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Community pharmacist's perspective regarding patient-centred communication in conjunction with pharmaceutical practice: A cross-sectional survey

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ABSTRACT

Effective communication between pharmacists and patients is essential for therapeutic success. The pharmacist's perspective may differ from that of the patient in terms of effective communication. Our study aimed to assess the communication efficiency in the pharmacist-patient relationship from the pharmacists' perspective. We hypothesize that the community pharmacist's perspective can lead to relevant aspects of patient-centred communication and their profession. A cross-sectional study was conducted through an online questionnaire addressed to pharmacists. A number of 506 questionnaires were collected, evaluated, analyzed and interpreted. The questionnaire focused on the following main issues: degree of job satisfaction, essential skills of a pharmacist working in a community pharmacy, different aspects of pharmacist-patient communication, shared decision-making, patient monitoring plan and other elements related to a patient under treatment (healthy lifestyle, receptivity to counselling, loyalty and appreciation of pharmaceutical services). The pharmacist's efficiency in communication with the patient and professional education were also targeted in the study. There are no significant differences between job satisfaction in women compared to men. However, the job satisfaction increases with the average age. Caregiver, communicator and life-long learner were identified as essential skills of a pharmacist. Pharmacists participating in the study generally perceive themselves as good communicators with the patient. Nevertheless, many particular aspects of communication with patients can be greatly improved. The lack of training in the spirit of the „patient-centred communication” concept has been identified. Still, more than a third of the respondents are missing the need for professional training. A periodic evaluation of the efficiency of pharmacist-patient communication in the community pharmacy is necessary. The degree of subjectivity of the pharmacist from this perspective and self-sufficiency would be significantly diminished if the pharmacists had access to the results of the periodic evaluations.

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1. Introduction

The concept of “pharmaceutical care” is a professional agreement and involves improving the patient's life by prevention, care, reducing symptoms, but also impeccable medical and pharmaceutical services (Hepler and Strand, 1990; “ASHP Statement on Pharmaceutical Care,” 1993). Essential aspects of pharmaceutical care are establishing a therapeutic relationship, patient assessment, the elaboration of a care plan to solve or prevent the problem, and continuous monitoring to ensure the desired results are

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achieved (Al Rahbi et al., 2014; Al-Quteimat and Amer, 2016; Awaisu and Mottram, 2018; Hepler and Strand, 1990; van Mil et al., 2004).

Patient-centred communication concept is relevant for pharmaceutical care in which the pharmacist plays the leading role. The aspects related to the pharmacist's behaviour are a) the pharmacist as a person (temperament, etc.), b) necessary skills, and c) empathy (Wolters et al., 2017). The characteristics of temperament are reactivity in provocative situations and self-control. The pharmacist's personal and social experiences can develop the temperament (Chen, 2018). Therefore, adaptability in contact with the patient is the key to a successful discussion and counselling (Sweeney, 2019). The required skills of a pharmacist dedicated to his profession are mainly communication skills, resistance to stress, patience with patients, increased self-confidence, the direction toward positive thinking, and counselling skills (clear analytical skills, good memory, conscientiousness, and interest in lifelong learning) (Higuchi et al., 2017; FIP et al., 2008; Thamby and Subramani, 2014; Wiedenmayer et al., 2006; Svensberg, 2017). In the communication process, empathy plays a crucial role in identifying the patient's problems and counselling (Higuchi et al., 2017; Wolters et al., 2017; Svensberg, 2017).

Nowadays, it could be challenging for the pharmacist to implement successful patient-centred communication because of individual, interpersonal, or organisational factors. Lack of motivation, clinical education or an inappropriate pharmacist attitude can decrease the efficiency of patient-centred communication (Svensberg, 2017). The essential role of the communicator is included in the "seven-star pharmacist" concept, implemented into Good Pharmacy Education Practice by the Pharmaceutical Federation (FIP), besides the roles of caregiver, decision-maker, lifelong learner, teacher, leader and manager (FIP et al., 2008; Thamby and Subramani, 2014; Wiedenmayer et al., 2006).

The patient's perspective is valuable for the assessment of pharmacist-patient communication. For example, recent studies evaluated pharmaceutical services from the patient's perspective (Bratkowska et al., 2020; Merks et al., 2020). A study conducted in Romania highlights the need to increase communication skills and build a professional relationship with the patient. The modern pharmacist must focus on the individual patient's needs rather than dispensing the medical prescription (Rusu, 2018). In 2020 compared to 2012, the Romanian patient is more influenced by the pharmacist's attitude in the community pharmacy (Chereches and Popa, n.d.).

However, the pharmacist's perspective may differ from the patient's perspective regarding communication efficiency in community pharmacy. Therefore, this study analysed the pharmacist's professional activity to verify the counselling focus on the patient and his needs using effective communication. The main objective was to assess the efficiency of communication in the pharmacist-patient relationship from the pharmacist's perspective.

2. Material and methods

2.1. Study design

An online cross-sectional study was conducted. We used non-probability, convenience sampling addressing an online questionnaire to pharmacists only. The questionnaires were anonymous, ensuring the confidentiality of the information obtained. The survey consisted of an online questionnaire created in <http://www.isondaje.ro/> platform, which was sent via Facebook, Messenger, and WhatsApp. Participants were recruited from pharmacists' social groups, professional communication groups, Alumni groups of the Faculty of Pharmacy from "George Emil Palade" University of

Medicine, Pharmacy, Science, and Technology of Targu Mures (UMFST), Romania. The configuration of the questionnaire allowed only one completion to eliminate the possibility of duplicate answers. A total of 506 questionnaires were collected and analysed. Questionnaires were collected in Romania from November 1st, 2018 to January 31st, 2019 (three months).

2.2. Description of the questionnaire

A mixed-methods approach was used to obtain relevant information. The content of the questionnaire is original and consists of two main parts: 1) a small part containing some identification data (i) age, ii) gender), and educational level (Question 1 and 2) a part containing specific questions, a series of 30 questions (Qs) related to the activity of pharmacists regarding the relationship pharmacist-patients (Table S1, Supplementary material). The used Qs were of several types presented in Table 1. The type of Qs was selected to complete the survey as quickly as possible. The questions are under the principles of pharmaceutical practice legislated in the Rules of Good Pharmaceutical Practice in Romania. The last legislative change was applied by Order of the Minister of Health no. 1552/2004 (Chertes, 2019).

2.3. Data analysis

The collected results were analysed using descriptive statistics. The relationship between variables was tested using the Fisher's Exact Test, while (Exploratory) Factor Analysis was used to determine the more subtle associations between preferences of pharmacists in interacting with patients (Stata 16, StataCorp LLC. Stata Statistical Software) ("Stata," n.d.), and Microsoft Excel (Windows 10) ("Windows 10," n.d.).

2.4. Ethical approval

The study was approved by the Ethics Commission of Scientific Research of UMFST by decision no. 229 from 07.11.2018.

3. Results

3.1. Demographic profile

Age. Pharmacists between the ages of 23 and 67 years old were included in this study. The age related-categories by age range are presented in Fig. 1. Essential statistical data age and gender-related are comprised in Table S2 (Supplementary material). The largest

Table 1
Types of survey questions.

The type of Qs	Q number	Observations
Dropdown questions	(i) Age	One answer is allowed
Multiple choice question - single-answer	(ii) Gender, 6, 9, 10, 14, 20, 22, 23, 25	One answer is allowed
Multiple choice question - multiple-answer	1	Multiple answers are allowed
Rating scales (1 to 5)	4, 5, 7, 8, 11, 12, 15, 16, 17, 18, 19, 21, 22, 24, 26, 27, 28	From „Not at all” (1) to „Totally” (5)
Open-ended questions (require to type answer into a comment box)	3, 29, 31	At least three aspects to fill
Closed-ended survey questions - "Yes" or "No"	13	One answer is allowed
Likert scale	30	One answer is allowed

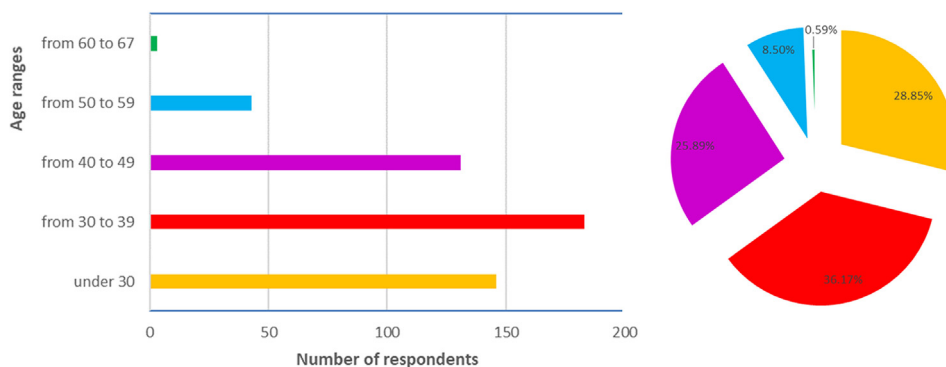


Fig. 1. Respondents categories by age range (number of respondents – left and percentage – right).

age related-category of respondents represented were 30 to 39 years old (36.17% of the total respondents).

Gender. In terms of gender, respondent pharmacists were women – 453 respondents (89.53%) and men, 53 respondents (10.47%).

3.2. Results of the survey

The obtained results based on the questionnaire are presented below for each question.

Results of Q1 regarding level of vocational education. More than three-quarters of respondents (78.46%; 397 respondents) have the first professional level. Of of these, 1 respondent has a PhD diploma and 3 respondents are PhD students. In descending order, the questionnaire was completed by specialist pharmacists (13.64%; 69 respondents; out of these, 3 respondents are also PhD students), resident pharmacists (4.35%; 22 respondents; out of these, 3 respondents are also PhD students), and primary pharmacists (3.56%; 18 respondents; out of these, 1 respondent has a PhD diploma).

Results of Q2. Pharmacists' satisfaction from a socio-economic perspective was assessed using a scale from 1 (not at all) to 5 (totally) (answers to Q2) (Fig. 2). **Over 66% of the pharmacists chose values 4 and 5, correspondings to the degree of satisfaction.**

Results of Q3. The pharmacists' opinion regarding primary skills (pharmacists working in a community pharmacy) was collected. This question was “added fill in the blank” type and required at least three skills. The most cited were patience, empathy, communication ability, self-control, quick thinking, ability to adapt the message to the patient's understanding, ability to adjust to stressful conditions, good management of the pharmaceutical activity, and attention to detail. Pharmacists have stated that it is equally important to update the pharmaceutical knowledge and professionalism expressed to the patient (similar to pharmacy as a knowledge-based profession (Waterfield, 2010)). For a better interpretation of the results, the roles of the pharmacist in the “seven-star pharmacist” concept were taken into account for codification: caregiver, decision-maker, communicator, life-long learner, teacher, leader, and manager (Fig. 3) (FIP et al., 2008; Thamby and Subramani, 2014; Wiedenmayer et al., 2006).

