



***PROSPERITAS VESTRA FINIS NOSTRA!***

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**THE PROFESSIONAL COMMUNICATION OF THE INSPECTOR  
PUBLIC HEALTH-  
OPPORTUNITIES FOR OPTIMIZATION**

**DISSERTATION ABSTRACT**

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The dissertation is discussed and directed for defense by an extended department council of the Department of Health Care at the Medical University "Prof. Dr. P. Stoyanov", Varna on October 26, 2021.

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The materials on the defense are available in the scientific department of MU-Varna and are published on the website of MU-Varna.

Note: In the abstract the numbers of the figures and tables do not correspond to the numbers of the dissertation.

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## **ABBREVIATIONS**

**BFSA** - Bulgarian Food Safety Agency

**EQD** - Educational qualification degree

**ES** - Education Sector

**EU** - European Union

**HEI** - Higher education institution

**IPA** - Institute of Public Administration

**MAF** - Ministry of Agriculture and Food.

**MH** - Ministry of Health

**MU** - Medical University

**NCPHA** - National Center for Public Health and Analysis

**PH** - Public Health

**PHI** - Public Health Inspectors

**RFSD** - Regional Directorate for Food Safety

**RHI** - Regional Health Inspectorate

**USR** - Uniform state requirements

## INTRODUCTION

In recent years, the Bulgarian state administration has faced a difficult challenge - on the one hand; fiscal constraints require a reduction in the cost of conducting public policies. On the other, the demand for public services and state support is growing. As a result, citizens have increasing expectations of institutions to ensure more general control over their activities, improve the quality of services provided, and ensure a higher standard of living. Achieving the goals requires good coordination in the communication process between governmental, non-governmental organizations, employees, and consumers. The development of competencies begins in higher education and is further developed in the process of professional development.

The formation and use of communication skills and abilities are part of the main qualities of future specialists in healthcare. Public Health Inspectors (PHI) are also part of the healthcare system. Their activity is specific, focused on health promotion and disease prevention. It is characteristic of them that they perform civil service and receive the status of civil servants. They have delegated powers for monitoring, research, analysis, and control regarding the observance of normative health requirements in communal hygiene, radiation protection, occupational medicine, nutrition, hygiene of children and adolescents, and epidemiology. The work of the PHI is characterized by a high frequency of interpersonal contacts in communication with various social groups and levels of education and awareness - managers, colleagues, governmental and non-governmental services, consumers, their relatives, students, and employees.

Behavior is an expression of professional communication. The professional conduct of the inspector is regulated in the Code of Ethics of Civil Servants. The introduced standards support decision-making, but their law enforcement is possible by mastering various communication techniques and managing specific situations. In their activity, the specialists impose administrative measures and do not meet the expectations of individual citizens, which puts them in an opposing position about business operators and society. Therefore, they need to anticipate situations and balance, on the one hand, the adverse reactions to them, and on the other hand, to perform the tasks effectively. Therefore, they must have a high level of professionalism, morale, qualities for solving non-standard tasks, and a sense of duty.

So far, a specific study has been conducted related to the level of education of the PHI and several national studies aimed at all employees in the state administration. National surveys cover critical aspects of administrative work such as leadership, teamwork, commitment, satisfaction, and motivation. On the other hand, the media reflects the protests of health inspectors concerning staff reductions, growing responsibilities, the appointment of different specialists to the position of inspector, unworthy pay, and others. In this case, when we talk about professional communication and behavior, we should consider the dominant influence of the professional environment in which a person falls, interacts, and influences the factors that determine the behavior of employees.

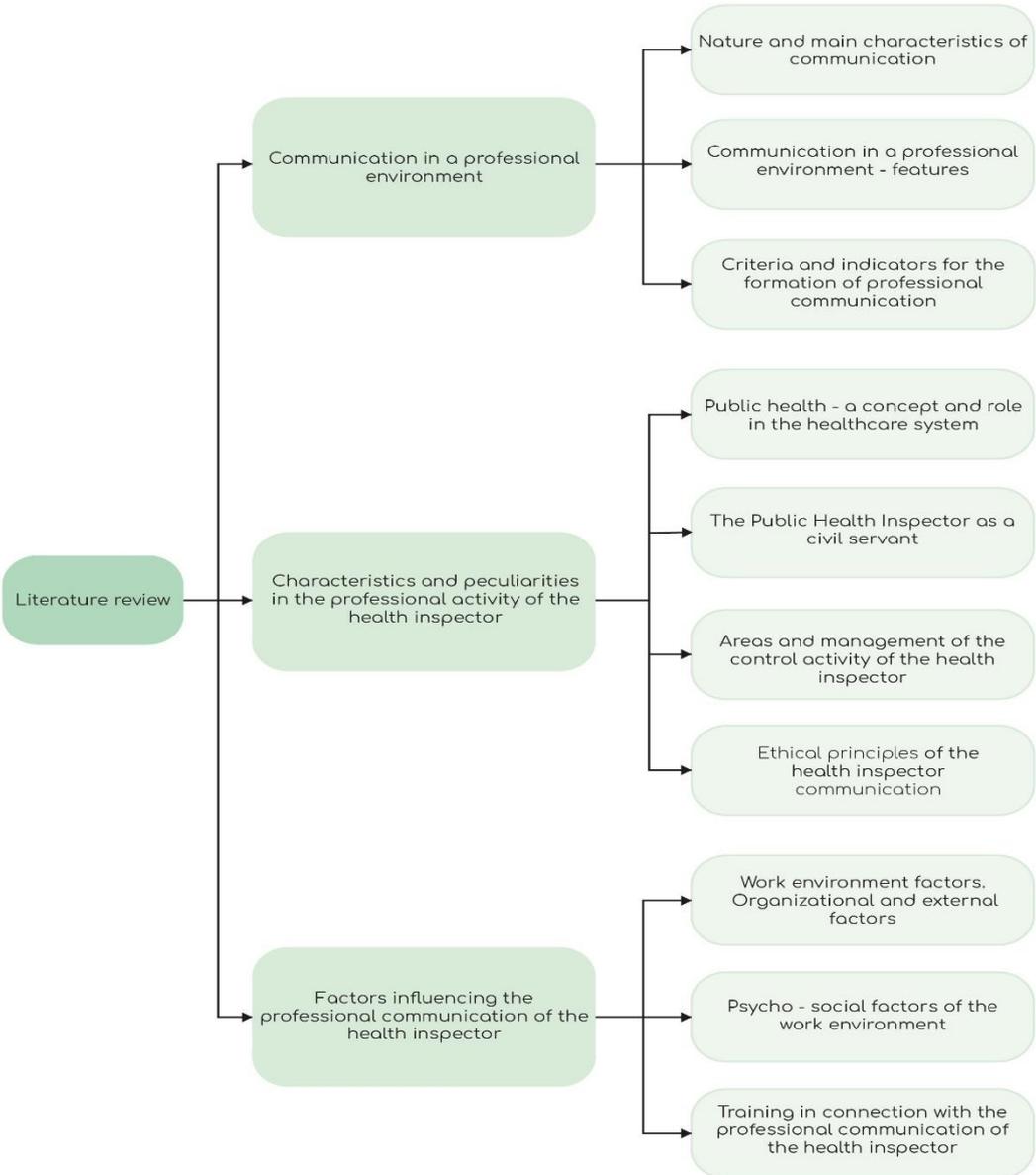
The lack of research on the functioning of health inspectors and their crucial role in protecting public health has determined our motives for the current research work. The dissertation includes a study to identify the factors of the professional environment that are relevant to the professional communication and behavior of health inspectors: motivation for work, job

satisfaction, workload, frequency of conflict situations in the activities of the PHI, preparation of employees to control the psycho-emotional state.

