



A Survey about Pharmacy Technicians in Eskişehir

Eskişehir’de Eczane Teknisyenleri üzerine Bir Araştırma

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ABSTRACT

Purpose: In the current work, we aimed to carry out a research on the evaluation of pharmacy technicians from the perspective of pharmacists in Eskişehir.

Material and Methods: The pharmacists of this test were chosen by random sampling method and they were asked to answer the questionnaire. The data of this test was analysed with IBM SPSS Statistics 20 and Microsoft Excel programs in general and in subgroups, then those analysis were given in percentages and shown in graphs.

Results: This survey revealed the expectation of pharmacists from their pharmacy technicians associated with their duties in the pharmacy and properties, education levels, professional experience, knowledge about medicines and pharmacy procedures.

Conclusion: In this survey, similar results were obtained in general and in subgroups. Generally the most important part of pharmacy system for pharmacists is prescription and authorization system so they want pharmacy technicians to be most well-equipped in this field.

Key words: Pharmacist; Pharmacy Technician; Pharmacy

ÖZET

Amaç: Bu çalışmada, Eskişehir’deki eczacıların bakış açısından eczane teknisyenlerinin değerlendirilmesi üzerine bir araştırma gerçekleştirilmesi amaçlanmıştır.

Metod: Bu çalışmanın eczacıları tesadüfi örnekleme yöntemi ile seçilmiştir ve kendilerinden konu ile ilgili soruları yanıtlamaları istenmiştir. Araştırma sonucu elde edilen veriler IBM SPSS Statistics 20 ve Microsoft Excel programları ile genel olarak ve genel içerisinde gruplara göre analiz edilmiştir ve bu analizler yüzde oran olarak verilerek grafiklerle gösterilmiştir.

Bulgular: Bu çalışma, eczacıların eczane teknisyenlerinden eczanedeki görevleri ve özellikleri, eğitim düzeyleri, tecrübeleri, ilaçlar ve eczane prosedürleri hakkındaki bilgileri ile ilgili beklentilerini ortaya koymuştur.

Sonuç: Bu anket çalışmasında, genelde ve alt gruplarda benzer sonuçlar elde edilmiştir. Genellikle eczacılar için eczane sisteminin en önemli kısmı reçete ve provizyon sistemidir; bu yüzden eczane teknisyenlerinin en çok bu alanda donanımlı olmalarını istemektedirler.

Anahtar kelimeler: Eczacı; Eczacı teknisyeni, Eczane

INTRODUCTION

Pharmacists must possess specific knowledge, attitudes, skills and behaviours in support of their roles. The pharmacist's role has developed from the well-accepted one—where pharmacists used to compound and dispense medications—to a more complex one where the pharmacists play a key role in the pharmaceutical care of patients¹⁻³. Pharmacists all over the world are involved in patient contact and practice patient education and patient counseling to varying degrees⁴.

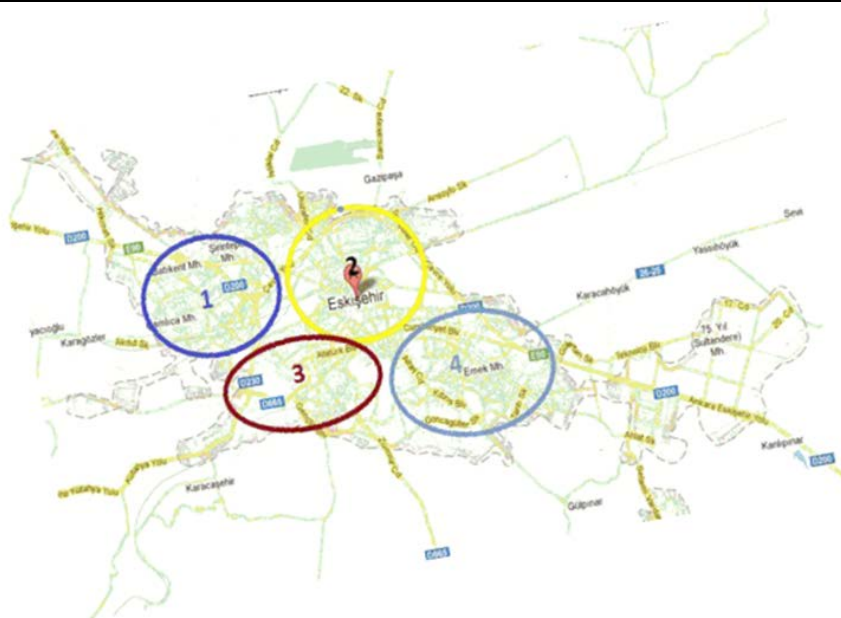
A pharmacy technician is described as a person who has been trained to assist in pharmacy activities that do not require the judgement of a pharmacist and who performs those activities under the supervision of a licensed pharmacist⁵. The pharmacy technician supplies appropriate support to the areas including prescription entry, patient scheduling and inventory control. Delegating these responsibilities to the technician helps the pharmacist to interact more extensively with patients and fulfill administrative duties. Pharmacists and pharmacy technicians have to work together with a cooperation to keep pharmacy system going on well⁶.

Depending upon the importance of the cooperation between pharmacists and pharmacy technicians as mentioned above, in this survey, expectations of pharmacists from pharmacy technicians were evaluated in Eskişehir.

MATERIALS and METHODS

The material of this survey was a questionnaire replied by 150 pharmacists representing four different sociocultural groups in Eskişehir (Table 1). This questionnaire form including 18 questions was filled out by pharmacists face-to-face interviews. All questions were asked to pharmacists to understand their general opinions, expectations from pharmacy technicians. In accordance with this work, it could be said that it was a descriptive and inquiring work. Data gained from this questionnaire was collected between September 2012 and June 2013 and this data was analyzed with IBM SPSS Statistics 20 and Microsoft Excel programs. IBM SPSS Statistics 20 is a statistical program which is used in academical search, questionnaire and reporting procedures⁷.

Pharmacies were divided into four areas according to their financial and sociocultural positions. Consequently, the second area was chosen as the most popular and wealthy area and contrary to this, the fourth area was chosen as the poorest and most unpopular area. The other two areas represent the moderate level of income and popularity. Pharmacies' financial and sociocultural positions were determined parallel to areas' economic and cultural positions. In all areas, the chosen pharmacies in same areas are located close to each other. The pharmacists of this test were chosen by random sampling method. In Table 1, each area was shown in a map and in these areas how many pharmacists participated in this survey was also shown.

Table 1. Four areas in a map and how many pharmacists participated in this survey.

Areas*	Participated Pharmacists
1st. Area	31
2nd. Area	65
3rd. Area	31
4th. Area	23
Total	150

*First area: Çamlıca, Batıkent, Şirintepe and Uluönder. Second area: Yenibağlar, İstiklal, Delikitaş and Şarhöyük. Third area: Büyükdere, Göztepe, Gültepe and Yıldıztepe. Fourth area: Emek, Çankaya, Yenidoğan, Erenköy.

RESULTS AND DISCUSSION

According to most of pharmacists, the pharmacy technicians' most important duty is meeting patients, presenting the prepared medicines which are in the prescription and informing patients how to use the drugs. A great majority of the pharmacists also think that the most important duty of a pharmacy technician is ordering the shelves and providing the pharmacy's

purity and layout. According to the first, second and third areas, most of them think that meeting patients, presenting the prepared medicines in the prescription and informing the patients how to use the drugs are the most important duties of pharmacy technicians, whereas in the fourth area with a little difference mostly they think that ordering the shelves and providing the pharmacy's purity and layout are the most important duties of pharmacy technicians (Fig 1).

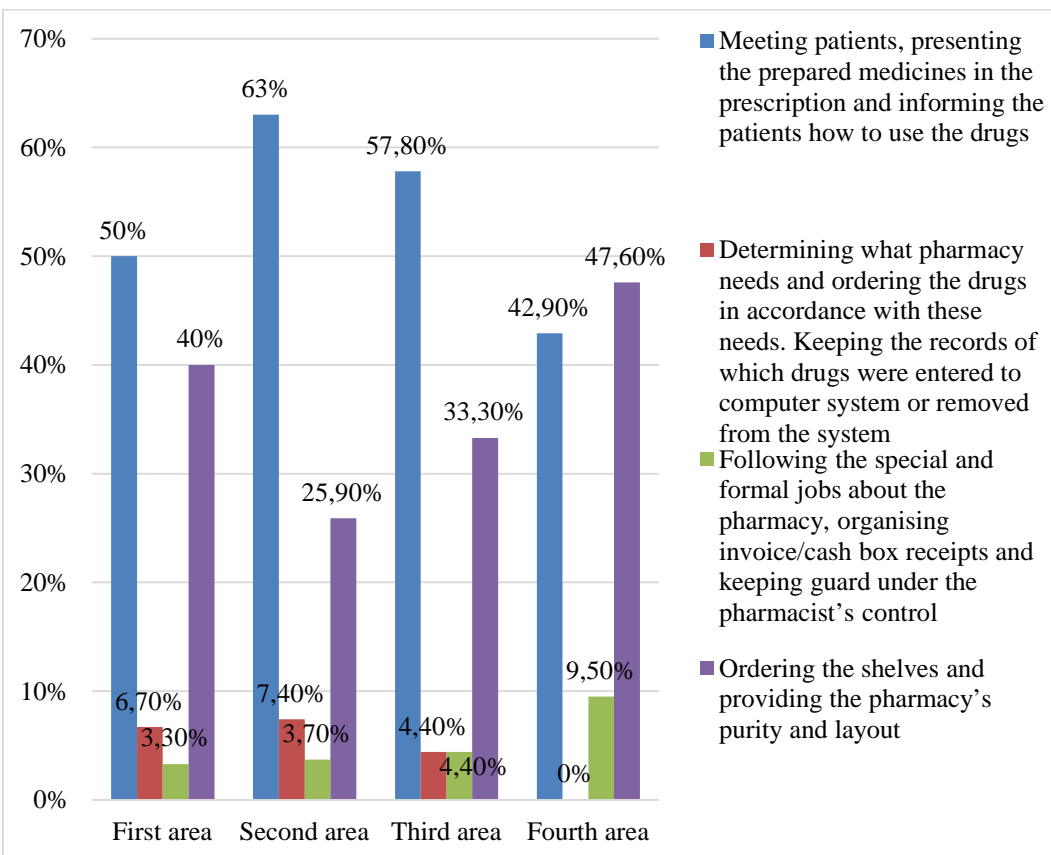
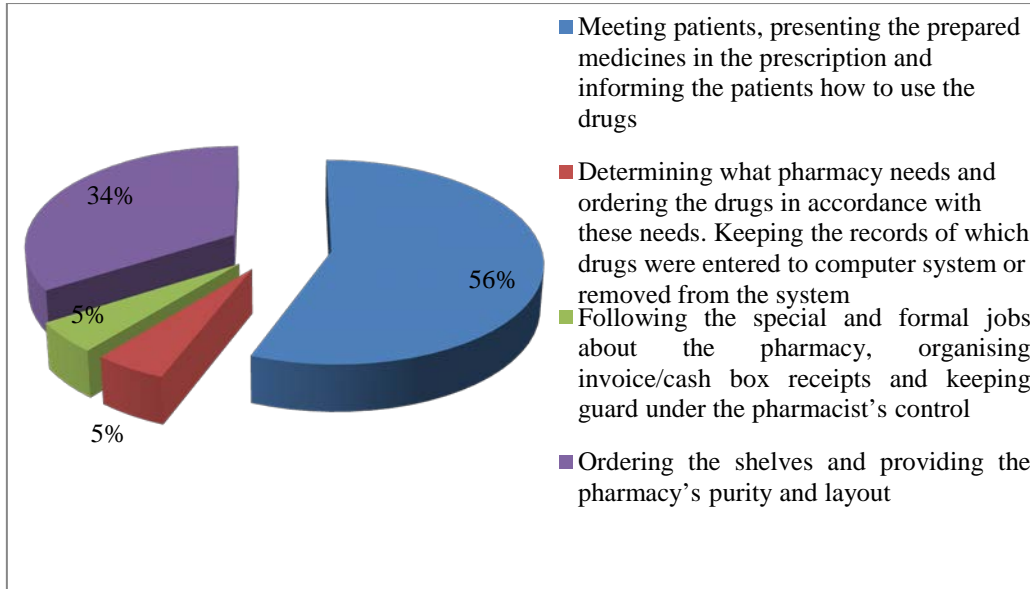


Figure 1. According to the pharmacists, pharmacy technician's most important duty.