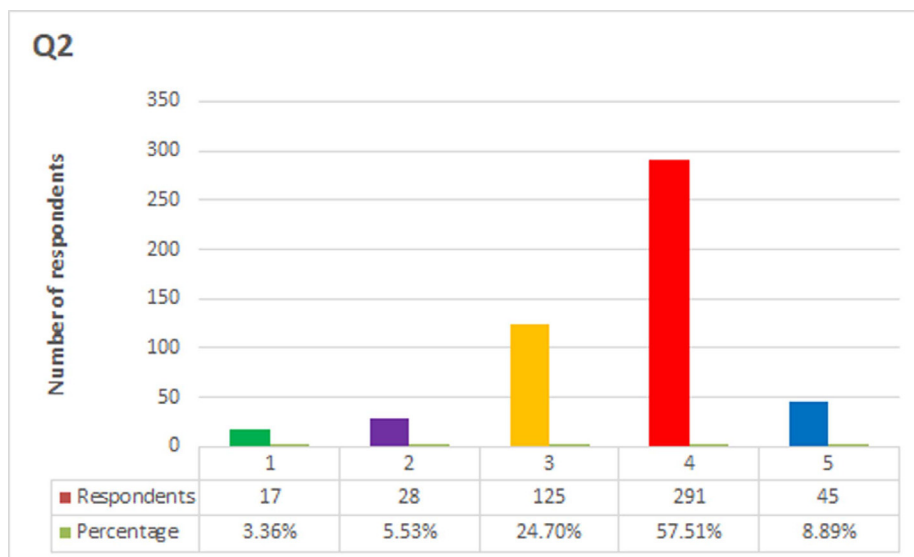


Fig. 2. Pharmacists' satisfaction from a socio-economic perspective (Q2 results).

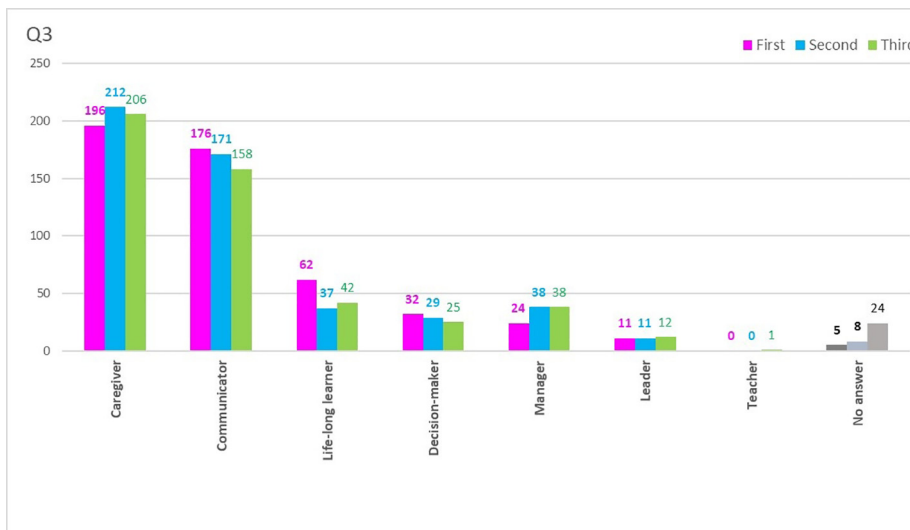


Fig. 3. Skills of a pharmacist working in a community pharmacy; first, second and third option (Q3 results).

Results of Q4. The answers to Q4 are summarised in Fig. 4 and provide information on pharmacists’ empathy. Approximately 90% of respondents (455 pharmacists) consider themselves empathetic with patients (values 4 and 5 on the scale).

Results of Q5. The subject of Q5 was the use of non-verbal language. The average of the obtained value is 3.93, on a scale similar to Q2, of 1 to 5. Most pharmacists (283 persons, 55.93%) ticked the value 4. We obtained statistically relevant results (Fisher’s exact less than 0.05) for associations the use of non-verbal language with the age of the pharmacists. Pharmacists in the 35–44 age category selected a high score (4–5) for the use of non-verbal language (Table S3, Supplementary material). Men pharmacists are associated with a lower frequency than expected use of non-verbal language in relation to patients (Table S4, Supplementary material).

Results of Q6 and Q7. More than half of the respondents (286) considered that they were successful in counselling only within the limits of 51–75% of the situations (Fig. 5 (left)). Q7 assessed the pharmacist’s success in exchanging information with the patients Fig. 5 (right). Most pharmacists (about two-thirds) appreciated that they managed to exchange information with the patient during counselling 330 persons (65.22%) selected value 4, and 76 persons (15.02%) selected value 5 on a scale of 1 to 5.

Results of Q8. Most pharmacists (about two-thirds) appreciated that they managed to exchange information with the patient during counselling; 321 respondents (63.44%) selected values 4, and 82 respondents (16.21%) selected a value 5, on a scale of 1 to 5 (Fig. 6).

Results of Q9 and Q10. The pharmacist appreciated how many questions uses in counselling (prescription situation and OTC or supplements situation) (Table 2).

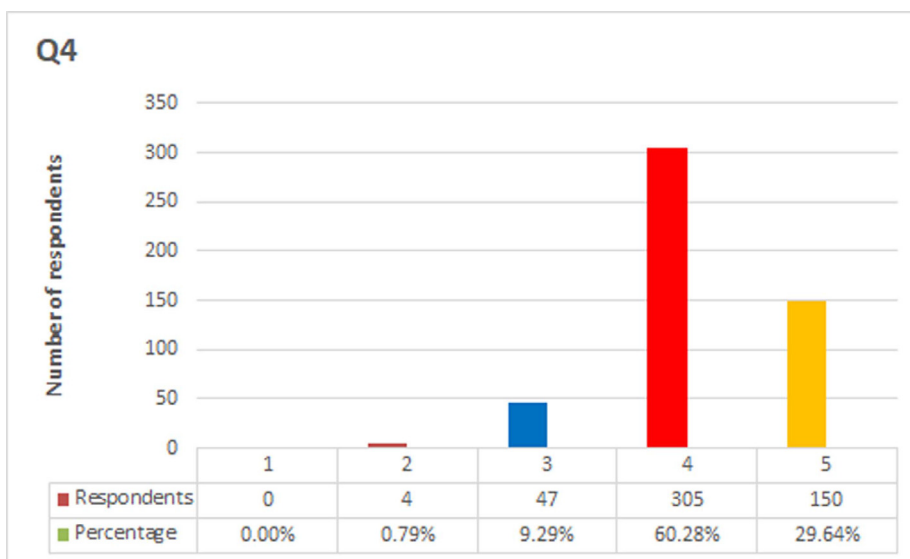


Fig. 4. The self-estimated degree of empathy (%) in daily work on a scale from 1 (not at all) to 5 (totally) (Q4 results).

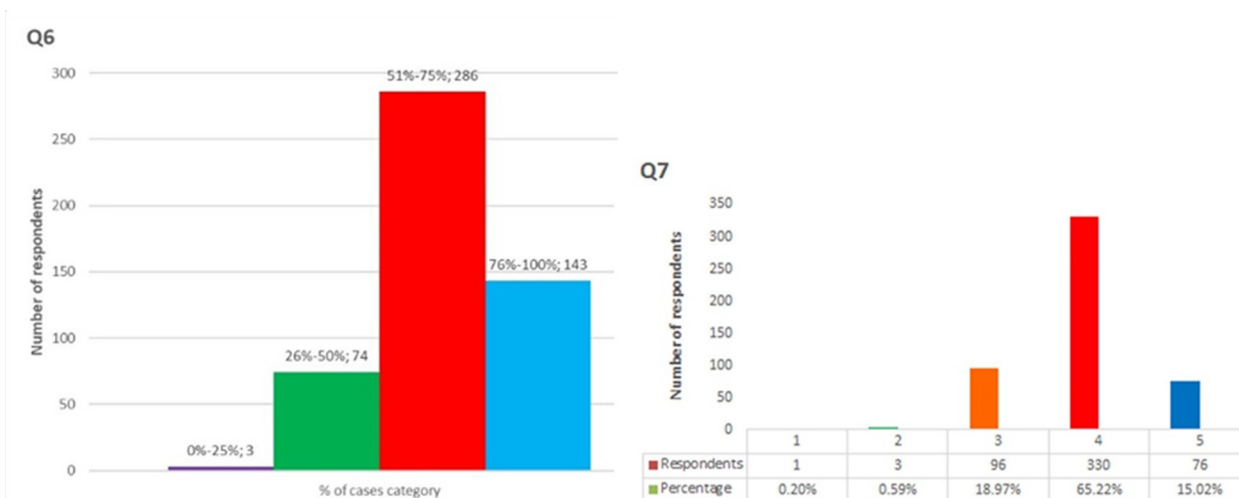


Fig. 5. Estimation (%) of the success of the patient's involvement in pharmaceutical counselling (Q6 results). The appreciation of the exchange of information with the patient (Q7 results).

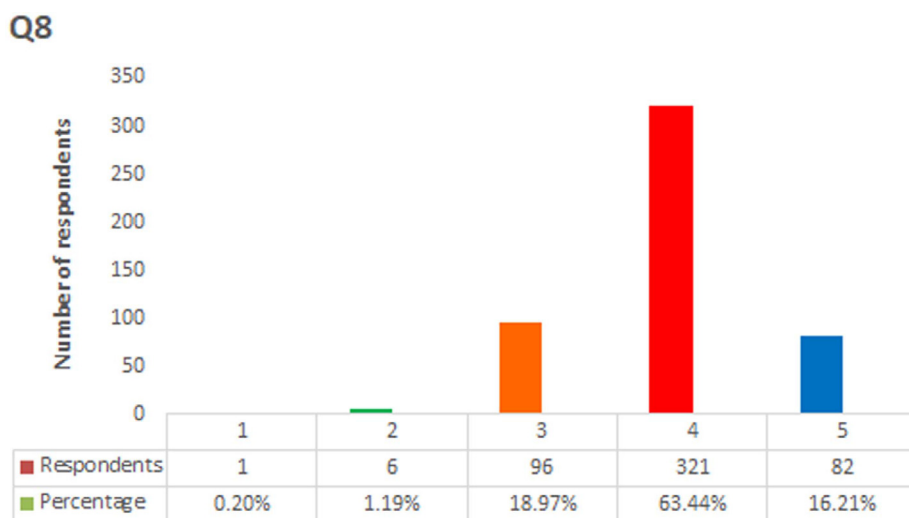


Fig. 6. Pharmacists' appreciation of the extent to which they exchange information with the patient during counselling (Q8 results).

Table 2
The obtained answers to questions 9 and 10 of the questionnaire (Qs – questions).