The high communicative culture of civil servants is essential because it strengthens and strengthens the authority and professionalism of each participant in communication.

**1.1. Structure of the literature review**

The first chapter of the dissertation includes a literature review, presenting in a structured form the process of communication in a professional environment, the status and functional characteristics of PHIs, reforms in the work environment and their impact on the process of communication and behavior of PHIs (Fig. 1).



*Fig. 1. Structure of the literature review*

## **II. METHODOLOGY AND ORGANIZATION OF SCIENTIFIC RESEARCH**

### **2.1. Purpose and tasks and hypotheses**

#### **Purpose:**

To study the professional communication of PHI to reveal the possibilities for optimizing their communication skills in the work process.

To achieve this goal, we set the following **tasks**:

1. To study and analyze the opinion of the PHI as a state control body for its professional communication in the work environment.
2. To identify the factors of the professional environment influencing the professional communication of the PHI.
3. To study and analyze the opinion of experts from the field of "Control over public health" on the activities of the PHI and its communication in a professional environment.
4. To outline the professional-personal profile of the PHI as a control body in the process of professional communication.
5. To develop a model and to propose approaches for optimizing the professional communication of PHI in the workplace.

#### **Hypotheses**

1. PHI highly values its communicative competence in the work environment
2. The professional communication in the activity of the PHI may be influenced by the factors of the working environment.
3. The professional satisfaction of the PHI can influence the process of professional communication.
4. The professional communication of the PHI is built and supported with the help of specialized pieces of training for the acquisition and development of communicative skills.

### **2.2. Organization, time and place of the dissertation research**

**The subject of the study** are the interpersonal relationships between the public health inspector, managers, colleagues and persons subject to control in the process of professional communication.

#### **Object of the study:**

- ✓ **Public health inspectors** - working in Regional Health Inspectorates (RHI) and Regional Directorates for Food Safety (RFSD)

**Experts** - experts, working/ left the system of RHI / RFSD or realized in other institution related to the PH (National Center for Public Health and Analysis, Medical University, University multidisciplinary hospital for active treatment, Diagnostic Consultative Center, Municipality)

The scope of the survey is 132 respondents, divided into two groups:

*First group - Public Health Inspectors working in the structure of RHI (n = 116), (Table 1):*

**Table 1. Distribution of the respondents from the first group by cities**

City	Institution	Number of respondents
Varna	RHI	33
Rousse	RHI	5
Dobrich	RHI	17
Shumen	RHI	11
Yambol	RHI	7
Razgrad	RHI	12
Silistra	RHI	10
Others	RHI	21

*Second group: experts* - experts, working/ left the system of RHI / RFSD or realized in other institution related to the PH (National Center for Public Health and Analysis, Medical University, University multidisciplinary hospital for active treatment, Diagnostic Consultative Center, Municipality) (n = 16). Everyone responded.

### Study bodies

The main part of the research was conducted personally by the doctoral student in order to achieve greater accuracy. Given the measures introduced against COVID - 19 and the impossibility of conducting the survey directly, in some of the cities the cooperation of persons working and designated by the Directors of the respective RHI in which the survey is conducted has been used. All selected collaborators are acquainted in advance with the purpose and methodology of the survey and are trained to work with the tools (questionnaires). The study can be repeated for all these groups of subjects with the ability to dynamically track the individual signs and perform a comparative analysis of some of them.

The study was conducted in several stages, determining the tools, place and period of implementation, presented in Table 2.

**Table 2. Stages of the study**

Stages	Activity	Instruments	Location	Time
1.	Pilot study	Questionnaire for working PES in RHI and RFSD	Varna Dobrich Sliven	July 2018
2.	Study topicality of the problem. Formulation on the topic, determining the purpose, tasks, object and subject of the study, developing hypotheses Development of	Literary sources on topic, articles, educational documentation, publications / inclusive	Varna	July 2018 – December 2019

	tools. preparation of the literature review	international /, normative documents		
3.	Conducting anonymously research and in - depth interview on respondents on the topic.	Questionnaire for working PHI in RHI	Varna Rousse Dobrich Shumen Razgrad Silistra Yambol Others	August 2020 –
		In-depth interview for experts working for the RHI / RFSD system or another institution related to the CA	Sofia Varna	July 2021
4.	Processing, analysis and description of the data obtained	SPSS – SPSS for Windows 13.0.	Varna	October 2020 – July 2021

### 2.3. Research methods

✓ **Documentary method** - used for analysis are national and international normative documents, publications in the press, letters from trade unions, instructions and reports of RHI, and literature sources related to the professional conduct of the PHI.

✓ **Sociological method**

- **Quantitative method (survey method)** - a survey was conducted among the PHI to analyze and assess the factors of the professional environment influencing the relationship of the PHI with managers, colleagues in the workplace and with persons subject to control.

- **Qualitative method (in-depth interview)** - an in-depth interview was conducted among experts working in the RHI / RFSD system or other institution related to health, the work environment, reforms in the PHI service and their impact on the activities of health inspectors.

- **SWOT analysis method for studying the professional communication and behavior of PHIs.**

✓ **Statistical methods** for analysis and interpretation of data in order to reveal the nature of the observed phenomena and their interdependencies. For the statistical presentation of the results were used:

#### A. Descriptive and evaluation methods

1. Variation analysis of quantitative variables - mean, standard deviation, median, minimum, maximum.

2. Frequency analysis of qualitative variables (nominal and rank), which includes absolute frequencies, relative frequencies (in percent), cumulative relative frequencies (in percent)

3. Graphic images.

**B. Methods for testing hypotheses** - non-parametric methods - Chi-square test method or its variant Fisher's exact test; methods on Kolmogorov-Smirnov and Shapiro-Wilk; Mann-Witney method

**C. Correlation analysis** - parametric coefficient of linear correlation - Pearson; nonparametric coefficient of linear correlation - Spearman.

**D. Regression analysis - logistic regression analysis**

The critical significance level we use is  $\alpha = 0.05$ . The corresponding null hypothesis is rejected when the P-value is less than  $\alpha$ . The SPSS version - SPSS for Windows 13.0 was used to process the data from the research related to the dissertation work.

## 2.4. Research tools

To achieve the research goals and solve the pre-formulated tasks, own developed tools have been applied.