Most of pharmacists think that pharmacy technician's most important property is being clean and tidy, having good communication with people, being cheerful and talented in team work. Some of them primarily think that pharmacy technicians must take a responsibility and they must be patient

and a few think first of all they have to be careful and organised. As a proportional distribution to areas, same results can be observed. In all areas, pharmacists primarily think that they must be clean, tidy, cheerful, talented in team work and have good communication with people (Fig 2).

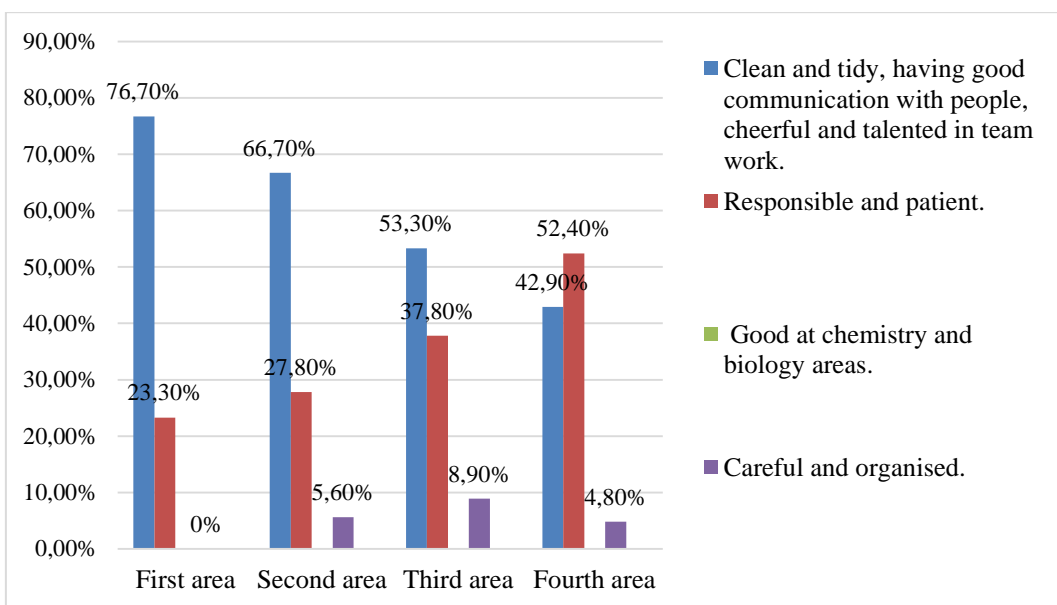
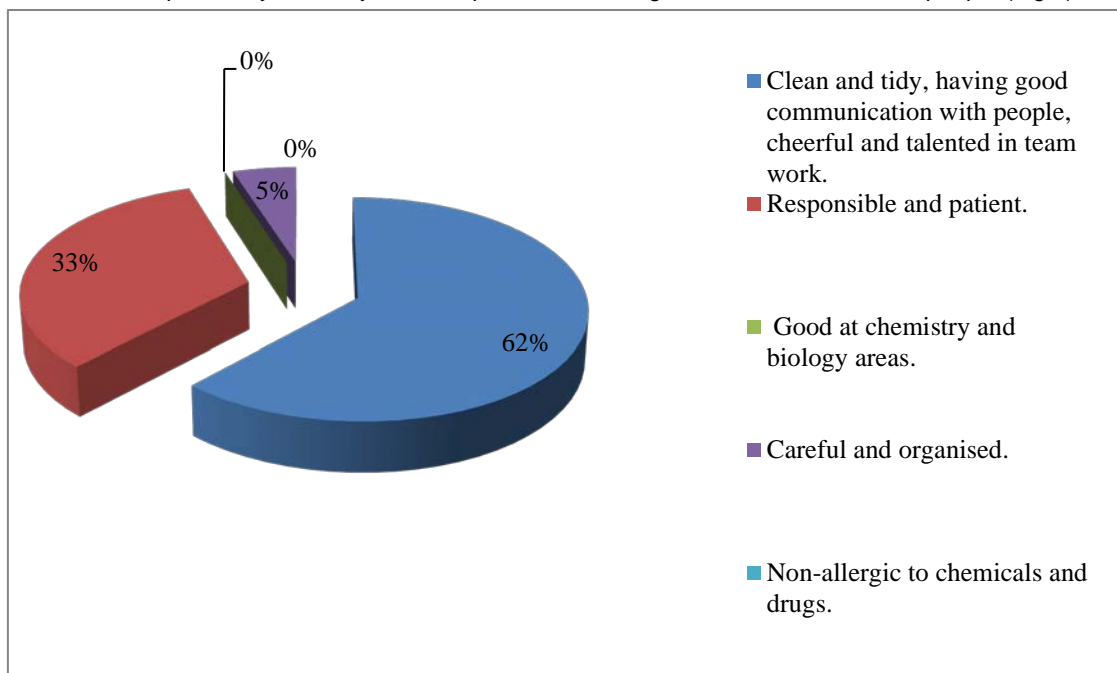


Figure 2. According to the pharmacists, pharmacy technician's most important property.

About the pharmacy technicians' education, some of the pharmacists think that they must go to some courses given by Turkish Pharmacists' Association (TEB) and learn the job's procedure in master-apprentice relationship. Most of them think that they can go to a vocational school of higher

education and a few of the pharmacists think that they can go to a vocational high-school and finally a few of them think they can be educated with a distance education program. In all areas, mostly pharmacists think they must go to a vocational school of higher education (Fig 3).

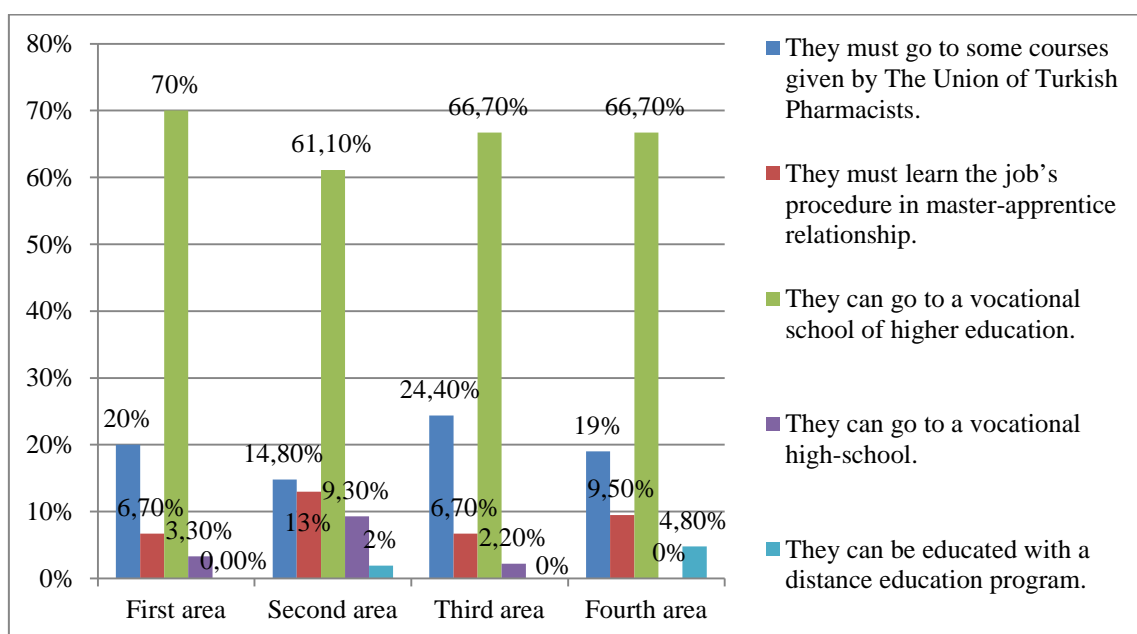
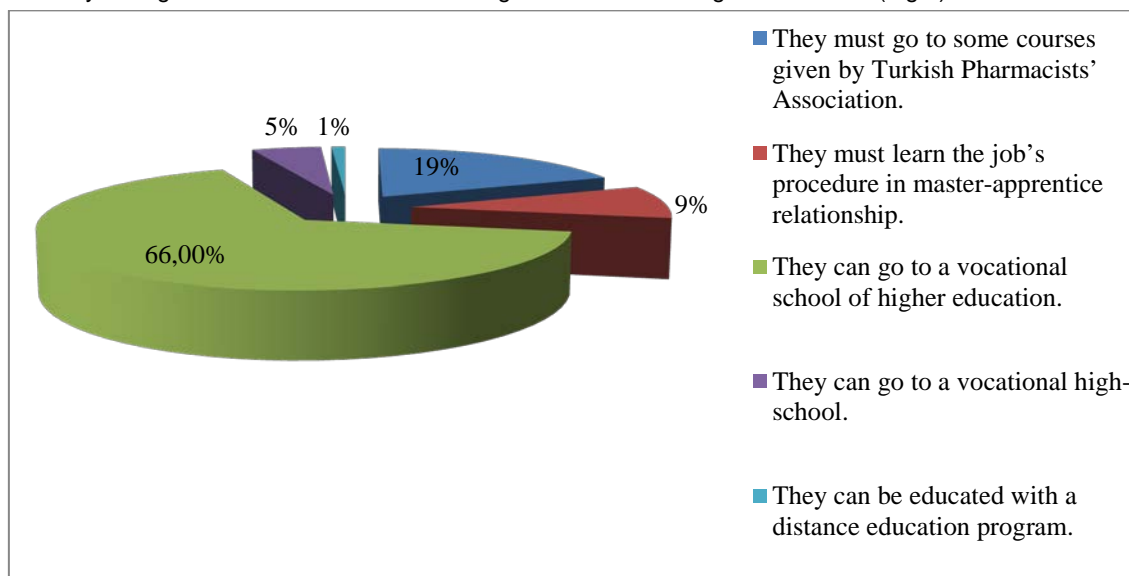


Figure 3. According to the pharmacists, where pharmacy technicians must be educated.

As far as pharmacists' opinions about pharmacy technicians' professional experience, most of participants think that it is important all the time, just a few of them think that it is never important. In all areas, mostly they think that it is always important (Fig 4).

In accordance with this subject in general,

pharmacists think that pharmacy technicians have to work more than seven years to get experienced. Mostly in second and third areas, pharmacists think that technicians have to work more than seven years; in first and fourth areas pharmacists think that they have to work between six and seven years to get experienced (Fig 5).