Qs / (content)	Answers	%
Q9 / (How many questions do you usually address a patient presenting a prescription? Objectively select one option.)	None	0%
	1–2 Qs	4.5%
	2–4 Qs	39.3%
	4–6 Qs	50.6%
	More than 6 Qs	5.5%
Q10 / (How many questions do you usually address a patient when you recommend an OTC or supplement? Objectively select one option.)	None	0%
	1–2 Qs	4.9%
	2–4 Qs	33.8%
	4–6 Qs	53.2%
	More than 6 Qs	8.1%

Pharmacists with a medium level of professional satisfactions are asking a lower number of questions than expected while those with high level of professional satisfactions are asking 4–6 questions more frequently than expected (Fisher's exact less than 0.05) (Table 3). On dispensing OTC products (how many questions are

asked before) revealed similar results – the more professional satisfaction the pharmacist has, the more questions are addressed to the patients before dispensing the medicine (Table 4).

Results of Q11 and Q12. Only 6.52% (33 respondents) share the responsibility of decisions with the patient (value 5 on the scale) (Fig. 7). More than 70% of respondents consider that the patient is informed (about medication/para pharmaceuticals, healthy lifestyle) when leaving the pharmacy (values 4 – 274 respondents and value 5 – 99 respondents, on the scale).

Results of Q13 and Q14. A large number of respondents (67.6%) of pharmacists provided an affirmative answer regarding the existence of a monitoring plan. However, the percentage by which pharmacists succeed in implementing the action plan and monitoring varies (Fig. 8).

Results of Q15-Q18. The patient's involvement in the proper management of their health is reflected in Table 5's responses.

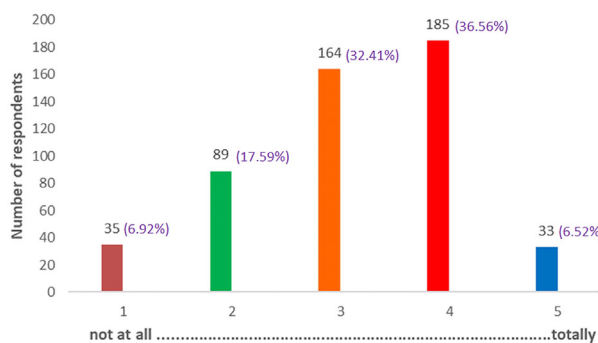
Table 3
Professional satisfaction correlated with pharmacists' number of questions before dispensing a prescription in an expected frequency test.

Professional satisfactions/Questions asked before dispensing a prescription		1–2 questions	2–4 questions	4–6 questions	more than 6 questions	Total
Weak	Frequency	4	16	20	5	45
	Expected frequency	2	17.7	22.8	2.5	45
Medium	Frequency	11	56	52	6	125
	Expected frequency	5.7	49.2	52	6	125
High	Frequency	8	127	184	17	336
	Expected frequency	15.3	132.1	170	18.6	336
Total	Frequency	23	199	256	28	506
	Expected frequency	23	199	256	28	506
	<i>Fisher's exact = 0.005</i>					

Table 4
Professional satisfaction correlated with pharmacists' number of questions before dispensing an OTC product in an expected frequency test.

Professional satisfactions/Questions asked before dispensing an OTC product		1–2 questions	2–4 questions	4–6 questions	More than 6 questions	Total
Weak	Frequency	4	17	20	4	45
	Expected frequency	2.2	15.2	23.9	3.6	45
Medium	Frequency	5	51	54	15	125
	Expected frequency	6.2	42.2	66.5	10.1	125
High	Frequency	16	103	195	22	336
	Expected frequency	16.6	113.5	178.6	27.2	336
Total	Frequency	25	171	269	41	506
	Expected frequency	25	171	269	41	506
	<i>Fisher's exact = 0.040</i>					

Q11



Q12

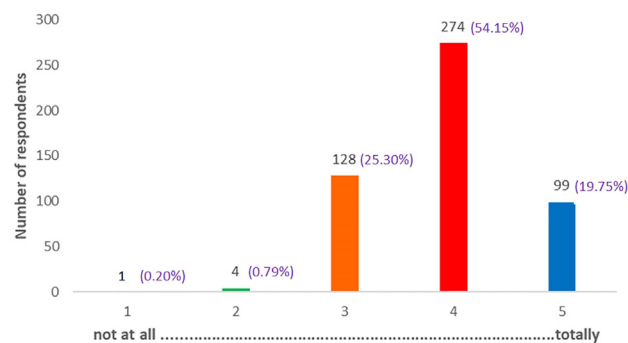
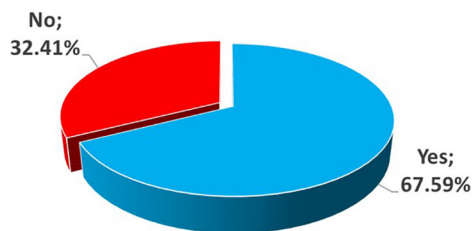


Fig. 7. The degree of sharing responsibility for professional decisions with the patient (Q11 results, left); the degree of appreciation if the patient left the pharmacy informed (Q12 results, right).

Q13



Q14

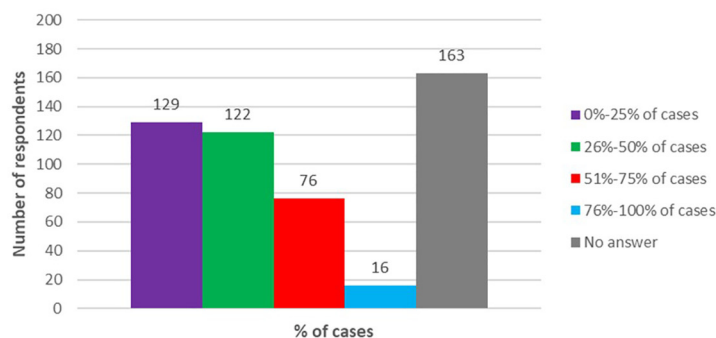
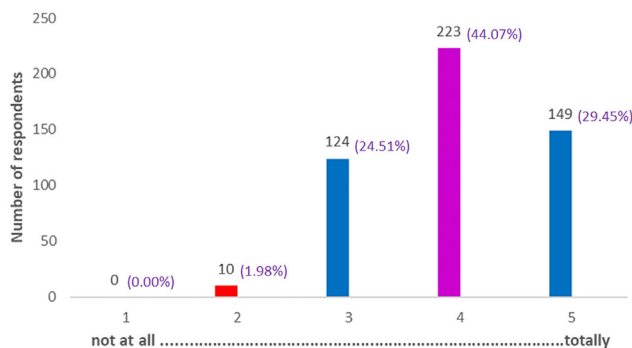


Fig. 8. Establishing an action and monitoring plan for the patient (results of Q13) and the extent (%) that pharmacists managed to implement the action and monitoring plan (results of Q14).

Table 5
The results obtained in Q15 - Q18.

Qs /(content)	Average	Scale from 1 (not at all) to 5 (totally)				
		1	2	3	4	5
		Answers (%)	Answers (%)	Answers (%)	Answers (%)	Answers (%)
Q 15 / (To what extent do you manage to make the patient aware of self-control in the management of their health condition?)	3.57	2 (0.40%)	22 (4.35%)	187 (36.96%)	273 (53.95%)	22 (4.35%)
Q16 / (To what extent do you manage to agree with the patient regarding the treatment/care/prevention plan to follow?)	3.65	2 (0.40%)	20 (3.95%)	158 (31.23%)	297 (58.70%)	29 (5.73%)
Q17 / (How often do you ask the patient for feedback on the treatment/care/prevention plan to follow?)	3.64	4 (0.79%)	26 (5.14%)	170 (33.6%)	251 (49.60%)	55 (10.87%)
Q18 / (To what extent do you evaluate the patient's experience related to his / her illness/impairment?)	3.58	3 (0.59%)	19 (3.75%)	199 (39.33%)	251 (49.60%)	34 (6.72%)

Q19



Q20

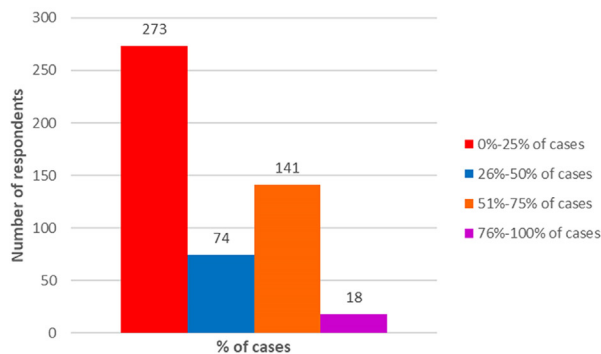
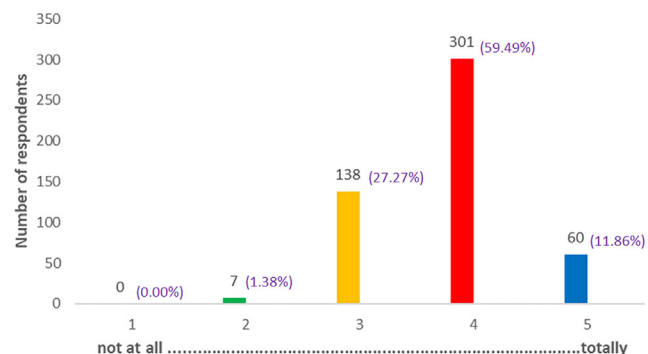


Fig. 9. Adaptation of the message to the patient’s personality and temperament (Q19 results); self-evaluation of cases in which the pharmacist encounters difficulties in communicating with the patient, strictly related to the patient’s personality and temperament (Q20 results).

Results of Q19 and Q20. Over 70% of respondents say they adapt their message to the patient’s personality and temperament (values 4 – 223 respondents and value 5 – 149 respondents, on the scale) More than half of the pharmacists (273 respondents, 53.95%) experience difficulties in communicating with the patient in less than 26% of cases (Fig. 9).

Results of Q21 and Q22. Almost 60% of respondents manage to mediate a tense relationship during communication with the patient (4 of 5 on a scale from “not at all” to “totally”). More than half of the respondents (271 respondents, 53.56%) appreciated that they managed to keep calm in a tense situation, which occurs in more than 75% of communication cases with the patient (Fig. 10).

Q21



Q22

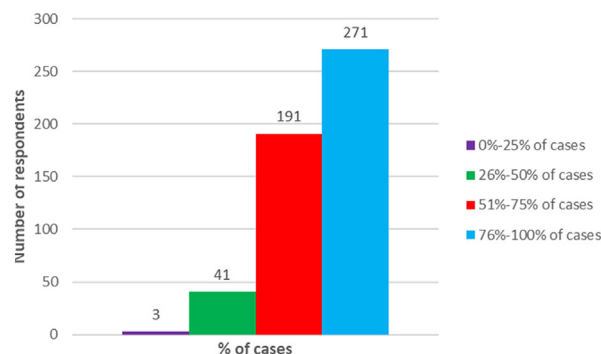


Fig. 10. The appreciation of the degree to which the pharmacist can mediate a tense situation in communication with the patient (Q21 results); self-evaluation of cases in which the pharmacist manages to keep calm in a tense situation that occurs in communication with the patient (Q22 results).