Individual questionnaire for surveying the opinion of working public health inspectors. The questionnaire includes 22 questions (7 closed, 11 semi-closed, and four open questions) for additional information (suggestions and recommendations), grouped as follows:

- Demographic and professional characteristics - age, education, professional experience, place of work;
- Satisfaction with the profession - reasons for choosing a profession, current satisfaction, future professional plans;
- Workload at work - subjective feeling and objective reasons;
- Self-assessment of one's communication skills and abilities, level of workload, and frequency of conflicts;
- Relationships between IOP with management, colleagues in the workplace, and persons subject to control, as well as the factors that affect them;

The in-depth interview to examine the opinion of experts, containing a total of 10 thematic areas. The discussion includes thematic areas related to the working environment, reforms in the PES service, and their impact on the work of health inspectors. They refer to the place and role of the PES in the prevention activities in Bulgaria; workload and work motives; the influence of the reforms in the action of the PES, the impact of the reforms on the professional communication and building of communicative skills. The construction of the areas provides an opportunity to obtain additional information on the topics discussed, proposals, and recommendations regarding the professional environment of the PES and the opportunities for acquiring communication skills and abilities in its activities.

## 2.5. Organization of the study

The study was conducted after approval by the Commission for Ethics of Research at the Medical University - Varna with Decision № 93 / 21.05.2020.

**In the preparatory stage**, we formulated the problem, the purpose, tasks, and design of the study were defined, the hypotheses, the tools, and the organizational plan were developed.

**The pilot study** was conducted in July 2018 to test the questionnaire.

**Fundamental research** - The research was carried out after receiving Declarations of Consent from the Directors of the institutions in which the research was conducted. For this purpose, requests were made to the Directors of RHI and RFSD in Eastern Bulgaria for

participation in a scientific study of health inspectors from the inspections entrusted to them. We received consents from the services management from RHI - Varna, Ruse, Dobrich, Shumen, Yambol, Razgrad, Silistra, and RFSD - Ruse. The study was conducted during an emergency epidemic situation in the country of COVID-19. In the fight against COVID-19, health inspectors take part as front-line workers. The introduced reorganizations in the RHI services made it difficult to cover all health inspectors. The cities initially planned for research (Varna, Ruse, Dobrich, Shumen, Razgrad, Yambol, and Silistra) are protected on average 87.9% of the persons working in the respective structures of RHI. Additionally, after filling in an Informed Consent Form, 21 health inspectors working in the RHI system took part at their request to maintain anonymity in the realized professional field.

Upon an inquiry to the Directors of RFSD on the territory of Northeastern Bulgaria (Varna, Ruse, Razgrad, Shumen, Targovishte, Dobrich, and Silistra), we did not receive written consent to conduct a survey among health inspectors in their departments, except RFSD - Ruse. Subsequently, given the anti-epidemic situation in the country against the spread of COVID - 19, the study in RFSD - Ruse was not carried out. Significantly fewer specialists with the education of a health inspector work in food agencies, and in the medium and smaller districts/cities, their number is between one and three employees. In this sense, including an additional small number of respondents would not significantly affect the final results.

#### **An informed consent**

Informed consent for participation in the study was prepared, containing detailed data on the nature of the study. Furthermore, the composition of the research team and contacts in case of additional questions or need for information is presented. The anonymity of the participants is guaranteed.

#### **Information about the subjects**

Each participant in the study was provided with information describing the purpose of the study, benefits for the study participant, the confidentiality of data. Participation in the survey is voluntary, and the person can withdraw at any time.

### **2.6. Conceptual apparatus**

Due to the variety of concepts that are often used unambiguously, but differ in content in meaning, we consider it necessary to present the conceptual apparatus and the concepts we have adopted.

- ✓ **Professional communication** is an interactive process between individuals united by belonging to the same profession and with other persons. Professional information, professional experience, and ideas are exchanged.
- ✓ **Competent authority** means a central authority of the state, capable of ensuring compliance with the requirements of the legislation.
- ✓ **Official control** means the activities carried out by the competent authorities to verify compliance with legislation in the field.

✓ **Control verification procedures** mean the organization established and the actions taken by the competent authorities to ensure the consistency and effectiveness of official controls and other official activities.

✓ **Operator, 'business operator,' 'economic operator'** means any natural or legal person holding one or more of the obligations laid down in the rules for carrying out official controls.

### III. Results and discussion

#### 3.1. Results of the survey

##### 3.1.1. Socio-demographic characteristics of the PHI

The study involved 116 health inspectors working as civil servants in the specified territorial centers of the Regional Health Inspectorates (RHI) (Table 1). The representatives of the three groups are approximately evenly distributed - 1/3 of the total number of respondents.

Additionally, after filling in an informed consent, health inspectors working in the RHI system and from other cities, which we do not mention, were included in order to preserve their anonymity. They are assigned to the respective areas in which they work as "Others" (Table 3).

*Table 3. Distribution of respondents by district.*

Distribution by areas of control	Cities	Number of state inspectors	Number of inspectors surveyed in the survey	% attitude	Total number surveyed inspectors in the study
Large areas / cities	Varna	36	33	91,6%	38
	Rousse	12	5	41,6%	
Medium districts / cities	Dobrich	20	17	85%	41
	Shumen	10	11	100%	
	Others	30	13	43,3%	
Small areas / cities	Yambol	12	7	58,3%	37
	Razgrad	12	12	100%	
	Silistra	6	10	100%	
	Others	11	8	72,7%	
<b>Total number</b>		<b>149</b>	116	<b>77,9%</b>	<b>116</b>

Among the employed, women predominate in a ratio of 4: 1 (women - 80%, men - 20%). The predominant age group among the participants in the study was between 45 and 54 years (34.3%). The determined average age of PHIs is  $45 \pm 2$  years. These are people of active age who have gained experience and can apply what they have learned in their practice. On the other hand, nearly one in five (18.2%) respondents are over 55 years old. i.e., close to pre-retirement age, who can pass on their professional experience to their younger colleagues. In the most active period, between the ages of 31 and 44, 26% of health inspectors fall. These are people with accumulated professional experience who have enough time for the future professional realization to develop and apply what has been learned. The most minor

represented age group are persons under 30 years of age (14.2%). These data indirectly show the shortage of young professionals.