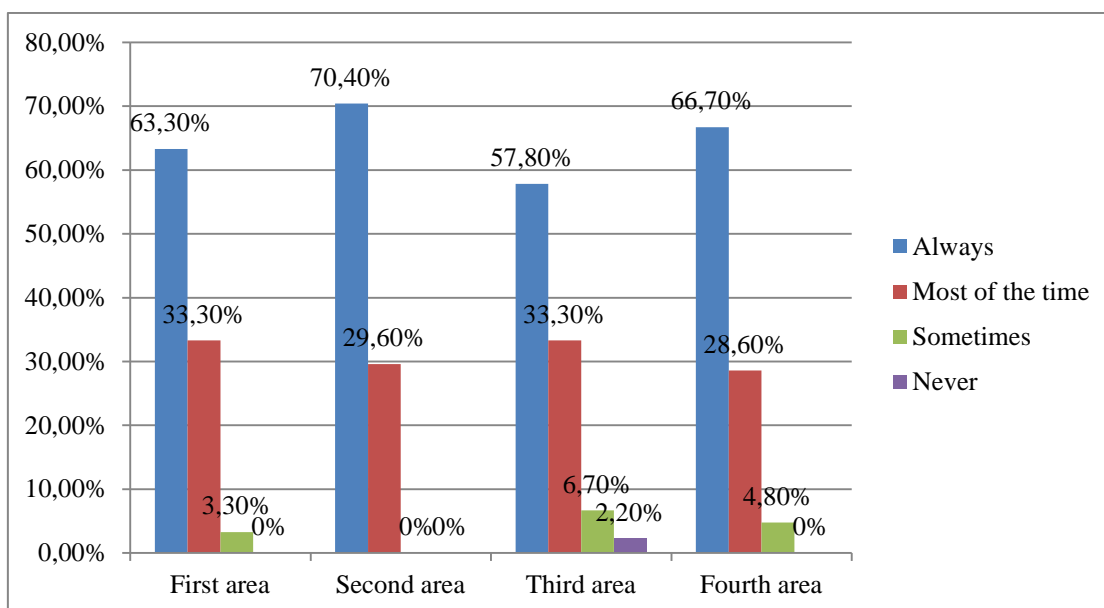
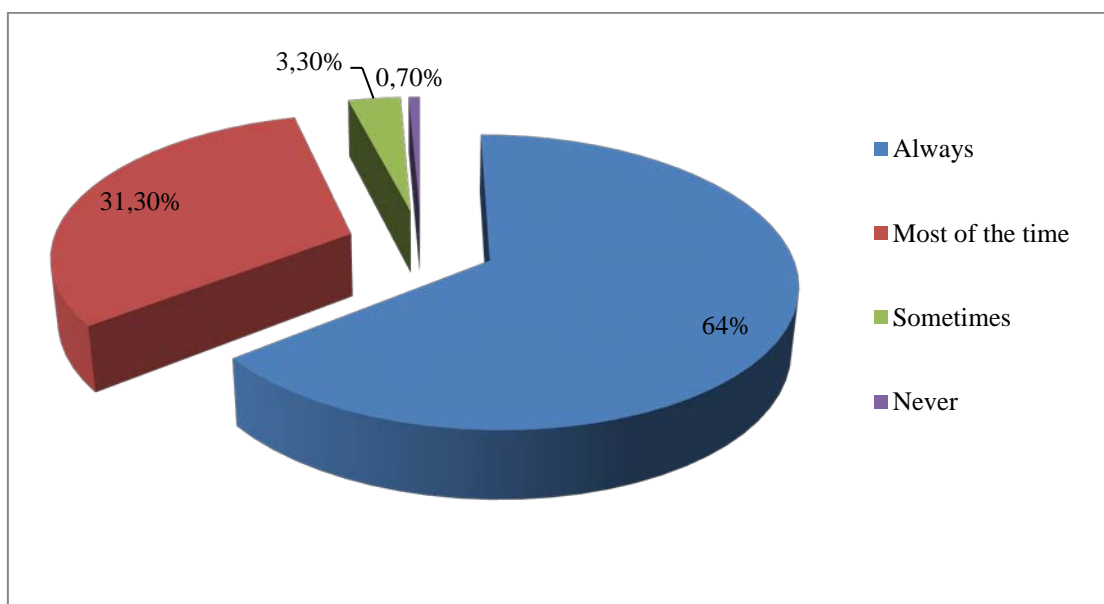


Figure 4. According to the pharmacists in the survey, the importance of pharmacy technicians' professional experience.

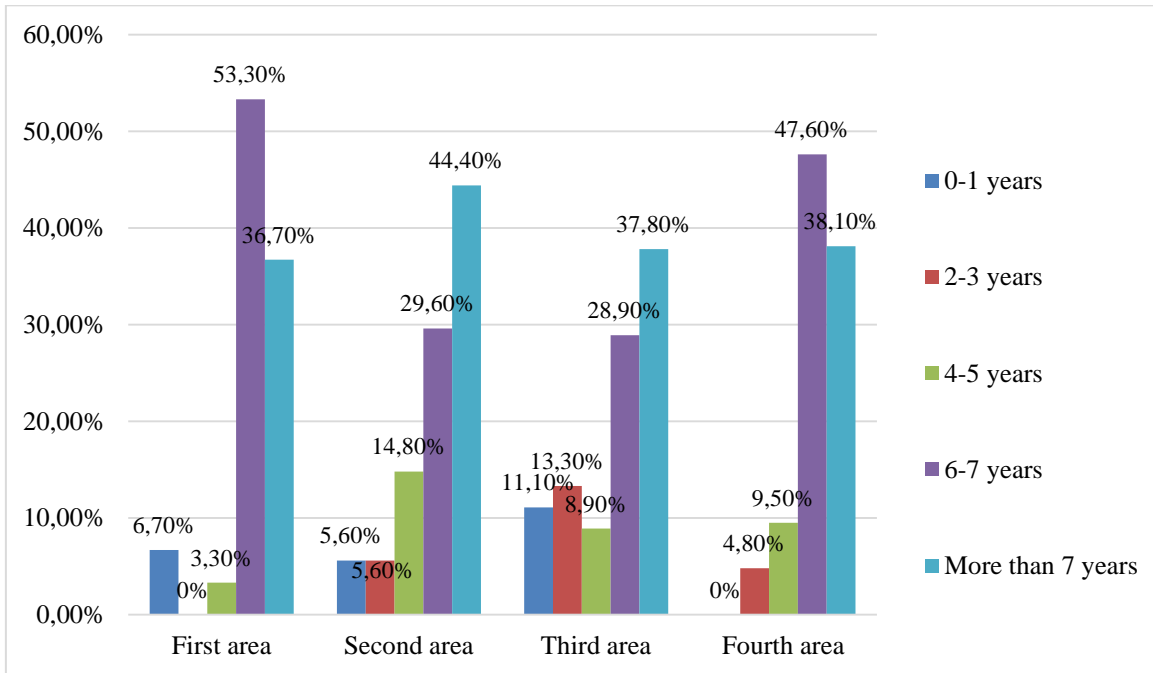
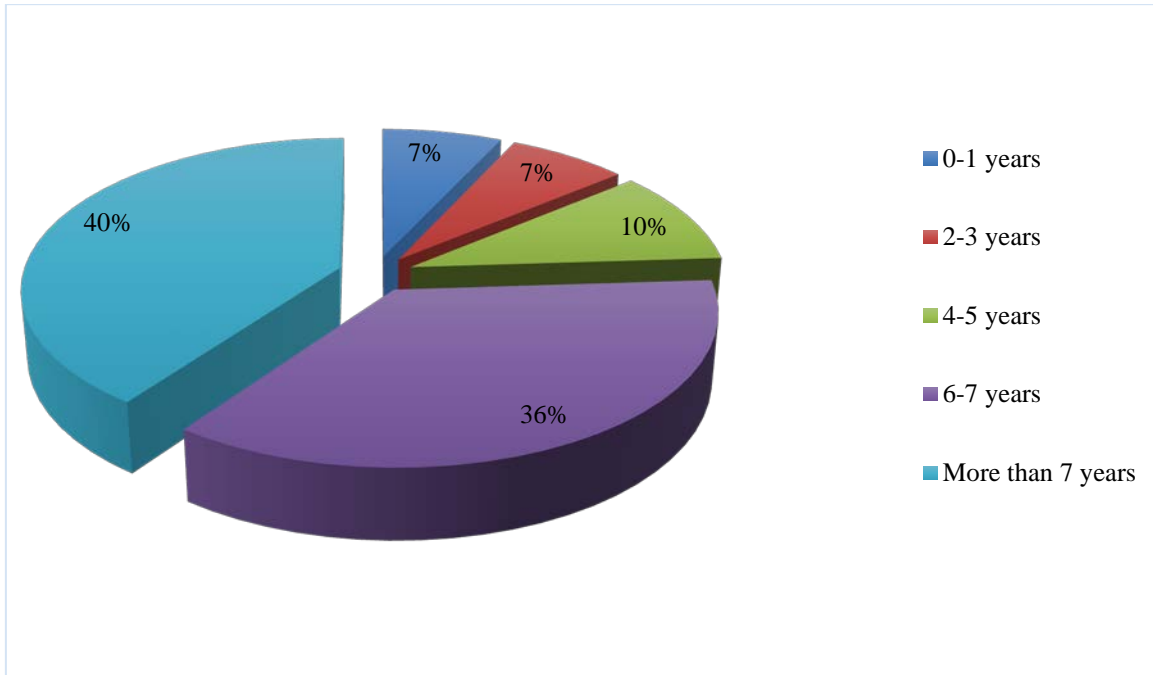


Figure 5. According to the pharmacists in the survey, how many years pharmacy technicians have to work to get experienced.

Pharmacists mostly think that there are some fields of pharmacy that their pharmacy technicians do not have enough information about. As a

distribution to areas, same result can be seen (Fig 6).

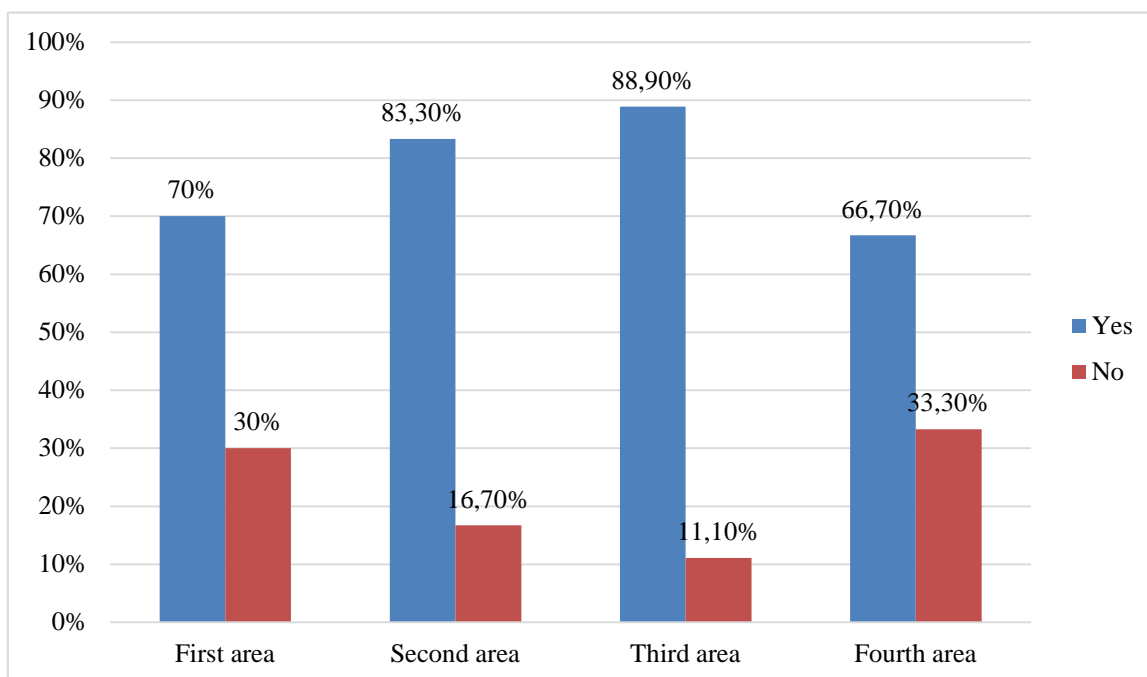


Figure 6. According to the pharmacists in the survey, whether there are some fields of pharmacy that their pharmacy technicians do not have enough information about or not.