Results of Q23-Q28. Questions Q23-Q28 focus on patients’ interest in a healthy lifestyle, patients’ receptivity to counselling, the patients’ fidelity and appreciation of pharmaceutical services, teamwork with the patient, and the impact of communication on the patient’s health. The results obtained in Q23 – Q28 are presented in Tables 6 and Table 7.

Results of Q29. The Q29 was an open question in which pharmacists listed the top three ways to gain patient trust. Because the answers were very diverse, they were coded. Seven categories of responses were identified:

1. Effective communication, which included responses related to empathy, listening, and dialogue;

Table 6
The results obtained in Q23 and Q24.

Qs / (content)	% of cases			
	0%-25%	26%-50%	51%-75%	76%-100%
Q23 / (What is the share of patients interested in a healthy lifestyle, in your opinion?)	78 (15.42%)	227 (44.86%)	186 (36.76%)	15 (2.96%)
Q24 / (What percentage (%) assess that patients return to your pharmacy?)	33 (6.52%)	132 (26.09%)	244 (48.22%)	97 (19.17%)

Table 7
The results obtained in Q25 – Q28.

Q (content)	Average	Scale from 1 (not at all) to 5 (totally)				
		1	2	3	4	5
		Answers (%)	Answers (%)	Answers (%)	Answers (%)	Answers (%)
Q25 / (Do you consider that patients are receptive to your advice?)	3.69	3 (0.59%)	10 (1.98%)	151 (29.84%)	318 (62.85%)	24 (4.74%)
Q26 / (Do patients who return to the pharmacy express their appreciation for the services previously provided?)	3.72	1 (0.20%)	15 (2.96%)	171 (33.79%)	255 (50.40%)	64 (12.65%)
Q27 / (To what extent do you create an effective team with the patient to ensure therapeutic success, prevent disease, promote a healthy lifestyle, etc.?)	3.56	1 (0.20%)	15 (2.96%)	213 (42.09%)	249 (49.21%)	28 (5.53%)
Q28 / (Do you think that a healthy lifestyle and improved patient health care are due to an effective pharmacist-patient dialogue?)	3.75	4 (0.79%)	20 (3.95%)	160 (31.62%)	235 (46.44%)	87 (17.19%)

2. Professionalism, which included answers related to knowledge, patient focus, and self-confidence;
3. Persuasion, which included answers related to selling skills;
4. Patience, which had answers related to calm;
5. Proactive attitude, which included answers related to promptness and efficiency;
6. Positivism, which included responses related to the transmission of optimistic messages, increased confidence in the treatment.

The obtained results after coding are presented in (Fig. 11). Some respondents offered only one or two methods to gain the patient’s trust, the coding being “no answer”.

Results of Q30. The pharmacist’s professional success in communicating with the patient was assessed using the five-point Likert scale which is suitable for examining perceptions and attitudes

(Ho, 2017). The selected answers varied 67.19% (340, two-thirds of respondents) selected the qualifier “Very Good”, and 7.51% selected “Excellent” (Fig. 12).

Results of Q31. Q31 was an open question about the need for training to increase the quality of communication with the patient. The first three training needs were requested. Because the answers varied, it was necessary to codify them according to Table S5 (Supplementary material). The obtained results are presented in Table 8.

In completion, we used Exploratory Factor Analysis (EFA) to assess the different typologies of pharmacists based on their preferences in interacting with patients, using the selected 17 questions that required a Likert-type scale of responses. The results allowed us to profile the pharmacists into three groups (factors) based on communication patterns (Table 9).

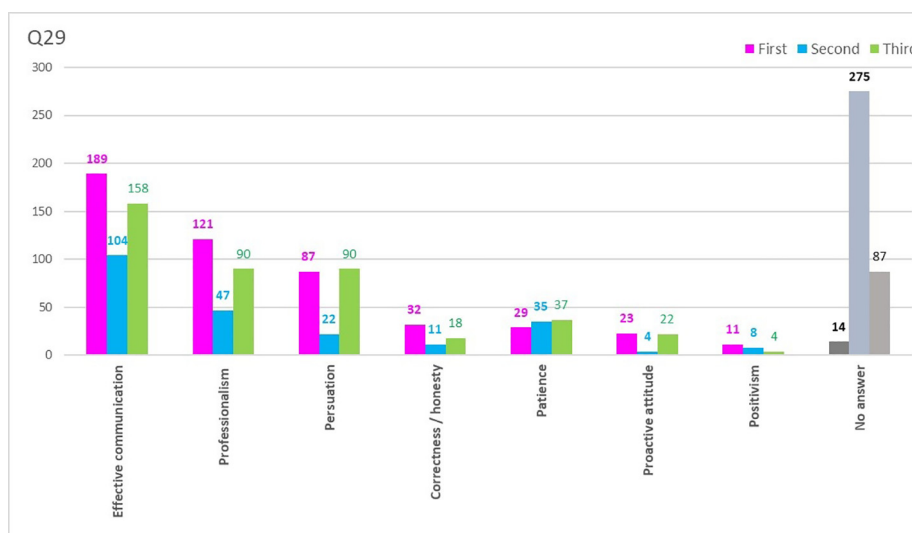


Fig. 11. Methods used by pharmacists to gain patient trust; first, second and the third listed ways (results of Q29).

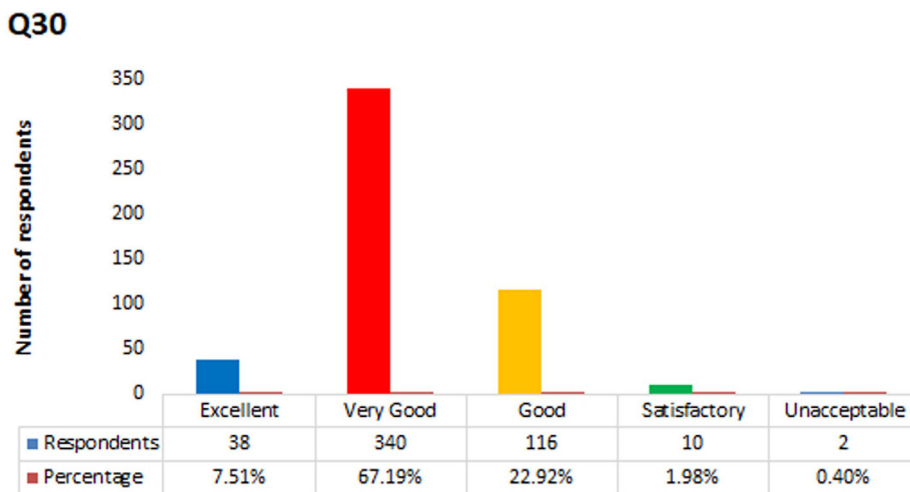


Fig. 12. Self-estimation of the professional success achieved in communicating with the patient (results obtained in Q30).

Table 8
Results obtained after coding the answers to question Q31.

Q31	Answers	% of total
Skills development	141	28%
Live activities	87	17%
Do not know/Do not answer	75	15%
Answer not related	69	14%
Reading pharma books	51	10%
No need	42	8%
Acquiring expertise	23	5%
Formal education	18	4%
Total	506	100%

4. Discussions

The analysis of the completed questionnaires brings into discussion several essential aspects.

4.1. Demographic data

4.1.1. Gender of respondents

The respondents of the questionnaire were mostly women (89.52%). This result was predictable due to the tradition regarding the choice of the pharmacist profession in our country. Enrollment in pharmacy faculties in Romania is undertaken by an overwhelming majority of female high school graduates. Within the Faculty of Pharmacy of UMFST, in the academic year 2017–2018, in the first year, only 16 male students enrolled out of a total of 97 admitted students (16.49%). The situation was similar in the academic year 2018–2019, with only 19 male students out of 112 students (16.96%).

This feminisation of the pharmaceutical workforce also occurs as well in other countries (Janzen et al., 2013; Kam Angela, n.d.; Young et al., 2012), including the European Union (EU) (“Professional practice,” 2019). Part-time jobs have been allocated mainly to female pharmacists versus male pharmacists. The

number of female pharmacists working in hospital pharmacies is higher than that of male pharmacists. However, women’s representation is lower at the management level in the United Kingdom (UK) and the United States (US). Two-thirds of their pharmacy graduates in many previous reports were female (Hawthorne and Anderson, 2009).

4.1.2. Age of the respondents

The respondents’ age was between 23 and 67 years old; the average age was 36.39 years old. About 90% of respondents were under 50 years old. Young pharmacists are more eager to help improve the current health system, hence the greater interest in filling out forms. However, more senior pharmacists are less open to fill-in in the questionnaire because they have fewer digital skills and less access to channels on which the questionnaire was posted.

4.2. Educational level (Q1)

The pharmacy practice is harmonised in the EU based on the Directive on the Recognition of Professional Qualifications [Directive 2013/55/EU]. The activity of pharmacists has been revised, and the European professional card was released (“European Professional Card,” n.d.; “Professional practice,” 2019). Pharmacist titles (bachelor in Pharmacy) match those requirements in some countries, such as Australia, India, and Israel (Schwartzberg et al., 2018).

In Romania, the specialisation of pharmacists occurs within the residency program. The residency program means the three-year training of residents in one of the specialised fields available in the list of pharmaceutical specialities: general pharmacy, clinical pharmacy, pharmaceutical laboratory, and pharmaceutical and cosmetics industry. Five years after achieving the specialisation, the specialised pharmacist can earn the degree of primary pharmacist after an exam (Order of the Minister of Health and Minister of Education and Research no. 833/4446/2020). Pharmacists may continue their training through doctoral studies, sometimes even

Table 9
The profile of the pharmacists grouped by Exploratory Factor Analysis (EFA) into three segments/factors (F1 – F3) according to the most positive answers to the selected questions.

EFA	Qs
F1	Q15, Q16, Q18, Q21, Q24, Q27, Q28
F2	Q7, Q17, Q19, Q26, Q27, Q28
F3	Q4, Q5, Q7, Q8, Q11, Q12, Q13, Q15

in parallel with the residency program’s specialisation. The highest percentage of respondents with an advanced degree were specialist pharmacists (13.64%), while in-training specialists pharmacists counted for 4.35% (resident pharmacists). Unfortunately, only 21.54% of respondents opted to continue their studies in the pharmaceutical field; hence the need for vocational training through postgraduate studies is low. Only 9 PhD students and 2 PhDs can be distinguished from this group of respondents. Our analysis also focuses on the need for professional training that will be commented upon in accordance with the results obtained below (Q31).