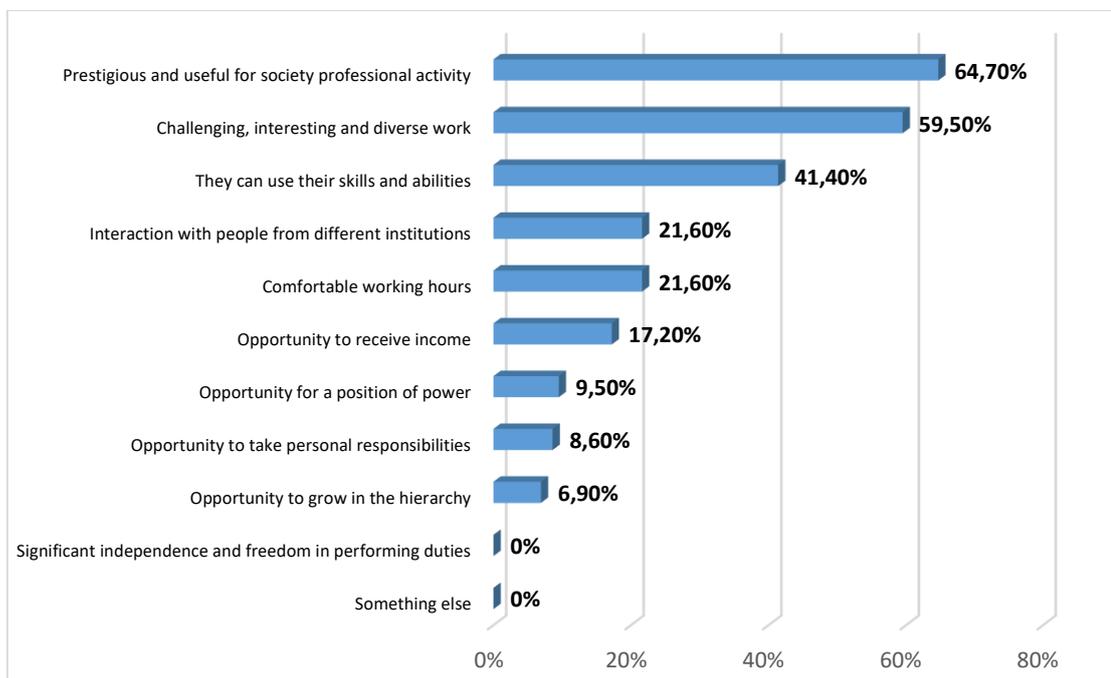
The average duration of professional experience of the surveyed PHI is  $18 \pm 2$  years. Definitely in the control state service under PH work persons with accumulated professional experience. Every second Inspector (58.6%) has been employed for over 20 years. The next group - 14.6% are respondents with professional experience between 2 and 5 years. The participants with employment between 6 and 20 years are evenly distributed, as from 6 to 10 years they are 10.3%, and from 11 to 20 years - 11.2%. The smallest is the group with less than one year of work experience - 5.2%.

It is expected in the coming years, given the large share of respondents of pre-retirement age, to increase market demand for specialists - Public Health Inspectors.

### 3.1.2. Level of professional satisfaction and evaluation of work relationships.

The two concepts - motivation and satisfaction - are important for the emerging professional communication and behavior of the employee. The motivated and satisfied person feels good and makes efforts to perform the tasks effectively. Conversely, demotivation and low levels of satisfaction depress the subject, and this can lead to low professional performance.

Motivation to work is considered a driving force in achieving the goals of the organization. It was studied through the expectations of employees at the beginning of work (Fig. 2).



**Fig. 2. Distribution of PHI expectations upon entry into office.**

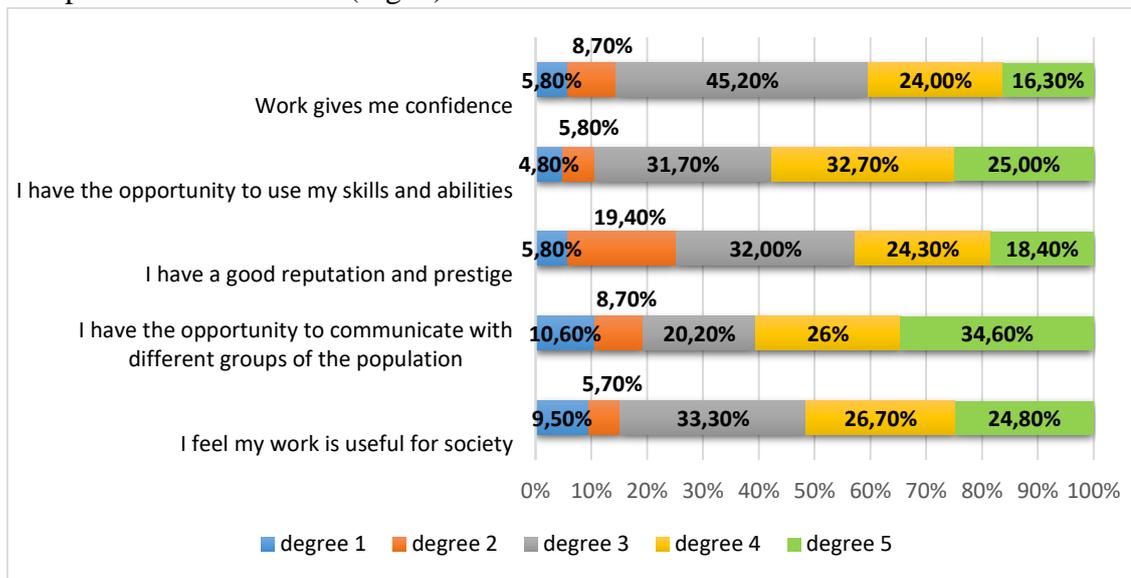
Note: \*% exceeds one hundred due to more than one answer

Leading motivating factors for the inspector are the prestige of the workplace (64.7%), the challenges of the work (59.5%), and the opportunities to share the skills and abilities of specialists (41.4%). Under ¼ of the respondents indicate other motivating factors, which means a weak initial motivation among employees. Low motivation is a prerequisite for the unsatisfied

performance of activities and reducing the effectiveness of professional communication and behavior of the PHI.

Satisfaction with professional work was studied through three aspects: aspects related to the nature of work, aspects arising from the organizational environment, and aspects related to social relations in the workplace. In addition, respondents had the opportunity to determine their level of satisfaction with a 5-point scale, with one showing that they are not satisfied and 5 reflecting the highest level of satisfaction.

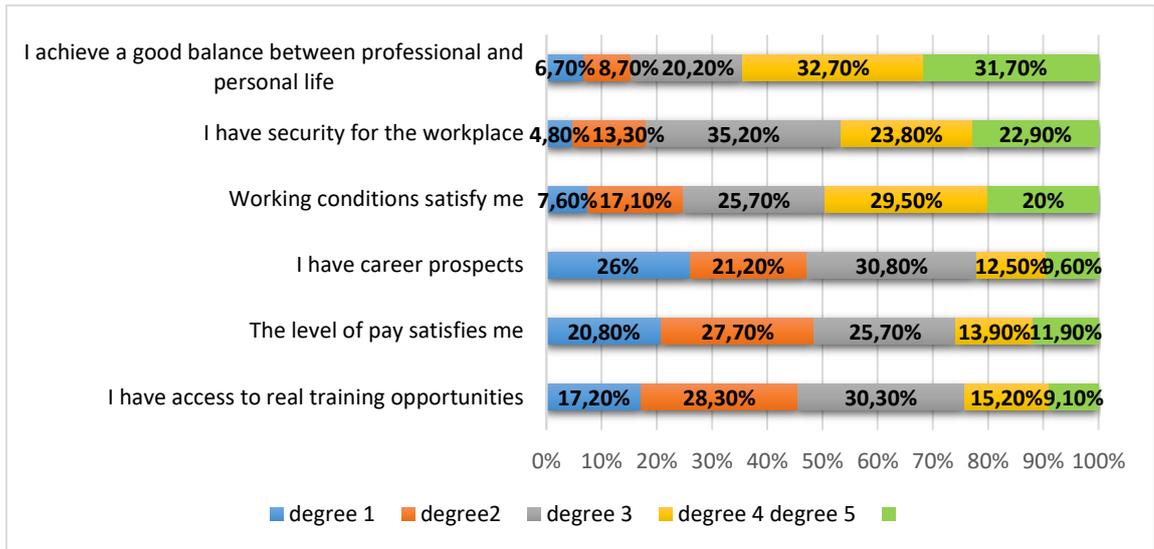
Regarding the nature of work, half of the respondents indicated high satisfaction levels with grade 4 and grade 5. Most satisfied with grade 4 and grade 5, the inspectors told that they could communicate with different social groups (60.6 %) and the opportunity to use their skills and abilities (57.7%), which shows that the need for communication skills is a priority for the effective implementation of tasks (Fig. 3).



