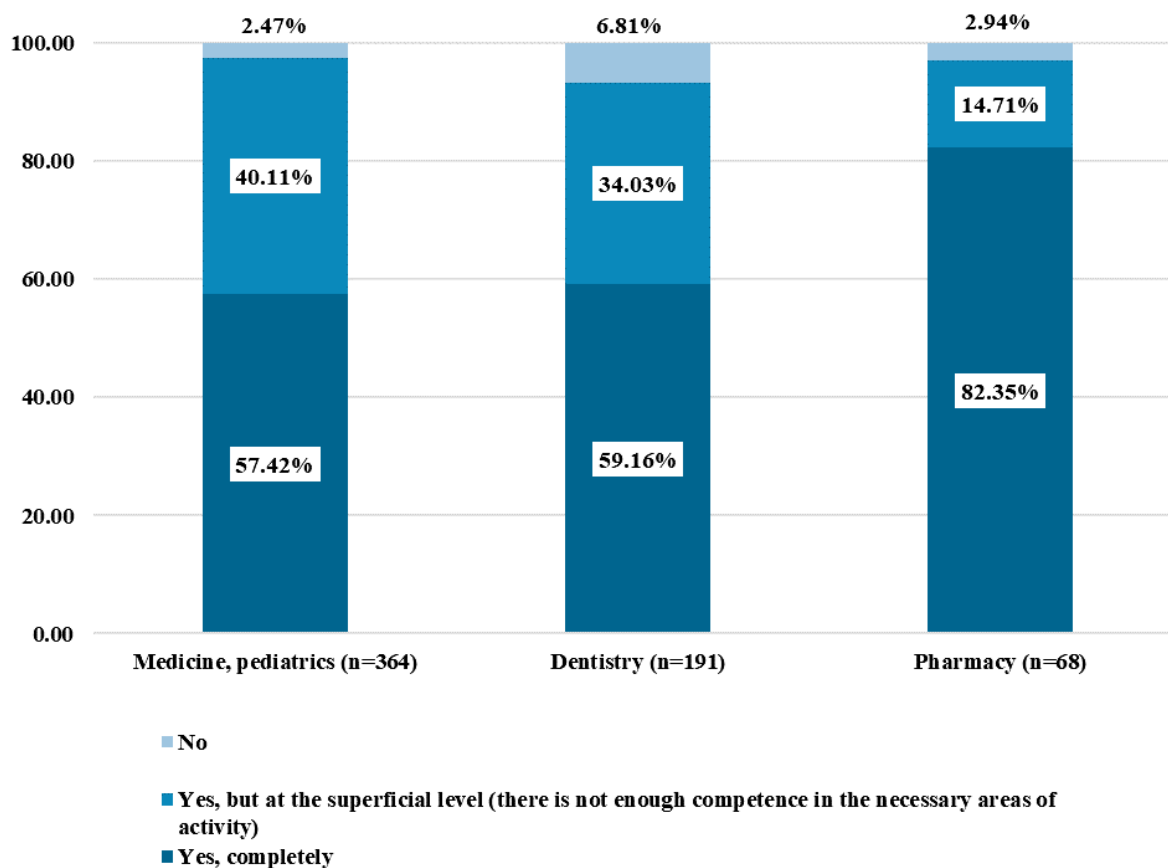


Fig. 2. Distribution of answers regarding the readiness for independent health activity / in the sphere of pharmacy, %

Interns-physicians and provisors made suggestions as for improving the organization of the educational, professional and scientific process in the course of primary specialization (internship). According to interns, the ideal model of internship should be available, such that would provide the optimal amount of theoretical knowledge and relevant practical skills and would be as relevant to the future work of the physician as possible. It should involve the work of an intern in a team with doctors to acquire skills of diagnosis and treatment, as well as training according to the levels of complexity (from elementary to the most difficult). Primary specialization (internship), according to interns, should be maximally adapted to the probable desire of the intern. Applicants emphasize the qualitative component of obtaining postgraduate medical education: the use of new treatment protocols, training in HCF of the tertiary level of medical care, the possibility of internships abroad.

The assessment of the satisfaction of interns with internship is within the interests of the international scientific community. Based on a number of studies

the following factors, which affect the overall satisfaction of interns with internship can be identified:

- direction of activity, training services, mentorship, relationships with supervisor and hospital activities [5];

- feeling supported in the workplace, getting quality supervision, teaching and clinical practice [6].

Mirsaleh Y.R. et al. [8] in their study found that religiosity, problem-focused activity and general self-efficacy were characterized by significant positive correlation with satisfaction with clinical internship in students-rehabilitation specialists.

In its turn, the reasons for dissatisfaction among interns are the following:

- poor access to a health administrator, excessively stressful situations at work, lack of support for mental health and well-being, and poorly organized educational process [6];

- poor infrastructural support from institutions, excessive workloads and inadequate supervision [9].

Attention is also focused on the study of supervision during the internship. Stolarski et al. studying

the challenges faced by interns-surgeons during the course of their internship determined that most of interns-surgeons selected senior faculty members for mentoring on career planning, clinical training, and research [10]. Interns-surgeons relied on junior faculty members only in discussing work-life integration. Gender as well as mentor career status/prestige were both the highest rated factors in selection of a mentor.

CONCLUSIONS

1. The study revealed that the most effective form of internship training, according to interns of all specialties, are practical classes and conferences for physicians-interns / pharmacists-interns; the least effective form is independent work.

2. The main factors that prevented interns from mastering the professional knowledge, skills and abilities were established: limited opportunities for independent management of patients (which may also be associated with restrictive measures in the COVID-19 pandemic), material and technical equipment of the clinical base of the department and their own inertia.

3. The study also identified some shortcomings in the organization of the practical part of the intern-

ship on the basis of hospital / pharmacies, namely: lack of patient supervision, lack of practical activities, unsatisfactory facilities and resources and disinterest of the staff in training interns.

4. The results of this sociological survey of physicians (provisors)-interns regarding their satisfaction and fulfilment of their expectations will be used in the development of an optimized Model of postgraduate education of doctors/provisors in Ukraine, the ultimate goal of which is health preservation and improvement of the life expectancy of Ukrainian citizens.

Contributors:

Sichkoriz O.Ye. – conceptualization, investigation, data curation, writing – original draft, supervision, project administration;

Zimenkovsky A.B. – conceptualization, validation, writing – review & editing, project administration;

Gutor T.G. – methodology, formal analysis, visualization.

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