4.3. Degree of job satisfaction (Q2)

In our study, most pharmacists have a high degree of job satisfaction. Over 66% of respondents chose the values 4 (57.51%) and 5 (8.89%) on a scale of 1 (not at all) to 5 (totally). However, one-third of respondents (33.60%) appreciate that the job of a pharmacist does not bring them significant satisfaction. There are no significant differences between job satisfaction in women compared to men. Gender analysis with job satisfaction was not significant (Fisher’s exact = 0.921). The average degree of job satisfaction was 3.60 for 53 male respondents (average age: 36.11 years old) and 3.63 for 453 female respondents (average age: 36.42 years old). The Fisher Exact Test does not show a significant association between the gender of the responding pharmacists and the degree of professional satisfaction. Fisher’s exact test probability was 0.898.

However, a recent study conducted in the US found that female pharmacists have more job satisfaction than male pharmacists. The elements that contributed to overall job satisfaction were adequacy of salaries and benefits, workload, advancement opportunities, stress, job security, fairness in the workplace, scheduling flexibility, job atmosphere, autonomy, job importance to patients, supervisor’s support, and relations with coworkers (Carvajal et al., 2018).

The average age increases with job satisfaction. These results conclude that the older generation of respondents requires more professional experience and, consequently, a higher degree of job satisfaction (Fig. 13).

Out of 45 respondents with the maximum degree of job satisfaction (rated 5 out of 5), 18 (40%) are specialised as follows: 10 specialist pharmacists, 6 primary pharmacists and 2 resident pharmacists. Out of 291 respondents who have a high degree of job satisfaction (rated 4 out of 5), 58 (19.93%) are specialised as follows: 35 specialist pharmacists (2 are also PhD students), 14 resident pharmacists (1 is also PhD student), 4 primary pharmacists, 1 PhD students, and 1 PhD. Simultaneously, several factors undermine the pharmacy’s status and the pharmacist profession:

consumerism, mercantilism, partial control over medicine, corporatisation of pharmacy, failure to achieve social closure, and technology (Ilardo and Speciale, 2020). Thus, we can appreciate that men and women have different perceptions of working as pharmacists. This aspect could be associated with the feminisation of the workforce in the pharmaceutical field. Employers’ rewards and incentives will have to be rethought and adapted to the needs of both genders.

4.4. The essential skills of pharmacists in an open circuit pharmacy (Q3)

Pharmacists’ crucial skills are accuracy, efficient use of scientific knowledge, communication skills, diplomacy, management skills, multitasking skills, computer literacy, mathematical and analytical skills, mentoring skills, integrity, and ethics. The “seven-star pharmacist” concept assigns essential roles to the pharmacist as a caregiver, communicator, decision-maker, teacher, life-long learner, leader and manager. These roles positioned the pharmacist as a healthcare team member (FIP et al., 2008; Thamby and Subramani, 2014; Wiedenmayer et al., 2006). A study conducted in 2015 in the United States highlighted this critical aspect. First, pharmacy graduates must demonstrate good communication skills, critical thinking, and teamwork skills. Other skills were related to pharmaceutical practice and professionalism in the workspace (Frenzel et al., 2015).

Our respondents listed the three most essential skills needed in the pharmacist profession (Table 10).

There is an interesting slightly decreasing trend in the average age of the respondents from the first to the third option for several identified skills: life-long learner (first – 36.62, second – 35.54, third – 34.76), decision-maker (first – 36.68, second – 34.96, third – 34.52), and manager (first – 37.37, second – 36.28, third – 36.00) (Fig. S1, Supplementary material). The highest average age is for the third option of leader skill (average: 38.66 years old) and the third option – decision-maker. Most likely, the role of a leader is associated with a mature age that includes professional experience. Job satisfaction of the respondents (in terms of the average of the selected value from 1 to 5; Q2 results) has been analysed related to the identified skills (first option) (Table S6, Supplementary material). „Manager” is the first option for pharmacists with the highest average job satisfaction (3.79). Most likely, these pharmacists work with a good manager in the pharmacy or are managers themselves.

On the other hand, pharmacists who had the lowest average job satisfaction (3.40 and 3.46) selected as their first option „No answer” and respectively „Lifelong learner”. In this group, the lack

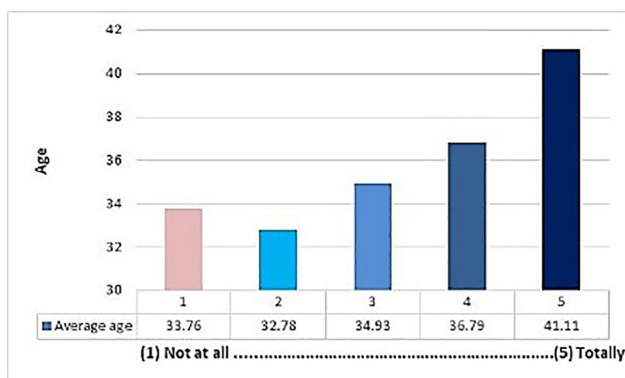


Fig. 13. The relationship between age (average) and the degree of job satisfaction on a scale from 1 (not at all) to 5 (totally).

Table 10 The three most essential skills needed in the pharmacist profession by codification through the “seven-star pharmacist” concept (results of Q3).

Top answers	Essential skills		
	The first option (answers)	The second option (answers)	The third option (answers)
1	Caregiver (196)	Caregiver (212)	Caregiver (206)
2	Communicator (176)	Communicator (171)	Communicator (158)
3	Life-long learner (62)	Manager (38)	Life-long learner (42)
4	Decision-maker (32)	Life-long learner (37)	Manager (38)
5	Manager (24)	Decision-maker (29)	Decision-maker (25)
6	Leader (11)	Leader (11)	Leader (12)
7	Teacher (0)	Teacher (0)	Teacher (1)
8	No answer (5)	No answer (8)	No answer (24)

of job satisfaction is evident in the absence of answers to the question. Those who have selected „Life-long learner” most likely believe that it is necessary to learn permanently and probably try to identify solutions to increase their job satisfaction. See also the respondents' low level of postgraduate studies (Q1 results).

4.5. Empathy in pharmacy (Q4)

Empathy plays a crucial role in communicating with the patient. A British clinical psychologist and professor of developmental psychopathology at the University of Cambridge, Simon Baron-Cohen, said in his book that “*Empathy is like a universal solvent. Any problem immersed in empathy becomes soluble*” (Baron-Cohen, 2011). A low level of empathy in the patient's relationship may be associated with the pharmacist's older age, physical, and mental fatigue (Hobeika et al., 2020). Pharmacists' empathy in pharmacy or virtual space is closely linked to improved treatment adherence, satisfaction, and patient treatment outcomes. Empathy is also closely linked to professional satisfaction (Meyer-Junco, 2015; Ratka, 2018; Terry and Cain, 2016). A recent study conducted in Indonesia was focused on empathy, knowledge and willingness to advise patients with HIV, as essential skills of pharmacists. It has been shown that a lower level of empathy and knowledge about HIV therapy was associated with stigmatisation (Sianturi et al., 2021).

Many respondents (455, 89.92% out of total) consider that they communicate empathetically with patients (rate 4 and 5). Of these, 150 (29.64% out of total) respondents consider that they are very empathetic with patients (rate 5, *totally*). From the analysed data, it was observed that the average age of the 12 male pharmacists respondents (37.83) is higher than the average age of the 138 female pharmacists respondents (35.90) for the total evaluation of shown empathy degree (5, *totally*). Thus, the percentage of male respondents (22.64%; 12 out of 53) was lower than female respondents (30.46%; 138 out of 453) who selected 5 value on the scale (*totally*). In this group, it seems that females self-evaluate more empathetically than males.

In a study conducted at Midwestern University, empathy levels in pharmacy students were measured. The empathy level of female students was significantly higher than male students. These results are in agreement with other studies with females scoring higher than males regarding empathy level (Tamayo et al., 2016). This self-appreciation of empathy degree may be more subjective than objective. However, in a previous study conducted in Romania, most patients (90% of respondents) believe pharmacists have shown empathy in their pharmaceutical counselling (Rusu, 2018). The development of empathy in undergraduate students is a more recent pharmacy faculty concern (Blaszczyk et al., 2018; Carey and Morrill, 2017; Degeeter, 2016; Schlesselman, 2018; Skoy et al., 2016; Wesche-Szollusi et al., 2016; Wolcott et al., 2019) (Tamayo et al., 2016). We consider that the shown level of empathy is closely related to each respondent's personal experiences and character.

4.6. Use of non-verbal communication (Q5)

The dimensions of communication, according to Albert Mehrabian (Mehrabian, 1981; Mehrabian and Ferris, 1967), were identified as follows. The verbal dimension includes the verbal message (*What do we say?*). What we communicate with the help of words is 7% of verbal communication. The vocal dimension includes the voice message (*How do we say?*). A percentage of 38% of communication is verbal communication through elements associated with speech (tone of voice, rhythm, pauses, interjections, etc.). The visual dimension includes the visible message (*What do we show?*

What is seen?). A percentage of 55% of communication is achieved through mime, gestures, and posture.

Most respondent pharmacists have appreciated that they consciously use body language to complete verbal communication with the patient. However, about a quarter of respondents (124 respondents; 24.51%) unintentionally used non-verbal language to communicate with the patient. Nonverbal communication has an overwhelming share (over 90%) and is an essential pharmacy counselling component. The basic nonverbal elements consist of vocal and visual dimensions (body language), alongside proxemics, haptics, oculosics, olfactics, chronemics, and atmospherics (Knapp et al., 2014). However, an essential difference between verbal and non-verbal communication is noted. Verbal communication has a beginning and an end, delimited by the used words (spoken or written words) using a single channel. In contrast, non-verbal communication is continuous and involves more than one communication channel simultaneously (Riggio and Riggio, 2012). Also, non-verbal language may help in situations where it is impossible to use verbal language (Stevenson, 2014).

4.7. Involvement of patient to understand his perspective and exchange information

4.7.1. The involvement of the patient in the decision-making process (Q6)

More than half of the surveyed pharmacists (286; 56.5%) consider that the share of situations they manage to involve the patient in pharmaceutical counselling is between 51% –75% (Fig. 5.). A number of 77 respondents admitted that they failed to include the patient in counselling in a large number of situations encountered (over 50% for 74 respondents; over 75% for 3 respondents). As an effective communicator, the pharmacist must succeed in involving the patient in the decision-making process regarding the treatment to be followed (Ilardo and Speciale, 2020).

4.7.2. Understand the patient's perspective (Q7)

To understand the patient's perspective, the pharmacist (and the physician) must know the feelings, ideas, concerns, and the patient's experience with the disease he suffers from (Hashim, 2017). Also, when adapting to the conversational level of each patient, the pharmacist should rapidly observe the education and cultural level of the interacting patient they're interacting with without being influenced by any stereotype (Cavaco, 2017). In our study, 406 respondents out of 506 (80.24%) appreciated that they understood to a vast extent, the patient's perspective (Fig. 5.).