**Fig 3. Satisfaction of the PHI with the aspects related to the nature of work**

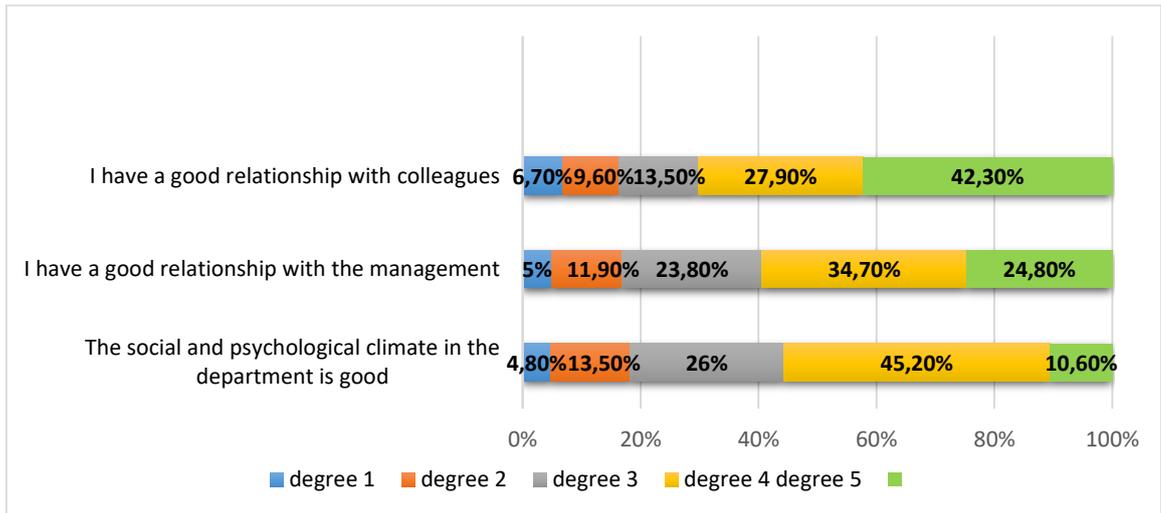
The factors arising from the organizational environment are the so-called external motivation factors. They are primarily related to the provided remuneration, benefits, working conditions, and achieving a balance between professional and personal life. Therefore, their presence favors the performance of the work.

Civil servants give an upbeat assessment of the motives related to the work environment with grade 4 and grade 5 on the balance they achieve between professional and personal life (64.4%), followed by working conditions in the organization (49.5%) and job security (46.7%). Specialists are dissatisfied with grade 1 and grade 2 in terms of salary level (48.5%), career prospects (47.2%), and training opportunities (45.5%). Many participants indicate a neutral position (neither satisfies me nor satisfies me) (Fig. 4).



*Fig. 4. Degree of PHI satisfaction with the factors of the organizational environment.*

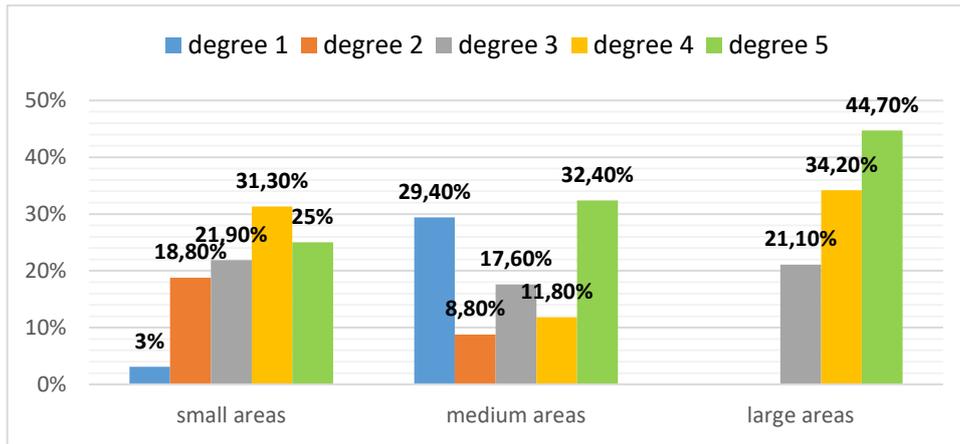
The highest levels of satisfaction were reported in the workplace relations with colleagues (42.3%) (Fig. 5).



*Fig. 5. Degree of satisfaction of the PHI with the relations at the workplace.*

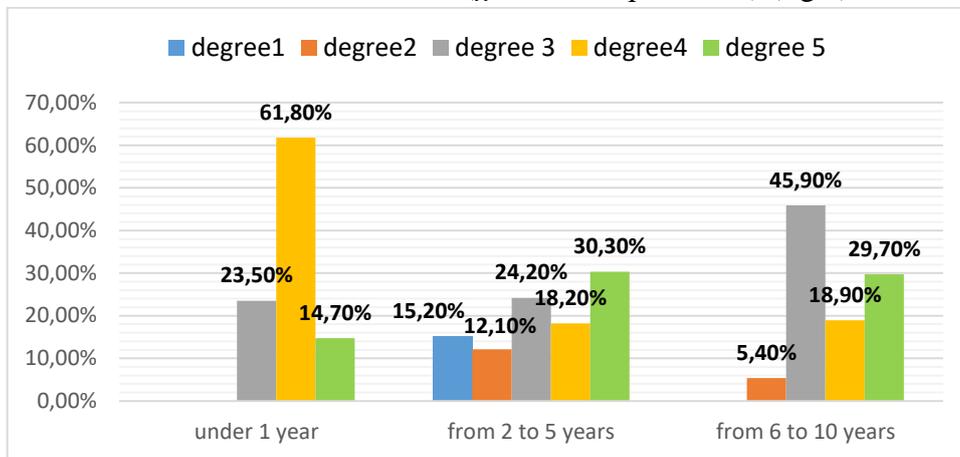
A low level of satisfaction was shown by the employees working in the medium-sized district centers. They noted the lowest levels of dissatisfaction in most environmental factors. These are:

- **opportunities for communication with different groups of the population** ( $\chi^2=30,34$ ,  $p<0,0001$ ) (Fig.6)