In a pharmacy system, mostly pharmacists think that pharmacy technicians have to be most well-equipped in prescription and authorization

system in general. As a distribution to areas, same result can be obtained with a huge difference (Fig 7).

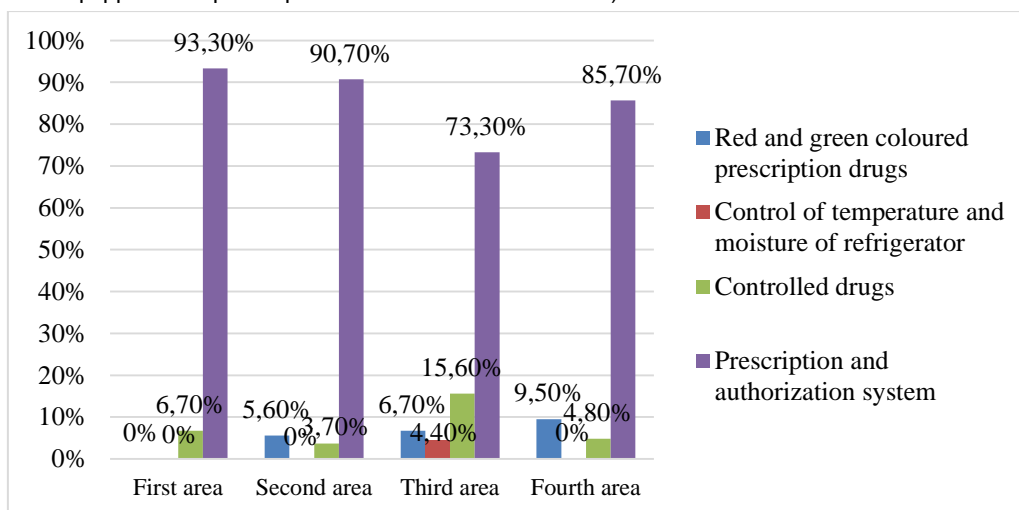


Figure 7. According to the pharmacists in the survey, pharmacy technicians have to be most well-equipped in which part of pharmacy system.

Pharmacists want pharmacy technicians to be well-informed in drug interactions and side-effects of medicine mostly. Some of them think that they must be well-informed about cosmetic-perfumery

mostly. According to distribution of areas; in all areas they want pharmacy technicians to be knowledgeable in drug interactions and side-effects mostly (Fig 8).

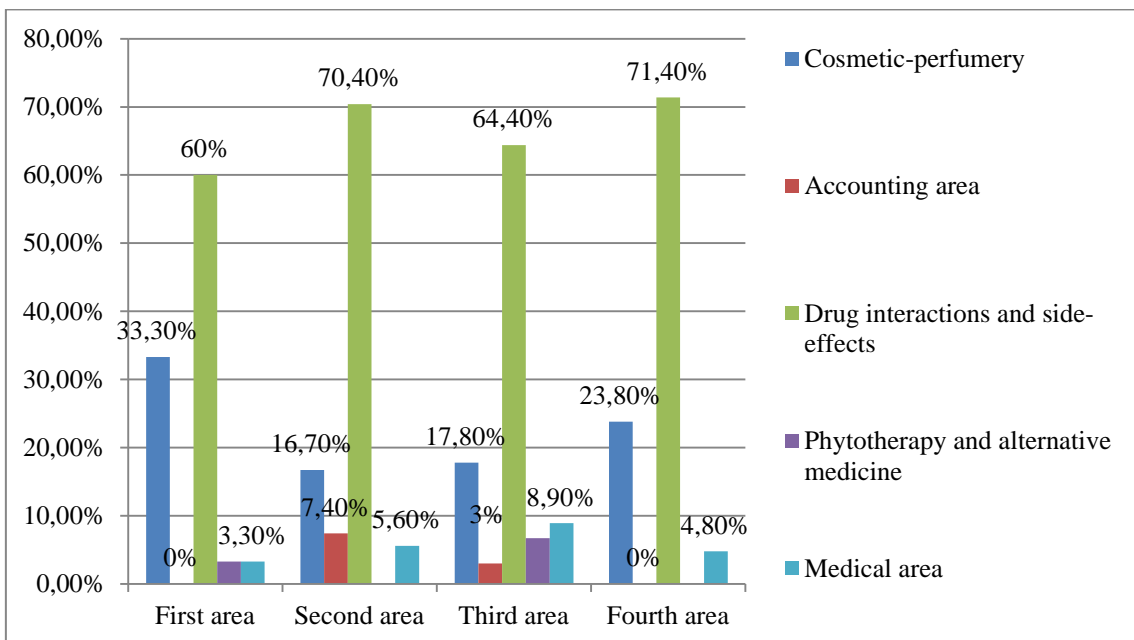
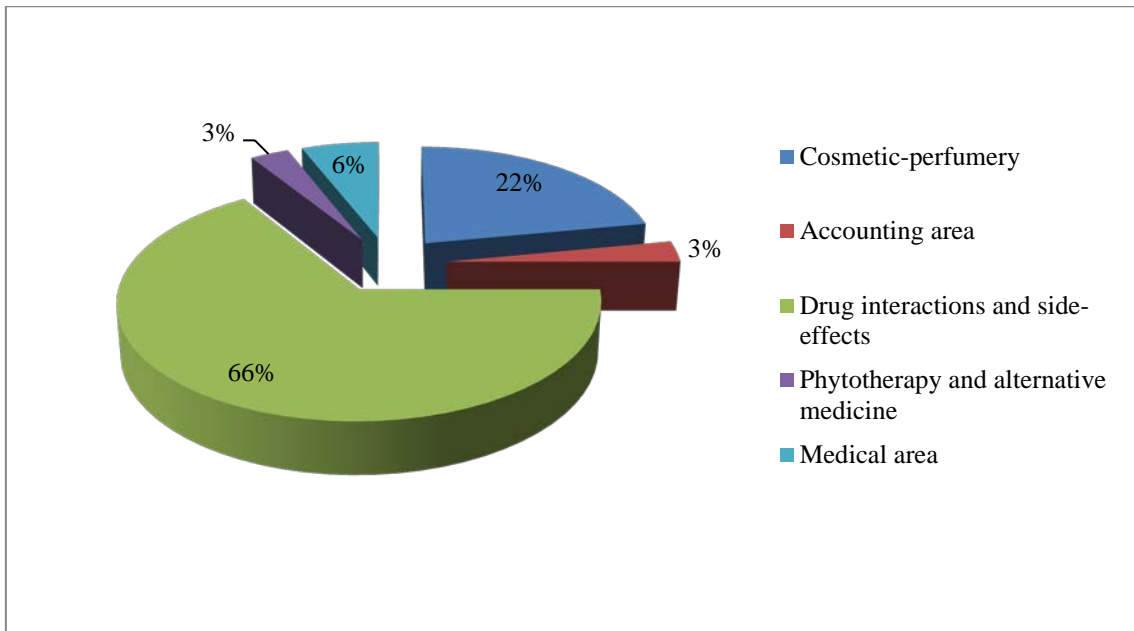


Figure 8. According to the pharmacists in the survey, they want pharmacy technicians to be most well-informed in which part of medicine.

Pharmacists find pharmacy technicians mostly inadequate in medical part of medicine, then in the field of cosmetic-perfumery, phytotherapy-alternative medicine finally in drug interactions-side effects part, respectively. According to four areas, different results are observed. In the first and second areas, most of

pharmacists think that pharmacy technicians are inadequate in medical part, whereas in the third area most of them think that pharmacy technicians are inadequate in cosmetic-perfumery and medical parts and in the fourth area in cosmetic-perfumery and phytotherapy-alternative medicine parts (Fig 9).

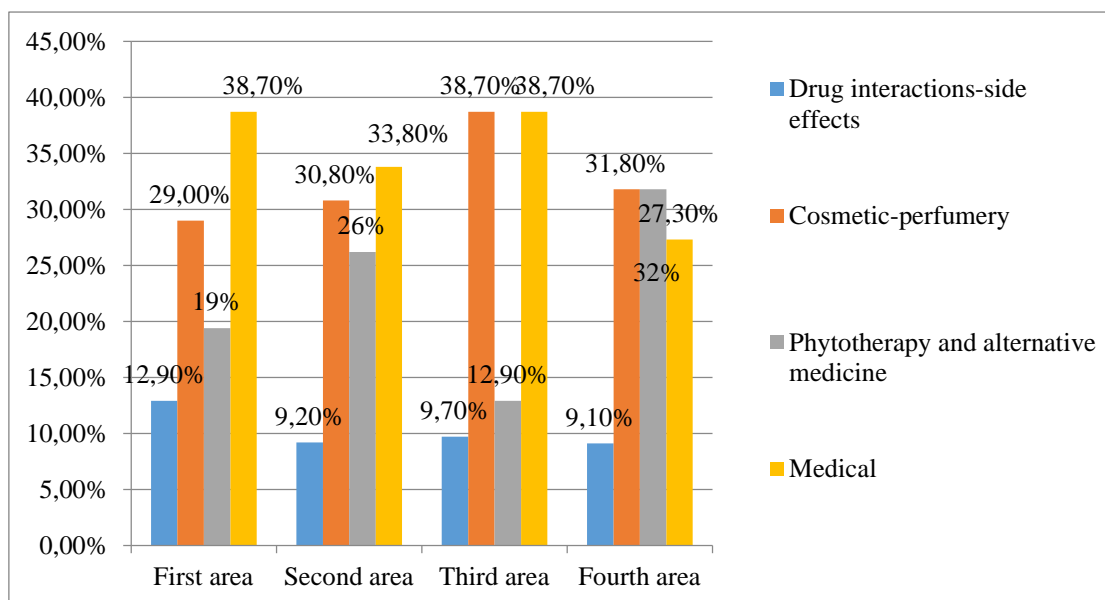
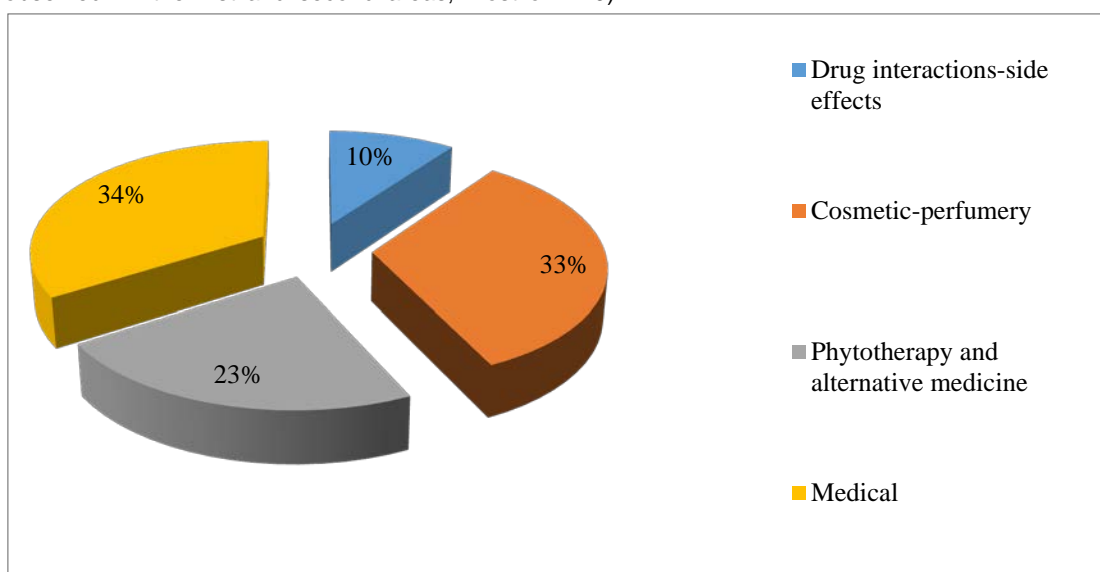


Figure 9. According to the pharmacists in the survey, they think that mostly pharmacy technicians are inadequate in which part of medicine.