4.7.3. Exchange of information (Q8)

The exchange of information between the patient and pharmacist is closely related to the patient's typology and communication skills. The pharmacist directs the conversation by controlling the types of questions asked and the time given for the patient's response. The ability to address questions improves with the pharmacist's experience. Thus, the pharmacist must communicate effectively with different types of patients (pleasant or unpleasant, cooperating or uncooperative, talkative or silent, interested or disinterested, etc.) (Tietze, 2012a).

In our survey, most pharmacists (403 respondents out of 506; 79.64%) appreciate that they manage to exchange relevant information with patients by selecting values 4 and 5 on a scale from 1 to 5. This result suggests that pharmacists are more patient-oriented than drug-oriented, close to the concept of “*patient-centred care service*.” The idea of “*patient-centred care service*” contains respect for the patient, responds to his individual preferences, needs and values, and takes these values into account in clinical decisions (Ilardo and Speciale, 2020).

The patient’s necessary information includes the following essential categories, listed in the natural order of the content comprised in Table 11.

4.8. Assessment of the pharmacist’s ability to address questions (Q9 and Q10)

Pharmacists have estimated the number of questions they use in identifying valuable information in the decision-making process. There is a slight tendency to address the patient more questions when it is necessary to recommend an OTC or dietary supplement than the release of a prescription (4–6 questions and more than 6 question situations). However, 39.3% of all respondents used between 2 and 4 questions in a prescription situation versus 33.8% in an OTC or supplement recommendation situation. Regardless of the patient’s case, we consider the number of asked questions is insufficient. On the other hand, the results obtained in Q8 contradict this self-assessment of the ability to question the patients. The pharmacist must have essential communication skills to address open-ended questions, allow the patient to complete responses, clarify and summarise the received information, and explore the impact of the disease on the patient (Tietze, 2012a). Patients who often use self-medication (OTC or supplements) are not aware of pharmacists’ professional role. Thus, they are less open to communicate with pharmacists, and they need privacy regarding their symptoms. Unfortunately, they are too confident in self-diagnose without a scientific basis and ignore the possible

risk of medicines (Seubert et al., 2018, 2018). In these particular situations, pharmacists are required to act as professionals, including questioning the patient properly.

A starting point towards the pharmacist’s de-professionalisation is the change of perception about the pharmacist by considering the pharmaceutical act and the pharmacy as part of the business field instead of the medical one. Because of this, the pharmacist tends not to be considered a specialist in the healthcare system anymore. Moreover, due to the freedom to access more or less scientific information sources in medical and pharmaceutical fields, the patient believes that he can medicate himself without asking for a pharmacist’s recommendation. Also, the recent increase in the variety of OTC products, combined with the patient’s false impression that he possesses the medical knowledge to use them correctly and associate them with other medical products, can lead to adverse effects.

Changes made in the legislation towards increased permissiveness regarding purchasing some medical products in some countries (e.g. Canada, USA) from the supermarket or other non-pharmaceutical sources are another issue that disadvantages pharmacists and confers less importance to the pharmaceutical act. The wrong association of some medical products with the notion of commercial good can have consequences both on the patient and the patient-pharmacist relationship, with an incorrect and incomplete perception of the pharmacist profession. An essential aspect of pharmacist’s de-skilling is the emergence of pharmacy chains (e.g. Czech Republic, Romania), which monopolise the pharmaceutical market by promoting their products and applying discounts at their purchase. Degradation of the pharmaceutical act prioritises the competition for selling instead of exercising the profession most conscientiously. Besides the reasons mentioned above, although it is helpful up to a point, digitalisation can decrease population appreciation for pharmacists’ jobs. The possibility of purchasing pharmaceutical products online can apparently help the patient but skips a critical phase - communication with the pharmacist. So, the counselling of the patient is omitted, which can actually bring serious disadvantages (Ilardo and Speciale, 2020).

If the EFST model (Explanatory, Social, Fears, Treatment) is followed, the required questions are more than six. The EFST model comprises a set of four types of questions: a) explanatory model of health and illness, b) social and environmental factors, c) fears and concerns, and d) therapeutic contracting (treatment) (Betancourt, 2006). In a two-year study conducted in Taiwan, pharmacists’ top ten questions were about dosage, usage, national health insurance criteria, the recommendation of medicines, pharmacology or mechanism of action, adverse drug reactions, indication, drug name, and alternative medicine (Hou et al., 2018). However, it is difficult for the pharmacist to ask the patient about the following items: a) asking about drug-induced sexual dysfunction; b) asking for haemorrhoid products, enema supplies, douche supplies, ostomy supplies, birth control products; c) to discuss drug or substance abuse, alcoholism, obesity, illiteracy, constipation, diarrhoea, incontinence, nonadherence to treatment (Tietze, 2012a).

In the pharmacist-patient dialogue, the number of addressed questions is essential. In Romania, the patient’s perspective on the pharmacist’s number of questions during counselling was previously assessed. More than half of the patients surveyed when leaving the pharmacy appreciated a small number of questions (between 1 and 4) asked by the pharmacist. Besides, there were situations in which the patient was not asked any questions by the pharmacist (18.87%) (Rusu, 2018). A large percentage of patients included in a study conducted in England were asked about taking other medicines (81.9%), symptom characteristics (77.9%), their duration (70.5%), and comorbidities (69.2%) when purchasing OTC drugs. The same study was conducted in Poland, where the

Table 11
The patient’s necessary information provided by the pharmacist (INN – International Nonproprietary Names for Pharmaceutical Substances) (Chertes, 2019; Hawes, 2018; Naughton, 2018).

No.	Information	Observations
1	Name of the drug and concentration (synonyms, INN)	The synonyms are explained where appropriate
2	Purpose of treatment and effects of drugs	Information regarding the purpose of the recommended drugs and what effect they have
3	Route of administration	Information on the route of administration; the pharmacist ensures that it has been understood
4	Method of administration	Information about the proper administration of the drug; the pharmacist will give clear recommendations for each type of drug, including demonstration where appropriate
5	The time of administration relative to main meals and circadian biorhythm	Instructions on the optimal time of day to administer their medications
6	The dose for once and the dose for 24 h	Clear warning regarding the maximum dose for one administration and the maximum dose for 24 h
7	Interval between administrations	How many hours, days, etc. are necessary between administrations
8	Administration time interval	How many days, weeks, months of treatment are needed
9	Warnings and precautions	For drugs where precautions and contraindications exist
10	Possible side effects	For drugs where side effects are possible
11	Proper diet regime	Drug-specific information
12	Proper storage of drugs and compliance with the shelf life	Drug-specific information
13	Minimum hygiene rules to be observed during the administration and storage of medicines	Drug-specific information

percentages were significantly lower (Ilardo and Speciale, 2020). Based on this comparative study, pharmacists in England ask more questions to patients than pharmacists in Poland.

4.9. Share Decision-Making (Q11)

The modern pharmacist aligns with the concept of “patient-centred communication.” The responsibility of the pharmacist is to identify patient goals and outline a collaborative treatment plan. To this effect, some essential communication skills are needed: the exploration of patient preferences, identification of barriers to treatment choices, and negotiation of an agreement (Naughton, 2018). In our study, only a small number of respondents (33 respondents; 6.52%) appreciated that they shared professional decisions with patients. A quarter of the surveyed pharmacists do not share at all or almost not at all professional decisions with the patient, selecting only the value 1 or 2 on a scale from 1 to 5 (Fig. 7). We can explain this most likely due to the pharmacist's lack of training in the spirit of the “patient-centred communication” concept. The pharmacist's communication skills of speaking clearly and avoiding jargon, using “Patient-Oriented Evidence that Matters” to encourage the patient to put questions and check for understanding (Naughton, 2018).

4.10. Transmitting information to the patient (Q12)

The patient's information offered by the pharmacist is crucial for the success of the treatment. The pharmacist often considers the prescription a basic form of communication with the patient (one-way communication). However, counselling the patient involves a complex set of clear information transmitted verbally and in writing that completes the prescription details in a two-way communication manner (Table 11). Patients' obtained data from the Internet can be misinterpreted and can affect the expected therapeutic results. Therefore, it is necessary to balance the need for information to be transmitted to the patient versus his desire 1) to know more details about the treatment schedule or 2) to know nothing (Ilardo and Speciale, 2020; Seubert et al., 2018; Tietze, 2012a). Effective patient counselling increases compliance in patients with chronic diseases. Pharmacists should possess essential communication abilities to address chronic patients (Palaian et al., 2006). Our study revealed that 73% of pharmacists appreciated that the patient left the pharmacy well informed; a quarter of respondents (25.30%) do not believe that the patient was well informed. The question here is whether this is a consequence of gaps in communication with the patient (overload or complexity of information, lack of experience, tiredness, relational shortcomings, inattention to the patient's needs, job dissatisfaction, other external factors) or it is due to the patient's reluctance to receive information (Cipolle et al., 2012; Ilardo and Speciale, 2020).

4.11. Patient monitoring plan (Q13 and Q14)

The pharmacist should develop a care plan for each condition that the patient suffers from. This plan will include the therapeutic objectives to be achieved, interventions and a schedule for the following health assessment. A therapeutic goal will be set to fix a specific response to medication or cure a condition. Interventions can solve drug therapy problems, achieve therapeutic purposes, or other necessary actions to prevent drug therapy problems. Several interventions related to therapy problems can be performed: initiating a new therapy, stopping therapy, increasing or decreasing the dose, or changing the medicine. Also, the pharmacist will consider patient education, the use of methods to improve adherence to treatment, referral to a specialist in the field of health, and

the use of medical devices. The care plan will contain the following schedule for assessing the patient's health and progress in achieving the established therapeutic goals. Besides, the care plan will be well documented to support therapeutic purposes through the performed interventions (Cipolle et al., 2012).

Implementing a patient monitoring plan in the community pharmacy is not sufficiently outlined in our country. As a result, the patient does not return to the same pharmacy most of the time. Furthermore, if the patient returns to the same pharmacy, there is a chance that he will meet another pharmacist. In Romania, pharmacists do not have access to patients' health records as doctors do. Thus, unfortunately, there is not a standard well-documented patient monitoring and care plan in Romanian pharmacies.

Nevertheless, many patients return to the same pharmacy in community pharmacies and establish harmonious relationships with pharmacists. From this perspective, 67.60% of the respondents most likely considered establishing an action plan and monitoring the patient's evolution. However, only 92 out of the total responding pharmacists (18.18%) appreciated that they monitor patients' evolution over 51% of the situations (on these, only 16 respondents monitor patients over 76% of the cases) (Fig. 8.). Moreover, those pharmacists who answered “No” to this question (163 respondents) do not monitor patients' progress or know the correct documented care plan requirements.