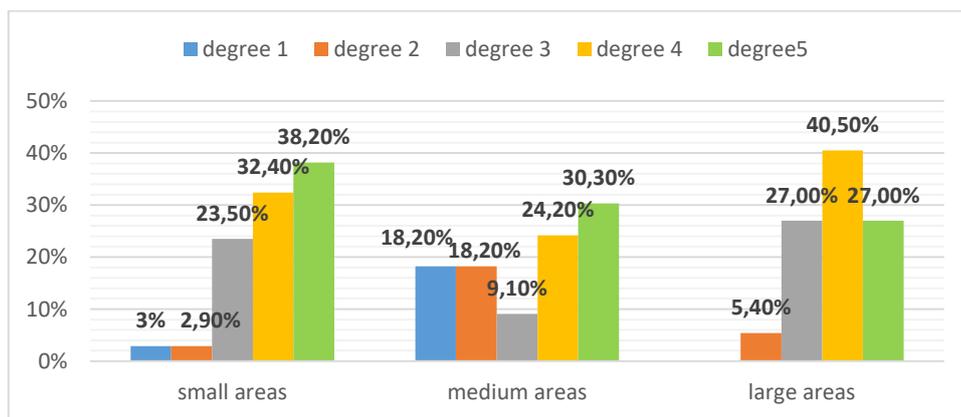
**Fig.6. Degree of satisfaction of the PHI with the opportunity to communicate with different social groups by districts**

➤ **opportunities to use skills and abilities** ( $\chi^2=33,902$ ,  $p<0,0001$ ) (fig.7).



**Fig.7. Degree of satisfaction of the PHI with the opportunity to use their skills by areas**

➤ **balance between personal and professional life** ( $\chi^2=20,049$ ,  $p=0,017$ ) (Fig.8)



**Fig.8. Degree of satisfaction of the PHI with the achieved balance between professional and personal life by districts**

➤ **a sense of usefulness from work** ( $\chi^2= 23,1$ ,  $p=0,003$ ) (Fig.9).

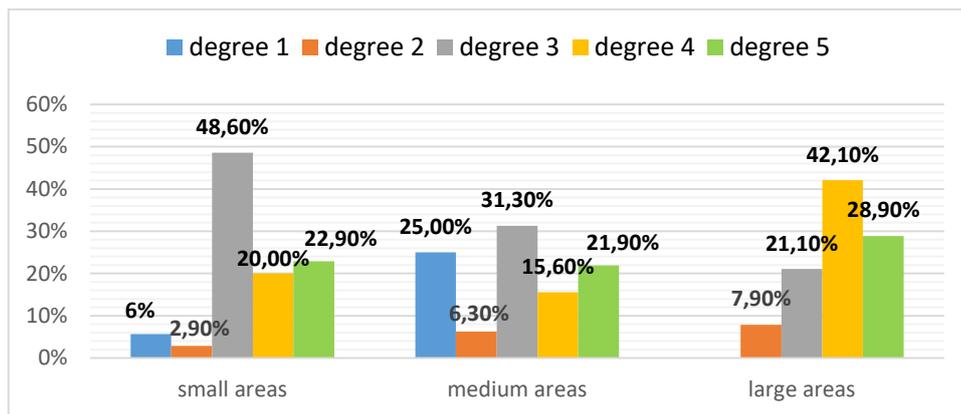


Fig.9. Degree of satisfaction of the PHI with the feeling of useful work for the society by areas

➤ **relationships with colleagues** ( $\chi^2= 23,16, p=0,008$ ) (Fig.10).

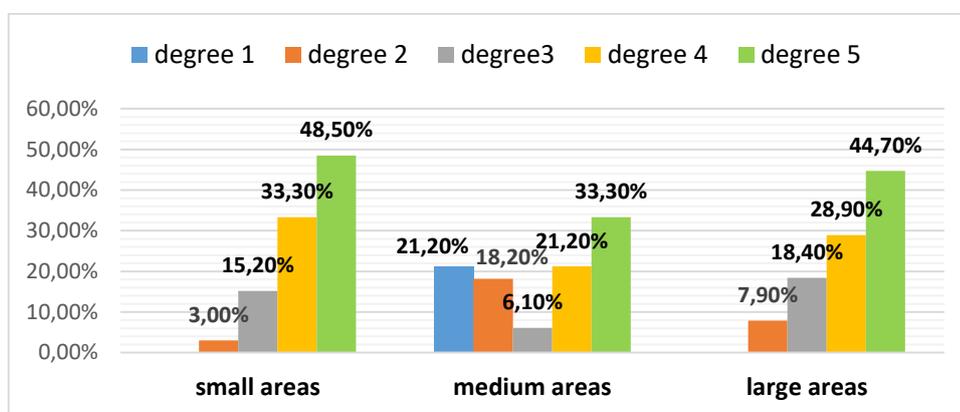


Fig.. 10. Degree of satisfaction with the relations with the colleagues at the workplace according to the size of the districts.

The level of professional satisfaction affects professional communication, regulates behavior, and improves work efficiency.

Achieving high levels of job satisfaction is a prerequisite for reducing the number of conflicts ( $r = - 0.204$ ).

The relationship between motivation, level of satisfaction, and conflict have been established. These factors are expected to have a permanent impact on the professional behavior of POPs, which gives grounds to propose the implementation of specific measures to increase job satisfaction and maintain high motivation. This is especially necessary for inspectors from medium-sized cities (districts), which show the lowest level of satisfaction on several indicators. To refine the measures, it would be appropriate to investigate further the reasons for the results described.

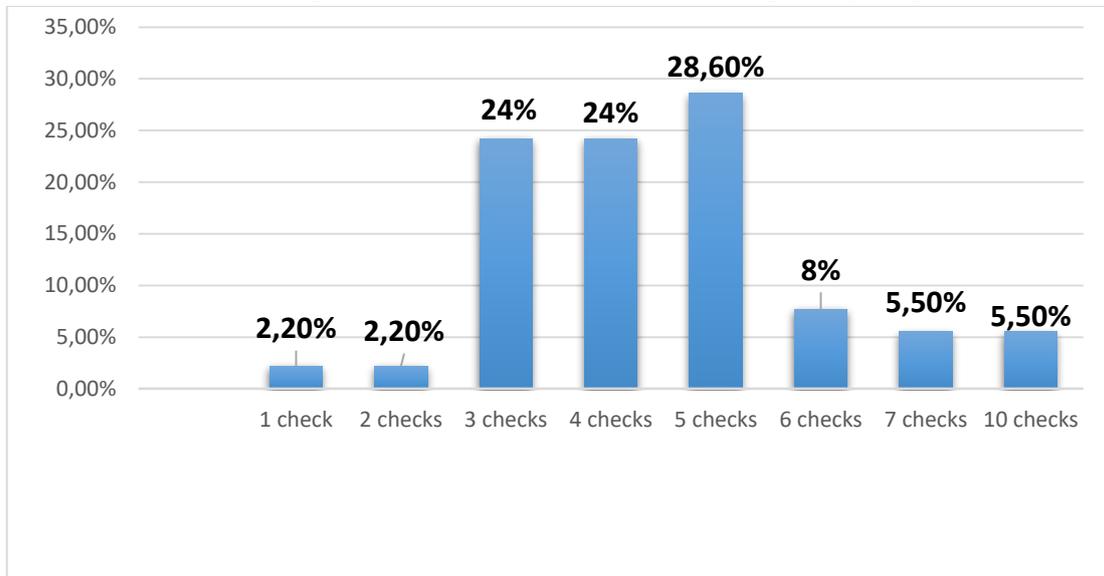
### 3.1.3. Workload as a factor for professional communication

The workload is a factor that can have a two-way effect. The increased workload can improve productivity in the short term. Still, it can also increase stress levels, the development of burnout syndrome, and in the long run, can lead to wrong decisions, problems in professional communication, conflict situations, and too low workplace efficiency.