In general, pharmacists need two pharmacy technicians in their pharmacies mostly. According to the survey, all pharmacists need at least one

pharmacy technician. As a proportional distribution to areas, in all areas they need two pharmacy technicians mostly (Fig 10).

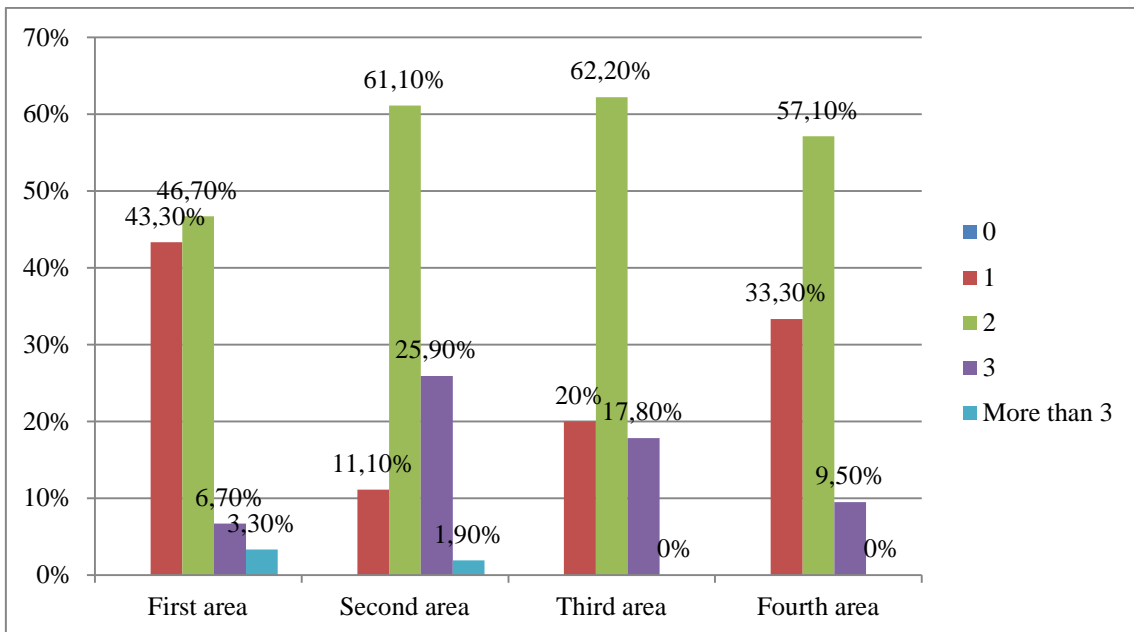
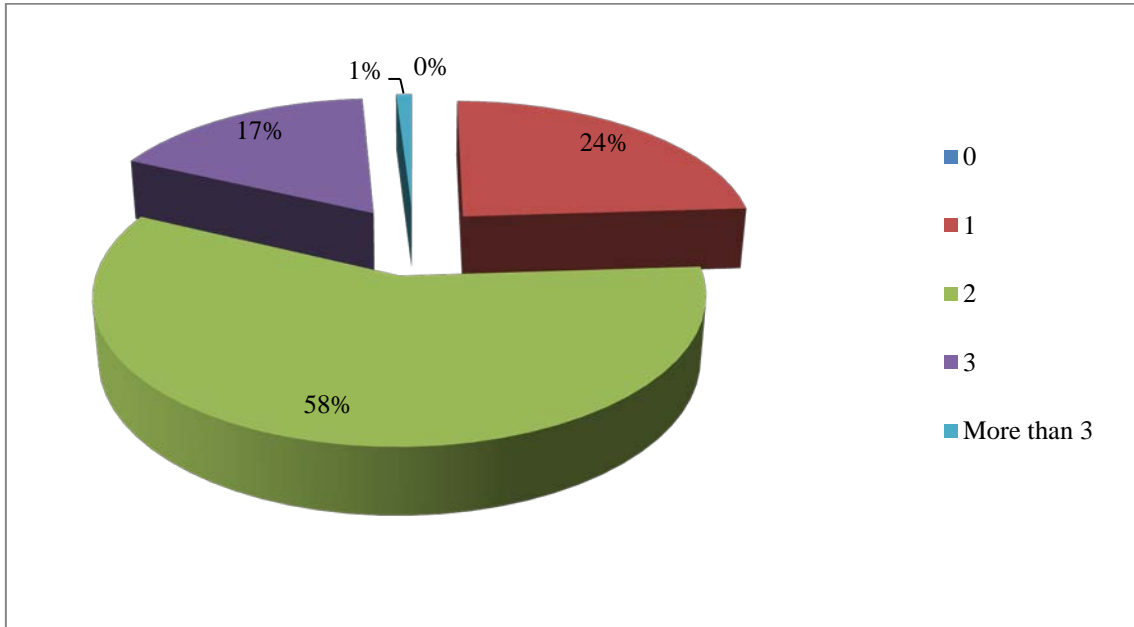


Figure 10. According to the pharmacists in the survey, how many pharmacy technicians they need in their pharmacies.

Most of pharmacists want their pharmacy technicians to be around 18 years old, most of

them want pharmacy technicians to be around 25 years old. Mostly pharmacists in the first and fourth

areas think that around 25 years old is good to work for them and in other areas pharmacists think that around 18 years old is good. Generally, they

want to work with young pharmacy technicians (Fig 11).

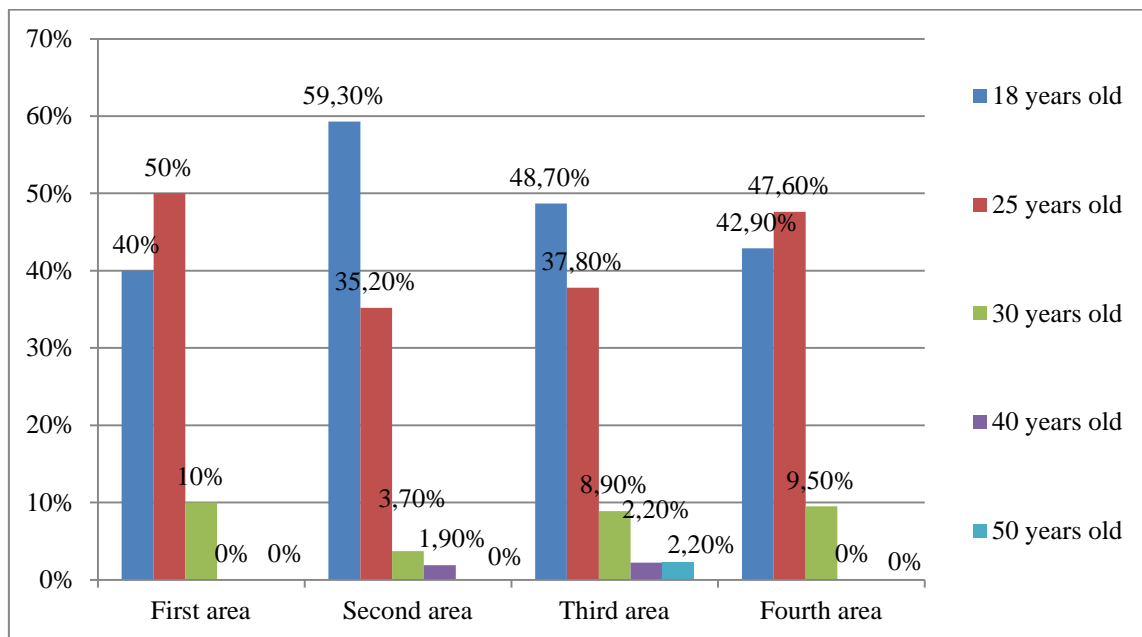
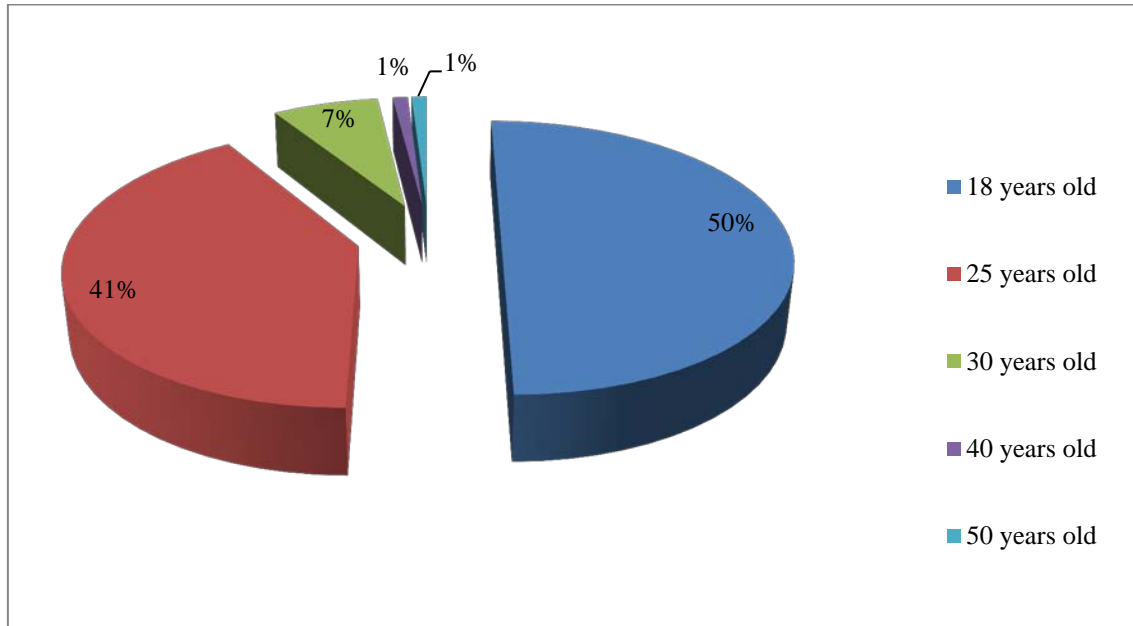


Figure 11. According to the pharmacists in the survey, how old pharmacy technicians must be.

According to the pharmacists in the survey, mostly the gender of pharmacy technicians is

sometimes important but some of them think that it is important most of the time (Fig 12).