Several steps are required in a patient monitoring plan: determine specific monitoring parameters, integrate the monitoring plan, obtain data, and the response to therapy. SOAP is a handy formal tool (the name is an acronym for Subjective, Objective, Assessment, Plan) for every patient's health problem. SOAP is a process that includes the following activities: identifying data, assessing the patient's state of health, and developing a monitoring care plan (Tietze, 2012b). Romanian pharmacists must evolve in this direction to have professional success in their relationship with patients.

4.12. Patient awareness regarding the control of own health condition (Q15)

Patients become more aware of their situation and actively participate in their treatment. Thomas Creer first used the self-management term in 1976 to rehabilitate children from asthma, a chronic illness (Creer et al., 1976; Grady and Gough, 2014). Pharmacists' attitude toward patient self-management was assessed through Q15 in our survey. More than half of the respondents (295; 58.30%) appreciate that they succeed in increasing the patient's self-control regarding the management of his health condition (Table 5). Raising patient awareness for self-management of their disease is helpful. It represents a fusion of patient, family, community, clinician, and pharmacist goals to manage the condition in the best manner, facilitating comprehensive care (Grady and Gough, 2014). The necessary skills for self-management are problem-solving, decision making, resource utilisation, forming a partnership between patient and health care provider (e.g. the pharmacist), and taking action (Lorig and Holman, 2003). Together with other health care providers, the pharmacists must educate the patient to become more aware of his control of disease self-management. Inducing the patient's positive thinking about his illness is a positive factor in increasing the disease's self-management (Hurt et al., 2014).

4.13. Pharmacist-patient agreement regarding collaborative drug therapy management (Q16 and Q27)

Collaborative drug therapy management (CDTM) is an agreement between a pharmacist and a physician. Pharmacists need a collaborative practice environment to access patients' medical

records. Also, pharmacists must prove to have knowledge and skills for promoting the development of CDTM (Hansen and McDonald, 2013). Throughout CDTM, the pharmacist assumes responsibility for drug therapy management. Not all interviewed pharmacists managed to reach a consensus regarding the CDTM to be followed. Only 29 respondents (5.73%) consider that they are successful in this aspect (*totally*) (Table 5). Half of the respondents (249; 49.21%) selected the value 4, and 28 respondents (5.53%) specified the value 5 (on a scale of 1 to 5) regarding the efficiency of the pharmacist-patient team to ensure the therapeutic success. The rest of the responding pharmacists manage to a lesser extent to make an effective team with the patient. However, 213 of them (42.09%) selected value 3. This result is closely related to the patient's fidelity to the community pharmacy, assessed in Q25 and Q26. The results of Q26 are comparable with the results of Q27 (Table 7).

In our country, the pharmacist's access to the patient's medical record is not yet possible. Besides, working with a physician is sometimes challenging. This collaboration is more formal than practical. However, clinical pharmacists have a higher degree of cooperation in hospitals with the attending physicians.

4.14. Patient feedback on the therapeutical plan (Q17)

Pharmacists must be prepared to ask for patient feedback regarding the therapeutical plan. Verbal and nonverbal feedback greatly influences the communication between the two partners of the therapeutic strategy. By obtaining feedback, the pharmacist monitors the patient's progress within the therapeutic plan and can make the necessary adjustments (Al-Quteimat and Amer, 2016). The received feedback is for the benefit of both the patient and the pharmacist (Lloyd et al., n.d.; Tietze, 2012a). The pharmacist will play a supportive role, providing positive feedback to the patient (Ilardo and Speciale, 2020). The results showed that pharmacists responding to the questionnaire are not used to asking for patient feedback. About 40% of respondents admit that they do not often ask for feedback. They selected values 1, 2 or 3 out of 5 (*totally*). Only 55 respondents (10.87%) constantly asked for patient feedback (Table 5). Feedback is an important communication technique necessary for the set of pharmacist skills. The lack of focus on patient feedback can be explained by the traditional drug orientation versus patient-centred communication. Romanian pharmacists are not used to monitoring patients for therapeutic progress (Fig. 8).

4.15. Evaluation of the patient's personal experience (Q18)

When monitoring the patient, it is essential to evaluate the patient's experience with their medication. Patients are divided between two beliefs: the necessity of the medicines to maintain health and the concerns about the potential side effects (Horne et al., 1999). In an old study conducted in Sweden, most patients considered drugs helpful as something positive. Other patients considered drugs necessary but evil or dangerous (Isacson and Bingefors, 2002). The pharmacist must adequately advise and supports the patients with chronic illness to understand their condition, a healthy lifestyle and the therapeutic plan. Thus, the pharmacist's responsibility is vast in counselling these patients (Palaian et al., 2006). Unfortunately, in our survey, about 40% of the responding pharmacists do not evaluate the patient's personal experience with the medication or their health problems (Table 5). The reasons why this does not happen are various: limited time of interaction with the patient, focusing on dispensing medication, lack of communication skills, reducing the role of the pharmacist in health policies, lack of reward for pharmaceutical services, lack of motivation, an imbalance between clinical responsibility and the

pressure of pharmacy business plan, lack of collaboration between pharmacist and physician, and lack of confidence of the patient in the pharmacist when they have a different opinion than the physician.

4.16. Ability to handle various types of patients (Q19-Q22)

Among pharmacy graduates' essential skills are communication, problem-solving, and critical thinking (Frenzel et al., 2015). The pharmacist's communication skills involve adapting the message to the patient's personality and temperament and recognising the particular situation. In our survey, 134 respondents (26.48% of total respondents) admitted that they failed to adapt their message when interacting with the patients' specific typology (Fig. 9). Also, 145 respondents (26.66% of total respondents) cannot mediate a tense situation (Fig. 10).

During university, the emphasis is on theory and less on practice. The lack of exercise in terms of interaction with the patient translates into a lack of experience for young practitioners, leading to difficulties in dealing with an unexpected situation. Working with patients is not simple, especially when they are facing health problems. They can be more sensitive because of their condition. Special attention and the capacity to adapt to each patient are essential for being a good pharmacist. In these cases, some patients, especially the elderly, see the pharmacist as a confidant and overextend the conversation. Some pharmacists do not have the patience and the skills to entertain such long discussions. Regarding the relation of Q19 results to Q21, we found that for 243 (48.02%) respondents, the answers were similar as a chosen value from 1 to 5 (5 – 32 answers, 4 – 152 answers, 3 – 58 answers, and 2 – 1 answer). The descriptive statistics for the two series of answers is found in Table S7 (Supplementary material). Almost half of the respondents can adapt the message to the patient's personality and temperament; they also can mediate a tense situation in communication with the patient.

The pharmacist must be a fine observer, analyse the received feedback carefully, and then adapt their message to the patient's understanding. The pharmacist's attitude will transmit interest in the patient, objectivity, relaxation, confidence, comfort, nonjudgmental thinking, sincerity and honesty, and control of the interview. To reach effective communication with the patient, the pharmacist will identify the barriers in patient communication and overcome these barriers. All of this should include respect for the patient. The pharmacist must always be aware that a patient is a person, not a case or a prescription (Tietze, 2012a). Our study revealed that 159 respondents (31.42% of the total respondents) encounter difficulties in communication with patients in over 51% of situations (Fig. 9). A small number of pharmacists fail to show calm and relaxation (44 respondents; 8.70%). They keep calm in less than 51% of the situations they encounter (Fig. 10). A reason for losing their patience and being less calm may be the distributive attention they have to prove. Besides counselling the patient, they have to focus on medicine, the quantity and the dose. Also, pharmacists work on the computer simultaneously and must be very careful because they work with money in most situations. All these must be done correctly and at a specific time. So, this can be stressful for the pharmacists, some of them not being able to keep calm and manage the situation well.

4.17. Patient interest in a healthy lifestyle (Q23 and Q28)

The rapid accessibility of the pharmacist in providing first-line pharmaceutical care offers the opportunity to promote a healthy lifestyle. Pharmacists can encourage patients to change their lifestyles by recommending a nutritious diet, physical activity, and smoking cessation. In our study, the respondents' perception of

patients' interest in a healthy lifestyle varies (Table 6). However, most pharmacists appreciate that 26%-50% of patients are interested in a healthy lifestyle and are more receptive to counselling about food, sports, smoking cessation, etc. Given these results, pharmacists' mission is more difficult to promote and maintain a healthy lifestyle as a part of the "health literacy" concept (Ilardo and Speciale, 2020).

The change to a healthier lifestyle is a consequence of the pharmacist's counselling in most interviewed pharmacists' perceptions. In our survey, 322 respondents selected values 4 and 5 (on a scale of 1 – *not at all* to 5 – *totally*) for Q28 (Table 7). In the last decade, worldwide, pharmacists have been more open to participating in the prevention and screening of chronic diseases: osteoporosis, osteoarthritis, diabetes, hypercholesterolemia, hypertension, asthma, chronic obstructive lung disease, sleep disorders, and depression (Havlicek and Mansell, 2016). However, it is unclear whether pharmacist intervention has a beneficial effect on patient behaviour related to a healthy lifestyle (Steed et al., 2019).

4.18. Patient loyalty in the community pharmacy (Q24 and Q26)

Trust in the community pharmacist has the most significant impact on patient satisfaction regarding pharmaceutical services in Italy. These two aspects positively affect the patient's trust in a community pharmacy, leading to loyalty to that pharmacy (Castaldo et al., 2016). To a recent study in Germany, patient loyalty is closely linked to satisfaction and perceived customer value (PCV) (Guhl et al., 2019; Woodruff, 1997). Our study presents different perceptions of responding pharmacists. A positive result is that 97 respondents (19.17%) considered that at least 75% of the patients are loyal, returning to the same pharmacy. However, 33 respondents (6.52%) believed that less than 25% of the patients are dedicated to the pharmacy. Half of the respondents (48.22%) considered that patients return to the same pharmacy between 51% and 75%. The reasons that lead to these differences in perception can be related to the pharmacist's experience, communication skills, pharmacy positioning, pharmacy supply, commercial promotions of supplements or other non-drug products, loyalty cards, and pharmaceutical products prepared by the pharmacists.

4.19. Receptivity of the patient (Q25)

The pharmacist needs a professional collaboration with receptive patients. However, they are not always receptive to pharmacists' advice. Our results show that 28.66% of pharmacists consider that patients are less receptive to their advice; they chose the values 1, 2 or 3 out of 5. The rest of the pharmacists (342; 67.58%) selected 4 or 5 out of 5 (Q25; Table 7).

At the beginning of the treatment, the patient needs advice and support from the pharmacist, so they are much more receptive. The administration of new medication for a chronic condition is crucial for the pharmacist to support the patient in achieving his therapeutic goal. In a study conducted in community pharmacies, 75% are receptive to subsequent offers of immediate telephonic pharmacist counselling (Feifer et al., 2010). In a study performed in the Netherlands, follow-up home visits were an excellent opportunity for community pharmacists to increase patients' receptivity to counselling (Ensing et al., 2018).