A measure of inspectors' workload is the average daily workload according to the number of inspections and their self-assessment of daily activities. The Ministry of Health gives no instructions on how much the average daily workload of health inspectors should be. Instead,

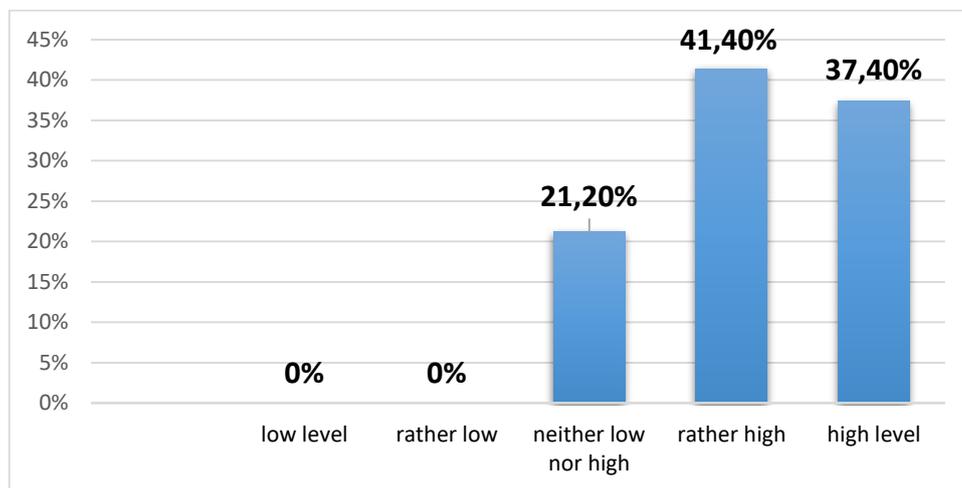
it is determined based on the number of objects provided for control, the degree of risk, and the minimum frequency for control of the object type. In the reports of RHI - Varna, the average daily workload varies between 3 and 4 inspections per inspector per day.

The average daily workload of inspectors varies. For 28.6%, the average number of sites controlled for the day is 5. The share of respondents who noted 4 and 3 inspections per day (24%) is the same. The rest perform between 6 and 10 reviews per day (Fig. 11).



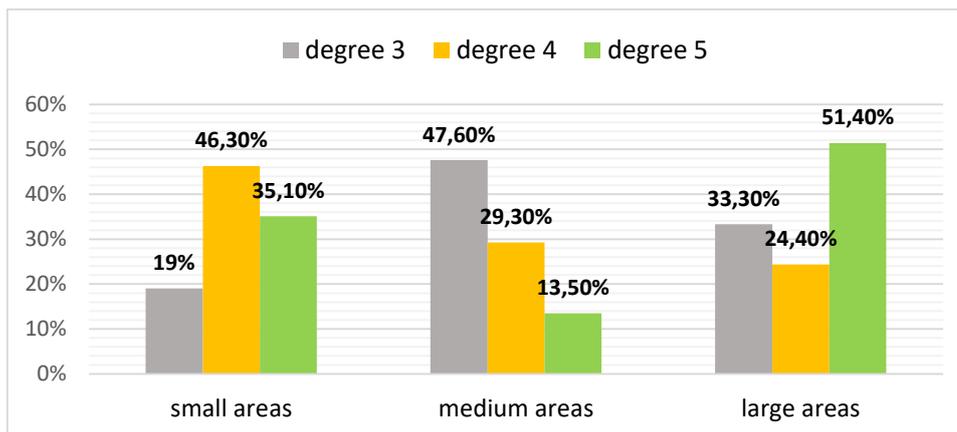
*Fig. 11. Average daily workload by number of PHI inspections*

Although approximately half of the respondents report an average daily workload of between 3 and 4 inspections per day, over 2/3 of them (78.2%) self-identify with a high degree of workload (Fig. 12).



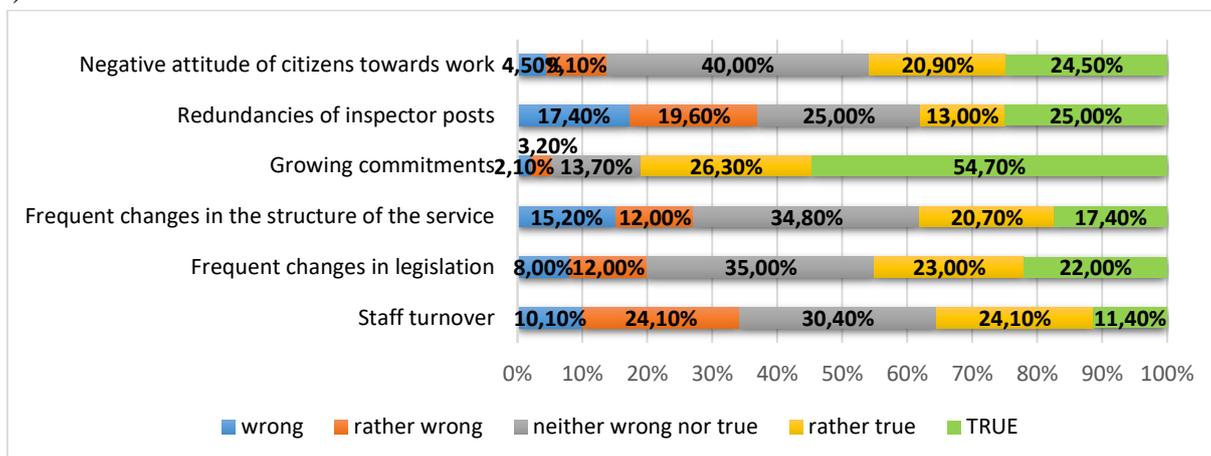
*Fig.12. Assessment of the PHI for the degree of daily workload*

The load level is perceived differently by those working in different areas (Cramer's  $V = 0.253$ ,  $p = 0.011$ ). 51.4% of the respondents working in the large areas self-identify with the highest degree of heel load (Fig. 13).



**Fig.13. Assessment of the PHI for the level of workload by districts**

When grading the main problems in their work, the health inspectors point to the growing commitments with level 4 (26.3%) and level 5 (54.7%), followed by a negative attitude of the citizens towards the performance of their work and the frequent changes in the legislation. (Fig. 14).