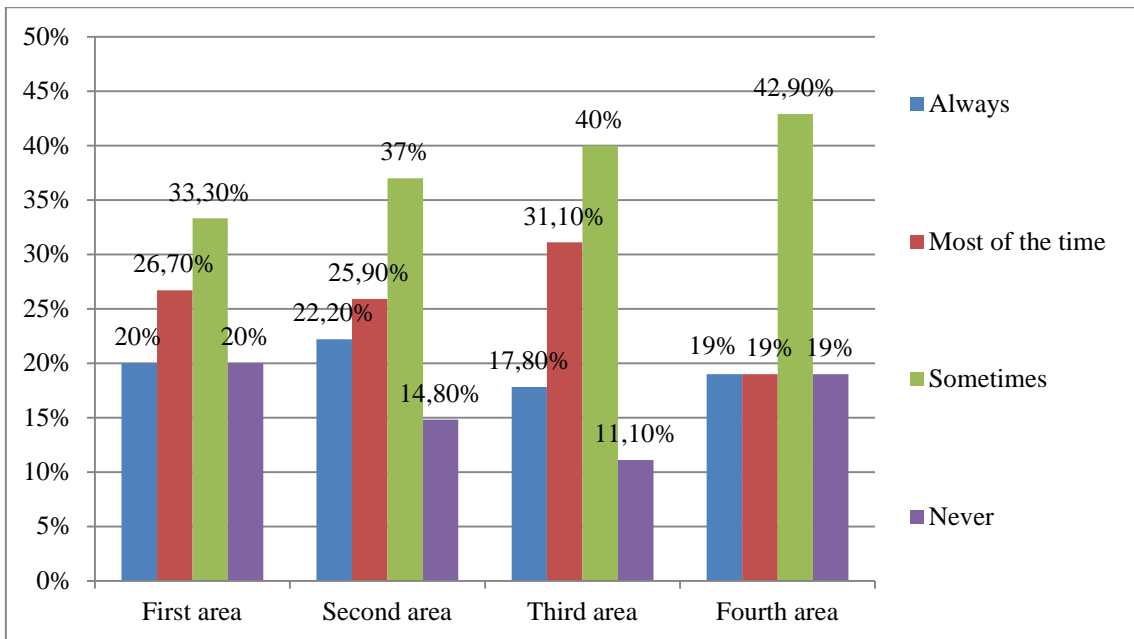
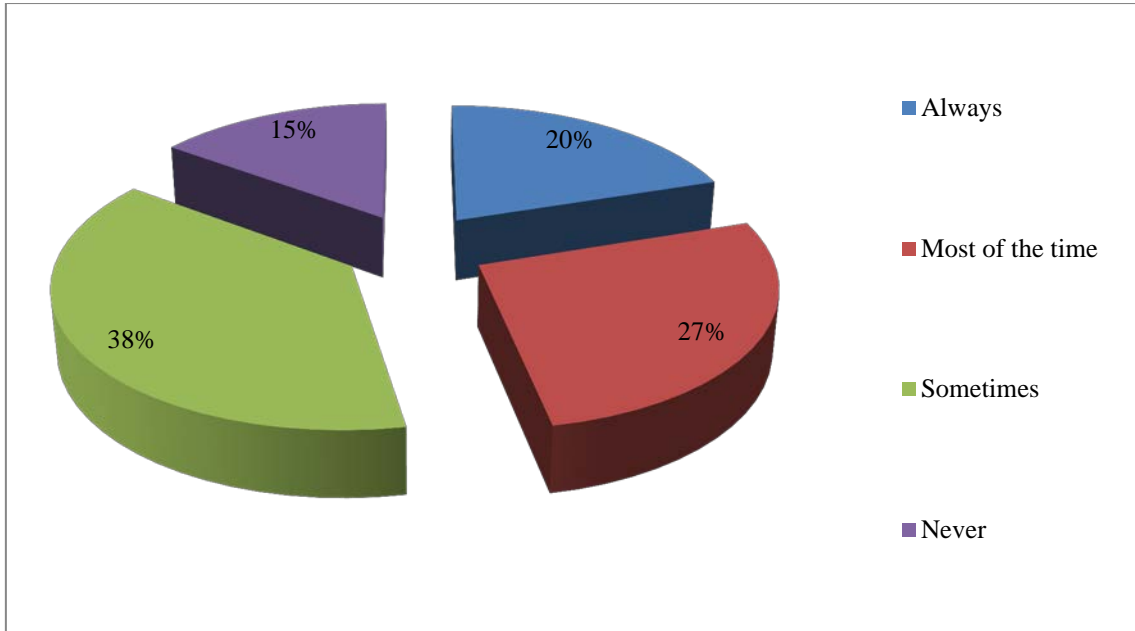


Figure 12. According to pharmacists in survey, the importance of gender of pharmacy technicians.

In general, 52% of pharmacists in the survey think that female pharmacy technicians are important for some conditions (Fig 13), whereas

62% of pharmacists in the survey think that male pharmacy technicians are necessary for some conditions (Fig 14).

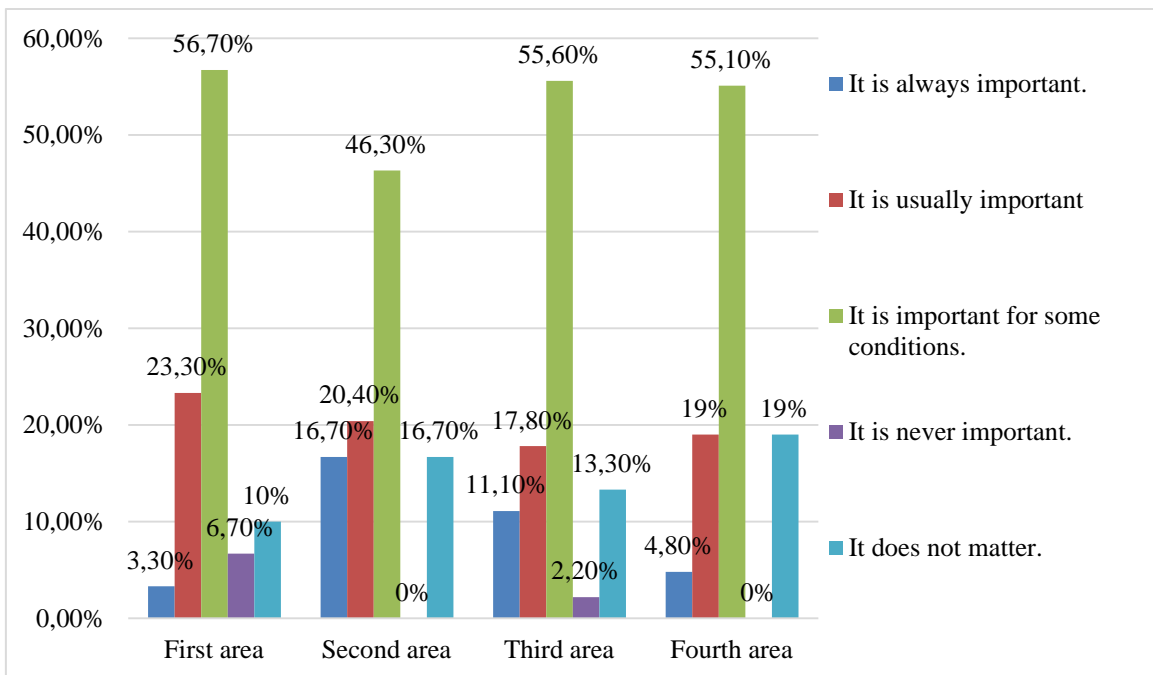
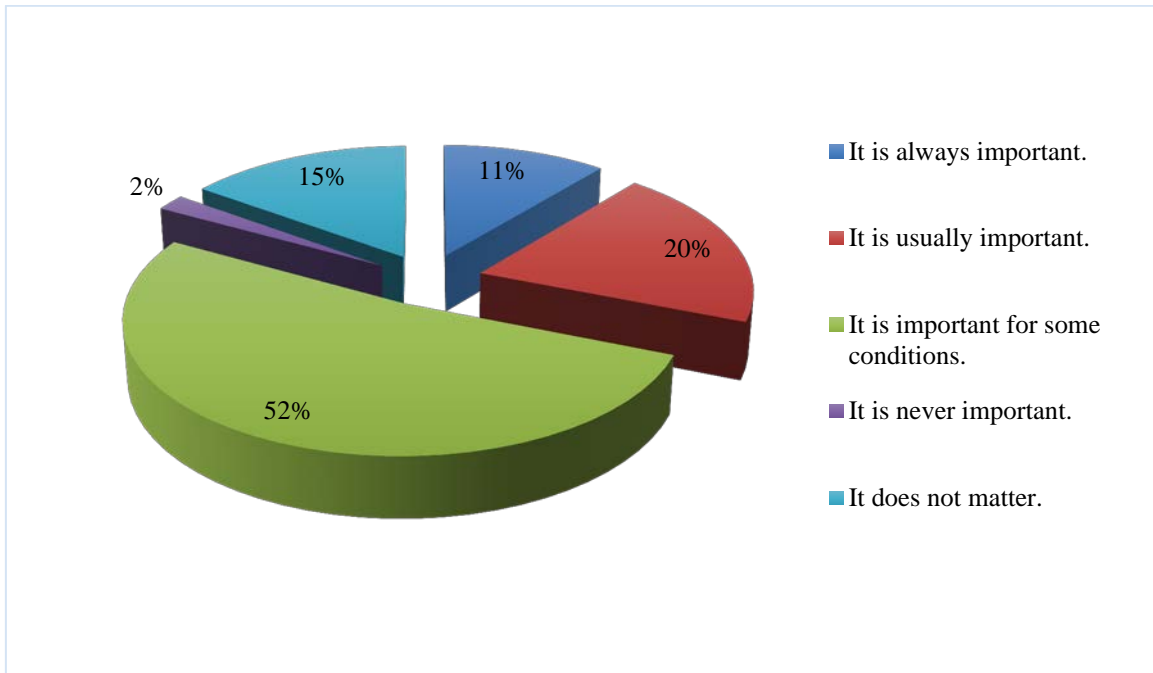


Figure 13. According to the pharmacists in the survey, the importance of female pharmacy technicians.

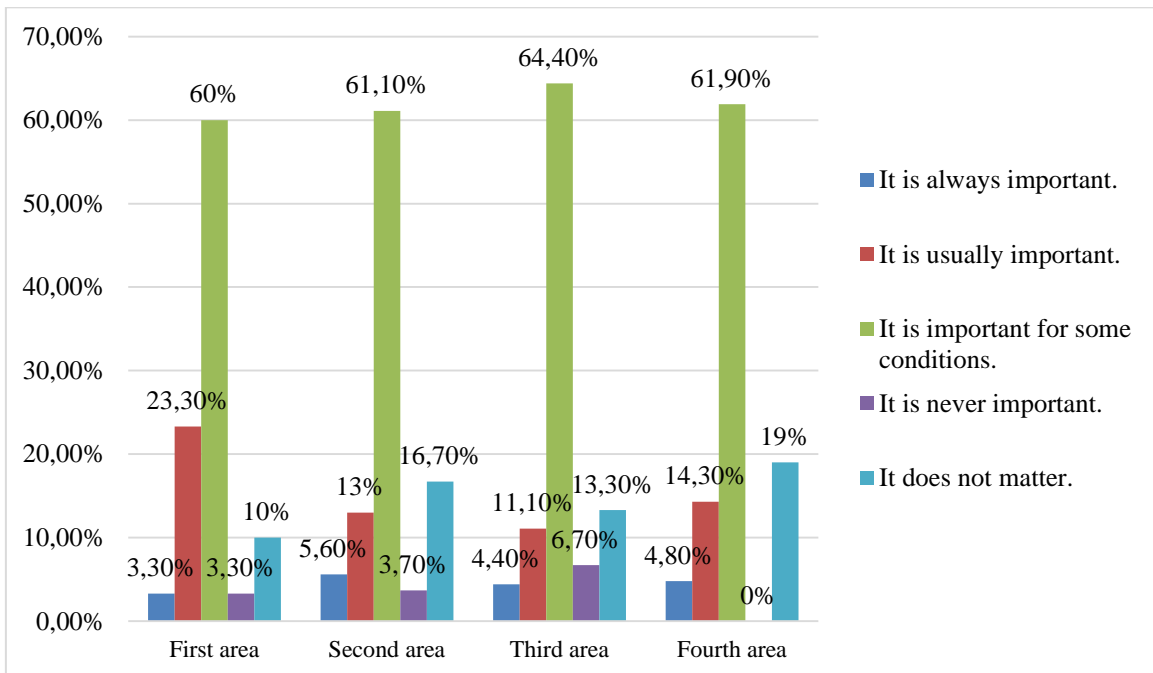
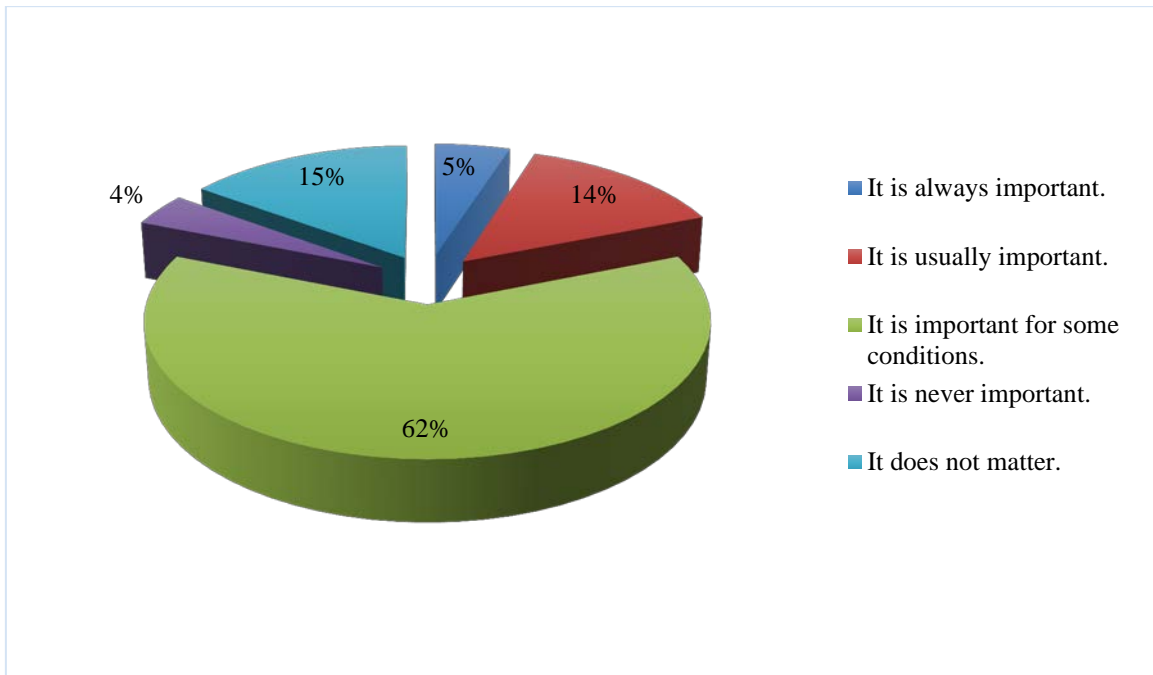