4.20. Methods used by the pharmacist to gain the patient's trust (Q29)

When interacting with the patient, the discussion should be patient-centred to contribute to the patient's trust in the pharmacy and increased adherence to treatment (van Dijk et al., 2016). The top of the answers after coding is presented in Table 12.

Table 12

The top of the answers after coding (by the number of obtained answers) for the first, second and third ways to gain the patient's trust (Q29 results).

Top answers	Ways to gain the patient's trust		
	First	Second	Third
1	Effective communication	Effective communication	Effective communication
2	Professionalism	Professionalism	Professionalism
3	Persuasion	Patience	Persuasion
4	Correctness / honesty	Persuasion	Patience
5	Patience	Correctness / honesty	Proactive attitude
6	Proactive attitude	Positivism	Correctness / honesty
7	Positivism	Proactive attitude	Positivism

The most used methods to gain patients' trust were effective communication, professionalism, persuasion, and patience. The coding is "no answer" for the respondents who offered only one or two ways to achieve the patient's trust (Fig. 11). Thus, effective communication is the most successful method in the perception of responding pharmacists in our study. However, effective communication is not possible without professionalism. Thereby, demonstrating professionalism in the relationship with the patient is the second most commonly used method in the perception of responding pharmacists. By selecting the appropriate resources and keeping current on the related literature, the pharmacist could inspire trust and competence in the patient ("Pharmacist's Role in Providing Drug Information," n.d.).

4.21. Effective communication with the patient (Q30)

The development of pharmacists' communication skills can help achieve higher patient satisfaction than providing new services (Schwartzberg et al., 2018). Thus, the patient becomes more adherent to the treatment, and the pharmaceutical services are focused on his personal needs. The pharmacist is satisfied at work, and their status increases visibly. Should they have pharmacists with good communication skills, the business will flourish. In opposition, the lack of communication skills of the pharmacist can have many negative consequences on the patient and the pharmacist and the industry. The patient becomes less adherent to the treatment and is not satisfied with pharmaceutical services that are not focused on his personal needs. As a result, the pharmacist is not happy at work, and his status becomes deficient. In this context, the entire pharmacy business is negatively impacted (Ilardo and Speciale, 2020).

Counselling, interviewing and educating the patient are three aspects that a pharmacist should consider when interacting. First, pharmacists should try to build a collaborative relationship with the patient from the beginning. Based on clinical knowledge and empathy, the pharmacist should create a bond over time with the patient. Second, the conversation with the patient must be systematised and organised to be efficient (McDonough and Bennett, 2006). The language should be unequivocal for each patient, so the pharmacist must ensure that the information is appropriately transmitted in each case. This means that some medical terms should be adapted for the pharmacist to be clear, such as hypertension - high blood pressure; arrhythmia - irregular heartbeat; sublingual- under the tongue etc. (van Dijk et al., 2016). The pharmacist must ensure that the patient understood the physician's using a technique based on several questions regarding the purpose of the treatment, the posology and the expectations after administration. Finally, the pharmacist makes sure that the

conversation is efficient by asking the patient to show how to administer the medication (McDonough and Bennett, 2006).

In our study, most respondents (74.70%) rated “Excellent” or “Very Good” as their professional success in communicating with the patient. However, 116 respondents rated “Good”, 10 respondents rated “Satisfactory”, and 2 respondents rated “Unacceptable”. The profile of the ten respondents who chose “Satisfactory” is the age between 25 and 45 years (average 30); the experience and specialisation vary. The average satisfaction score is 2.8 out of 5. The average degree of empathy score is 4.3 out of 5, the patient’s perspective is relatively understood (average 3.6 out of 5), and they exchange some information with the patient (average 3.4 out of 5). They partially share the responsibility for decisions with the patient (average 2.5 out of 5). The profile of the two unsuccessful pharmacists is characterised by age 25 and 39 (female gender). Also, these findings suggested a lack of specialisation, a lack of professional satisfaction (average satisfaction score 2.8 out of 5), the average degree of empathy (average empathy score 3 out of 5), poor understanding of the patient’s perspective (average 2.5 out of 5) and little information exchanged with the patient (average 2.5 out of 5). They do not share the responsibility for decisions with the patient (average 1.5 out of 5). One of the two respondents does not need a professional training.

In addition, the results of Q30 seem to be related to the results of the Q28. A healthy lifestyle and improved patient health care could be results in effective pharmacist-patient dialogue. Many respondents (209; 41.30% out of total) selected similar answers to both questions. The similarity found is as follows: „5” and „Excellent” for 10 respondents (1.97% out of total), „4” and „Very Good” for 166 respondents (32.80% out of total), and „3” and „Good” for 33 respondents (6.52% out of total).

The reasons why some pharmacists are not successful in communicating with the patient can vary widely (Ilardo and Speciale, 2020; van Dijk et al., 2016). Romanian society is increasingly oriented toward consumerism, and community pharmacy has become more trade-oriented than other health services. Also, many pharmacies are part of chains of pharmacies subject to a corporate system in our country, well anchored in the business area. The growing bureaucracy of a pharmacy significantly reduces the time required to communicate with the pharmacist. In the last twenty years, new faculties of pharmacy have been established, and the number of graduates has increased. Thus, the selection of candidates for admission is increasingly relaxed, but professional training has decreased.

4.22. The need for professional education (Q31)

The main philosophy underlying pharmaceutical practice should be the well-being of patients (FIP/WHO, n.d.). Yearly, Romanian pharmacists must participate in many training courses or other forms of continuing education and information and obtain 40 credits of Continuous Pharmaceutical Education (CPE) (Romanian College of Pharmacists, n.d.). Life-long learning is essential for pharmaceutical practice and therapeutic patient outcomes. These CPE credits are in agreement with continuing professional development promoted by the Pharmaceutical Group of the European Union (PGEU) (“Professional practice,” 2019). The cycle of experiential learning (Kolb cycle) revealed that learning occurs cyclically (Concrete Experience – Feeling, Reflective Observation – Watching, Abstract Conceptualization – Thinking, Active Experimentation – Doing)(Konak et al., 2014; “The 4 Components of the Experiential Learning Cycle,” n.d.) Globally, there are significant differences in health systems. These differences influence pharmacists’ training needs, the skills required, and the job description (Schwartzberg et al., 2018).

The results obtained after coding the answers showed that most responses revealed the need for skills development (141; 28% out of total) followed by live activities (87; 28% out of total). Formal education is ranked last in the top of pharmacists’ preferences. More than a third (186; 37% out of total) of the respondents do not need professional training to improve communication with the patient, or they did not know how to answer, they did not answer, or the answer was not related to the subject of the Q31 (Table S8, Supplementary material). Most of those respondents who do not need professional training, do not know/do not answer Q31, or the answer was not related to professional training are mainly pharmacists without other formal education aspirations, with few exceptions. The relationship between this issue and the degree of job satisfaction of the respondents on a scale from 1 (not at all) to 5 (totally) is as follows: 1 – 7 respondents, 2 – 15 respondents, 3 – 40 respondents, 4 – 103 respondents, and 5 – 21 respondents (average 3.62). There is an interesting relation between the degree of job satisfaction and the lack of need for professional training. Most respondents (124 out of 186) chose a high degree of job satisfaction (4 or 5 value). The reasons for professional self-sufficiency may be various: insufficient training during faculty, increased bureaucracy, overloading at work, trade-orientation over health services, and lack of vocation for the profession.

The EFA highlighted the pharmacists’ profile in three segments (F1 – F3). F1 profile includes persuasive pharmacists and process-driven pharmacists in communicating with patients and understanding the patient. Also, those pharmacists can smooth out tense situations. F2 profile includes pharmacists who pay close attention to the patient’s opinion, concerns or fears and are interested in getting the patient’s approval. They can adapt the message according to the patient’s typology and receive gratitude from the patients. Both F1 and F2 profiles include pharmacists who successfully form an effective team with the patient to ensure therapeutical progress, prevention of diseases, and a healthy lifestyle. The F3 profile of pharmacists is more the action-driven type of pharmacist following by-the-book advice to get results. The profile has the following features: empathetic, aware of the importance of efficient communication (verbal and non-verbal). Also, those pharmacists share responsibility for professional decisions with the patient, consider achieving a necessary level of information, establish an action plan, and monitor the patient’s health evolution. Finally, both F1 and F3 profiles include the success of pharmacists in convincing the patient that he has power over his health.

5. Strengths and limitations of the study

The strongest point of this study is the originality of the pharmacist-patient communication approach from the pharmacist’s perspective. Moreover, the study treated this subject from many different angles and provided extensive discussions for each question and correlations between multiple questions.

Regarding the study’s limitations, the obtained answers have a high degree of subjectivity, being the personal perception of pharmacists. The respondents’ group includes only pharmacists who had access to the online questionnaire and may not reflect all pharmacists from community pharmacies. The obtained demographic data may be limited, referring only to age, gender and specialisation. We preferred a short time to complete the questionnaire (about 15 min) and include relevant questions about pharmacists’ perceptions. The coding of some answers (Q3, Q31) can lead to the loss of some particular answers.

6. Conclusions

This study shows the perspective of the Romanian pharmacists (most women) concerning the communication with the patient

and other relevant aspects due to the current public health system and the level of knowledge and skills.

Most pharmacists have a high degree of job satisfaction, which increases with average age, and professional experience is obtained over time. The three essential skills selected by the pharmacists as the first option were caregiver, communicator and life-long learner. Study participants perceive themselves as good communicators, manage to exchange relevant information, understand to a vast extent the patient's perspective, and appreciate that the patient leaves the pharmacy well informed.

Pharmacists are partially successful in monitoring the patient's therapeutic plan because well-documented monitoring and care plans are not standard in Romanian pharmacies. The ability to handle various types of patients and mediate a tense situation is a challenge for pharmacists. Thus, the educational role of the pharmacist should prevail in pharmacist-patient communication and be closely related to the patient's receptivity. Nevertheless, more than a third of the respondents are missing the need for professional training.

Implementing methods for periodic evaluation of the efficiency of pharmacist-patient communication in the community pharmacy is necessary. The access to the results of periodic evaluations will diminish the pharmacist's degree of subjectivity. Also, the Romanian CPE credit system needs to be less formal and should be more challenging to obtain. These CPE credits must include acquiring skills (especially communication) and professional information.

CRedit authorship contribution statement

Aura Rusu: Conceptualization, Writing – original draft, Writing – review & editing, Visualization, Supervision. **Marius Călin Chereches:** Writing – original draft, Supervision. **Cristian Popa:** Writing – original draft. **Raluca Botezatu:** Writing – original draft. **Lungu Ioana-Andreea:** Writing – original draft, Writing – review & editing, Visualization. **Octavia-Laura Moldovan:** Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jsps.2022.06.014>.

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