Figure 14. According to the pharmacists in the survey, the importance of male pharmacy technicians.

Another important subject for pharmacists is pharmacy technicians' salary. A great majority of pharmacists think that pharmacy technicians receive how much they deserve. Some of them want to give them much more but their economy is

not adequate. As a proportional distribution to areas, in all areas, most of them think that pharmacy technicians receive how much they deserve (Fig 15).

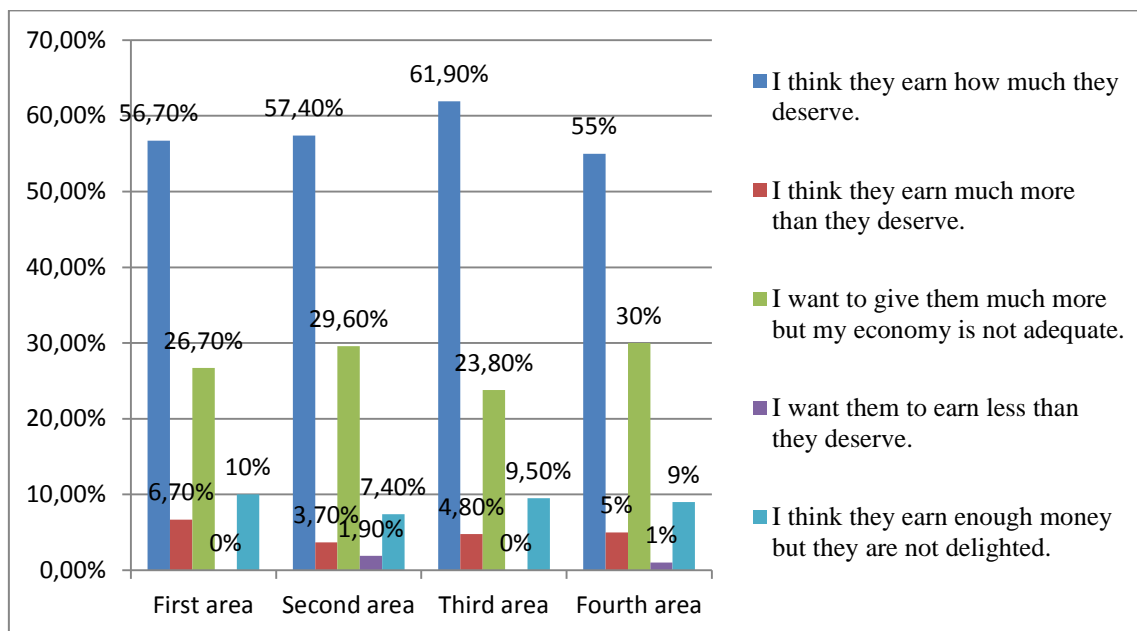
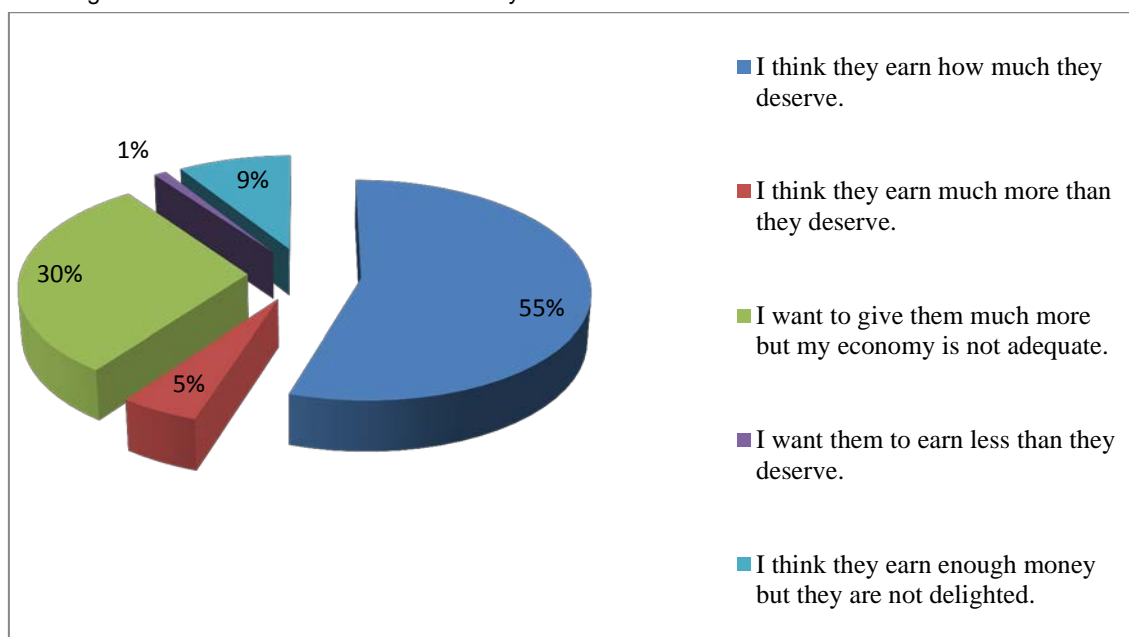


Figure 15. According to the pharmacists in the survey, what they think about pharmacy technicians' salary.

Pharmacists determine pharmacy technicians' wages according to their experience mostly. Lots of pharmacists also choose to give minimum wage+premium. Just a few pharmacists leave this decision to pharmacy technicians' requests. As a distribution to areas; in first area they mostly give

minimum wage+premium and pay regard to experience similarly, in second area mostly they care about pharmacy technician's experience and lastly in other areas they choose to give minimum wage+premium (Fig 16).

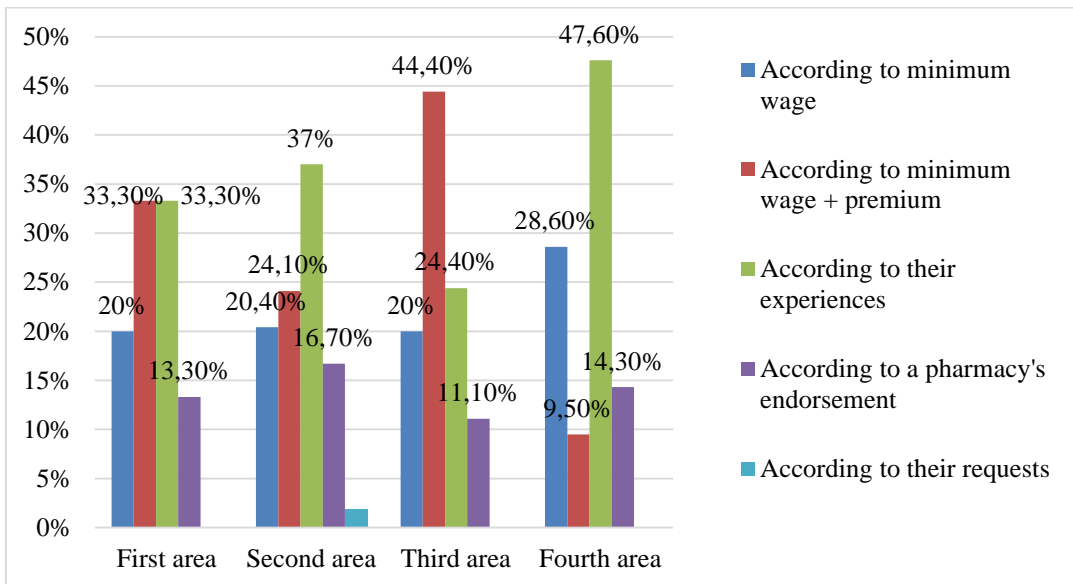
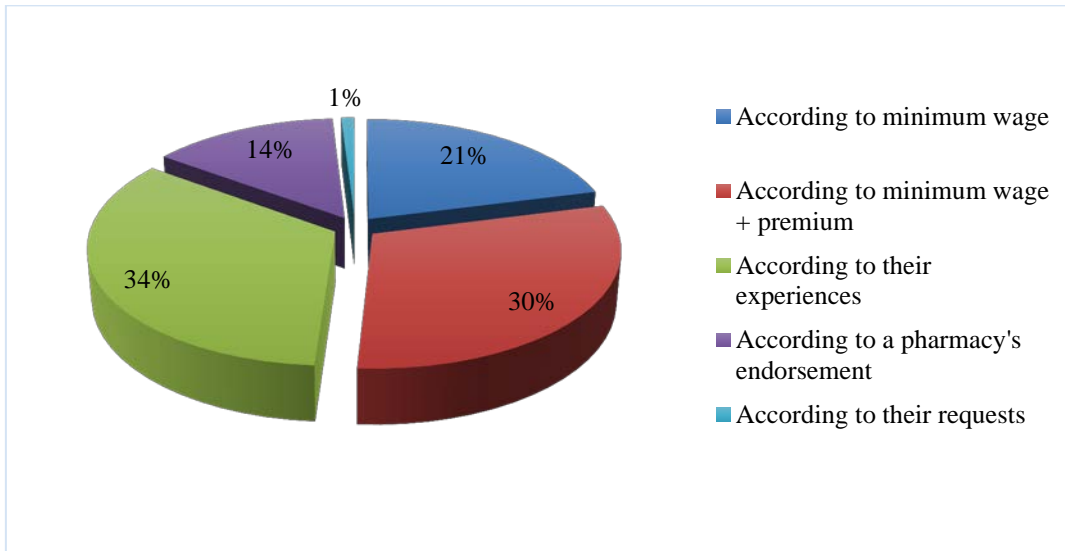


Figure 16. According to the pharmacists in the survey, how they decide pharmacy technicians' salary.

Most of the pharmacists trust their pharmacy technicians most of the time and some of them trust all the time, whereas just a few trust never. If we evaluate the results for the areas, just in the

second area, most of pharmacists trust their pharmacy technicians all the time and in other areas, lots of pharmacists trust them most of the time (Fig 17).

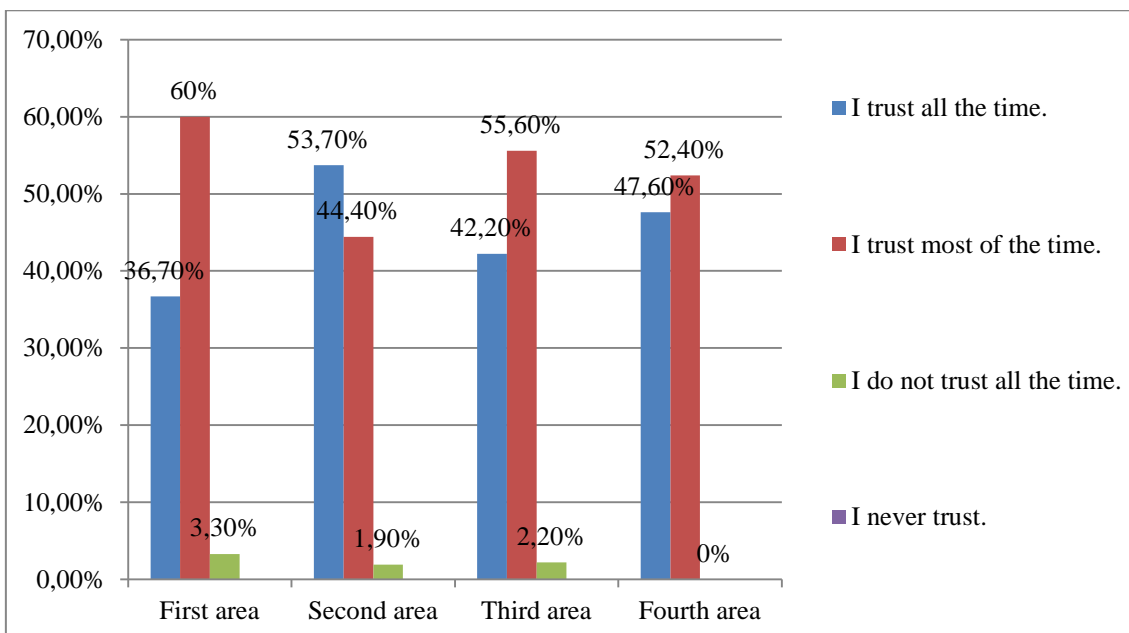
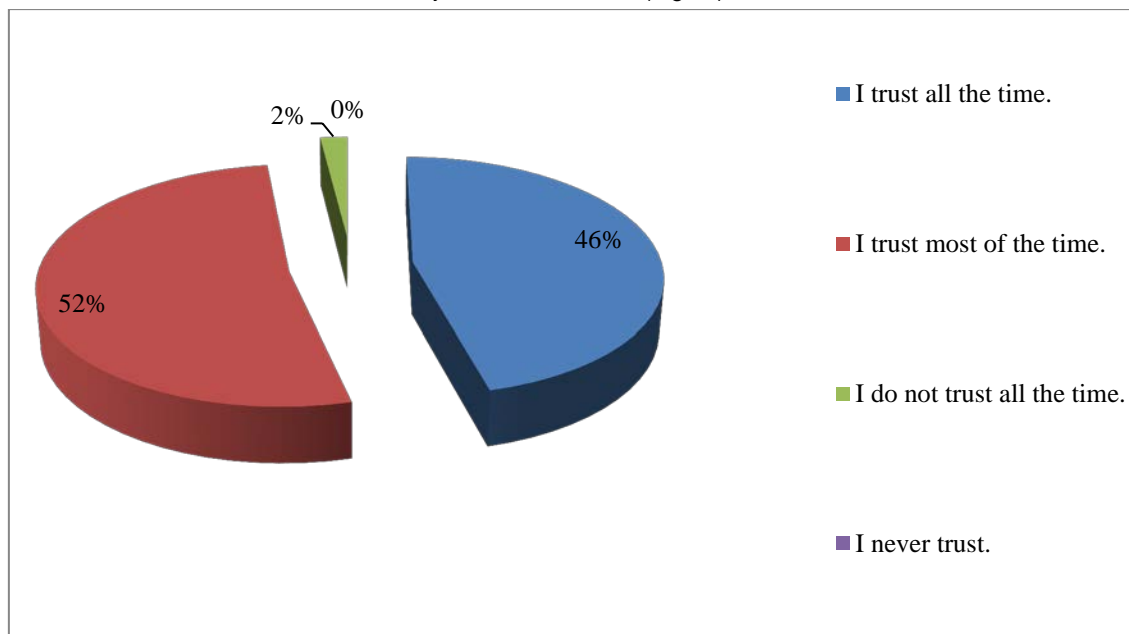


Figure 17. According to the pharmacists in the survey, the evaluation of their trust to their pharmacy technicians.

Ultimately, in general most of pharmacists control pharmacy technicians most of the time. If we evaluate the results for the areas, in all areas the same result can be seen (Fig 18).

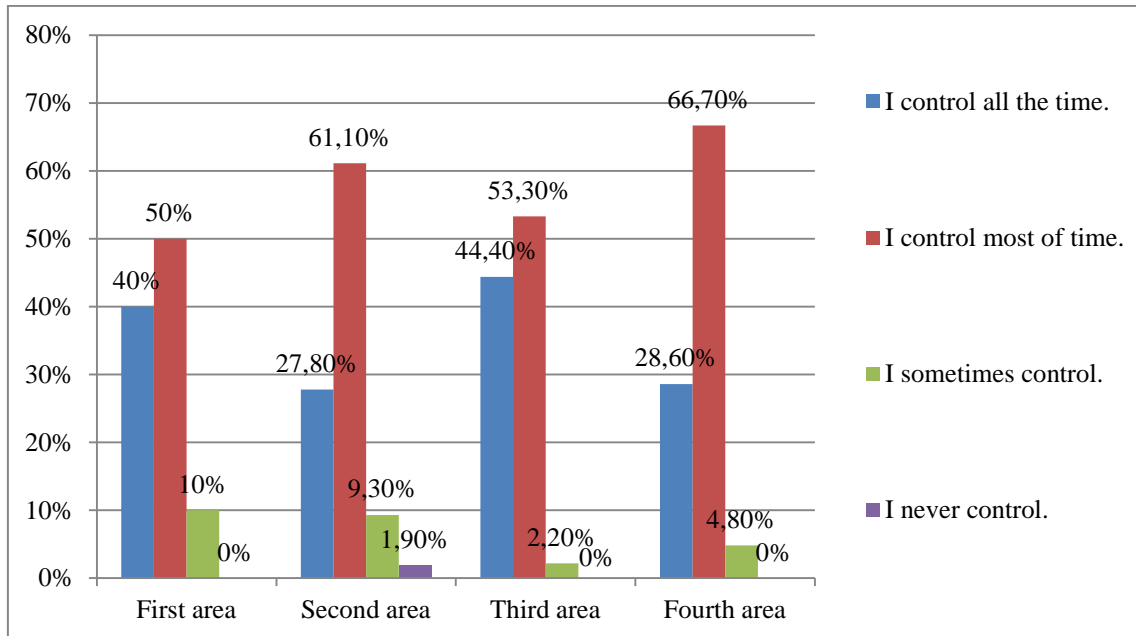
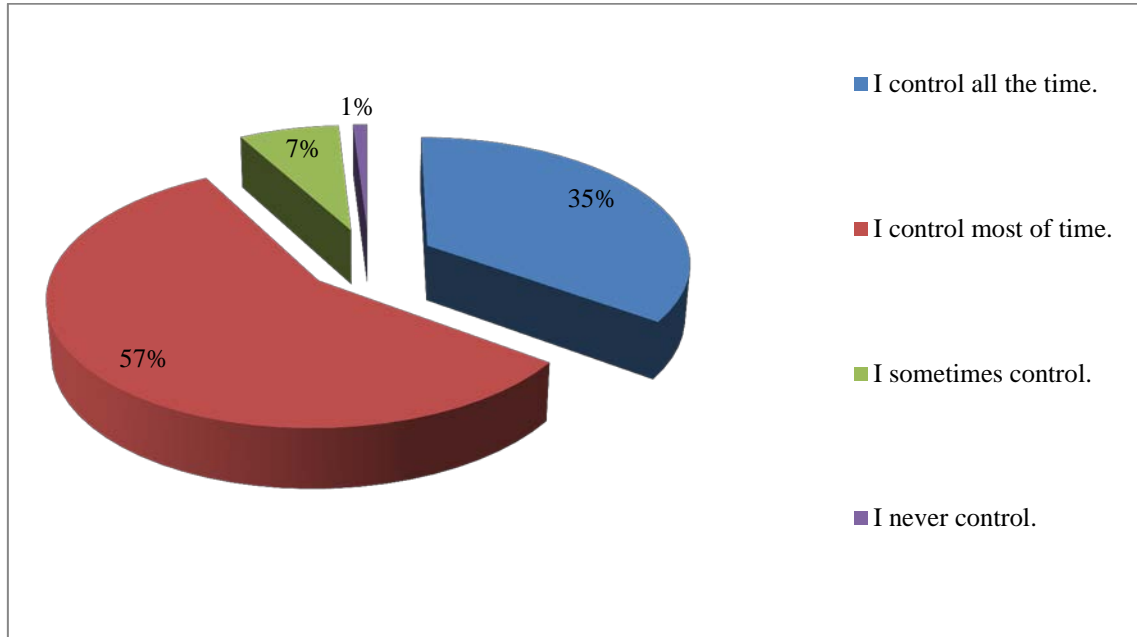


Figure 18. According to the the survey, whether pharmacists control their pharmacy technicians or not.

CONCLUSION

In the present work, we carried out a research on the expectations of pharmacists from pharmacy technicians in Eskişehir. 150 pharmacists representing four different socio-cultural groups in Eskişehir were chosen by random sampling method and were asked to answer the questionnaire.

According to the most pharmacists in the survey, the most important duties of pharmacy technicians are meeting patients, presenting the prepared medicines which are in the prescription and informing the patients how to use the drugs. Most of pharmacists expect their pharmacy technicians to be clean and tidy, have good communication with patients, be cheerful and talented in team work.

Pharmacists mostly think that pharmacy technicians must be educated in a vocational school of higher education. Generally, pharmacists also think that pharmacy technicians must have professional experience and they have to work more than seven years in a pharmacy to get experienced.

In a pharmacy system, mostly pharmacists think that pharmacy technicians have to be most well-equipped in prescription and authorization system. This could result from the over-changing system of authorization and Declaration of Healthcare Applications rules. Due to this situation, when a mistake is made about this system, a fine is imposed to pharmacists by Social Security Institution and a suit is prosecuted on account of the fact that the government is undermined.

Most of the pharmacists also want pharmacy technicians to be well-informed in drug interactions and side-effects of medicine.

Generally, the pharmacists in the survey find their pharmacy technicians inadequate in medical part of medicine, whereas other pharmacists think that their pharmacy technicians are not good at cosmetic-perfumery, phytotherapy-alternative

medicine and in drug interactions-side effects, respectively.

Most pharmacists need at least two pharmacy technicians and generally they want their pharmacy technicians to be around 18 years old. Most of the pharmacists in the survey think that the gender of pharmacy technicians is sometimes important but some of the participants think that it is important most of the time.

Another important subject for pharmacists is pharmacy technicians' salary. A great majority of pharmacists think that they receive how much they deserve. Most of pharmacists determine their pharmacy technicians' wages according to their own experiences and choose to give minimum wage+premium to pharmacy technicians.

The survey indicate that most of the participants trust their pharmacy technicians most of the time and some of them trust all the time, whereas just a few trust them never. Generally most of pharmacists control pharmacy technicians most of time.

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