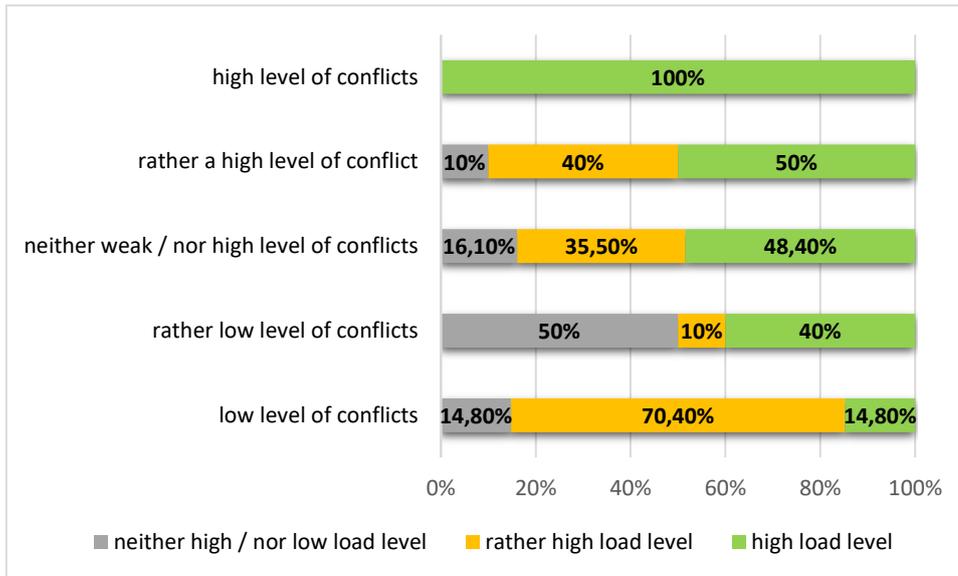
**Fig.14. Distribution of aspects according to the respondents, characterizing the main problems encountered in the work of the PHI.**

The two factors - growing commitments and a negative attitude towards the work of the PHI - can be a prerequisite for lack of satisfaction among employees and a predictor of conflict situations and low efficiency of professional communication.

Other problems that health professionals face in their daily lives are frequent changes in legislation and frequent changes in the service structure. The increase of the daily problems faced by the PHI in work leads to an increase in the workload among the participants ( $r = 0.373$ ). Some of them are resolving conflict situations, dealing with disrespect for them (41.2%) ( $p = 0.015$ ) and threats of third party intervention (50%) ( $p < 0.0001$ ).

$\chi$

**There was a statistically significant relationship between the high degree of workload and the frequency of conflict situations in the activities of the PHI. ( $\chi^2 = 31,491$ ,  $p < 0,001$ ) (Fig.15).**

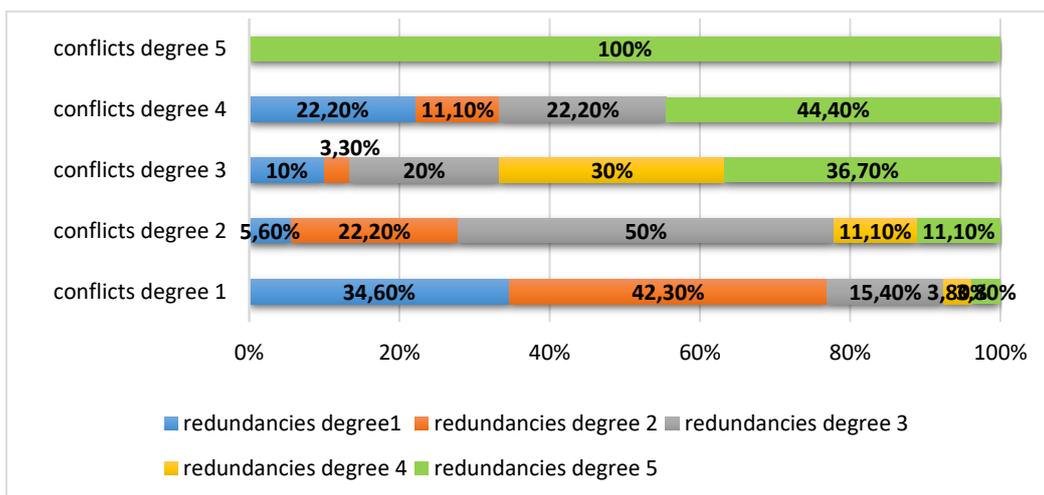


**Fig.15. Level of workload and general frequency of conflicts in the activity of the PHI**

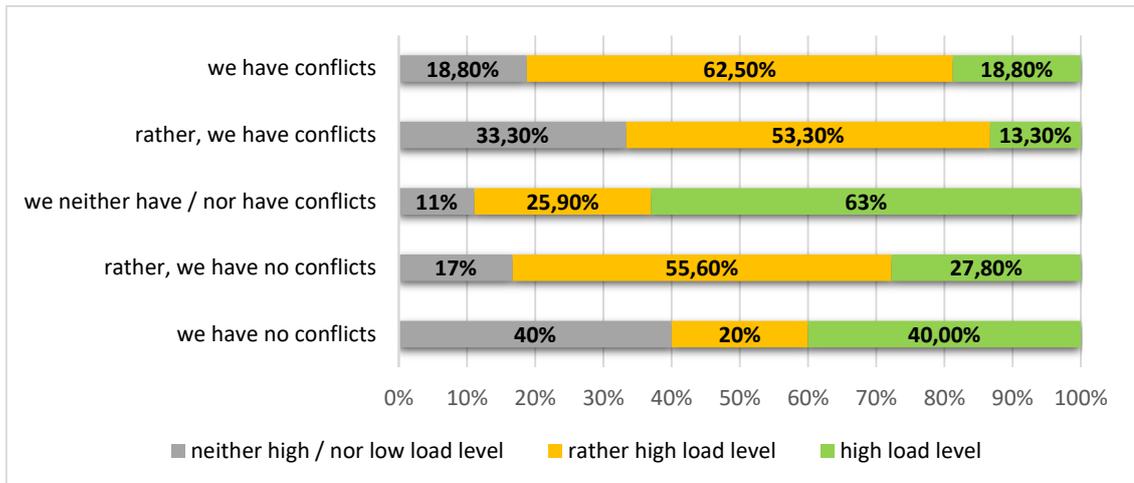
Increasing workload and conflicts in the workplace are factors that can lead to stressful situations among employees. It is assumed that stressful situations reduce the effective performance of duties, lead to low professional communication and can lead to changes in the health status of the PHI.

**Growing commitments are a factor that confirms the high level of workload in the PHI service ( $\chi^2= 19,312, p=0,004$ ) and lead to an average frequency of conflict situations in everyday life (73,3%) ( $\chi^2 =25,011, p=0,021$ ).**

**The redundancies of the inspector position lead to an increase in the frequency of conflict situations in the PHI service. ( $\chi^2=48,261, p<0,001$ ) (Fig.16).**



**Fig.16. Relationship between redundancies and the frequency of conflicts in their activities**



*Fig.17. Level of workload and frequency of conflicts with the controlled persons*

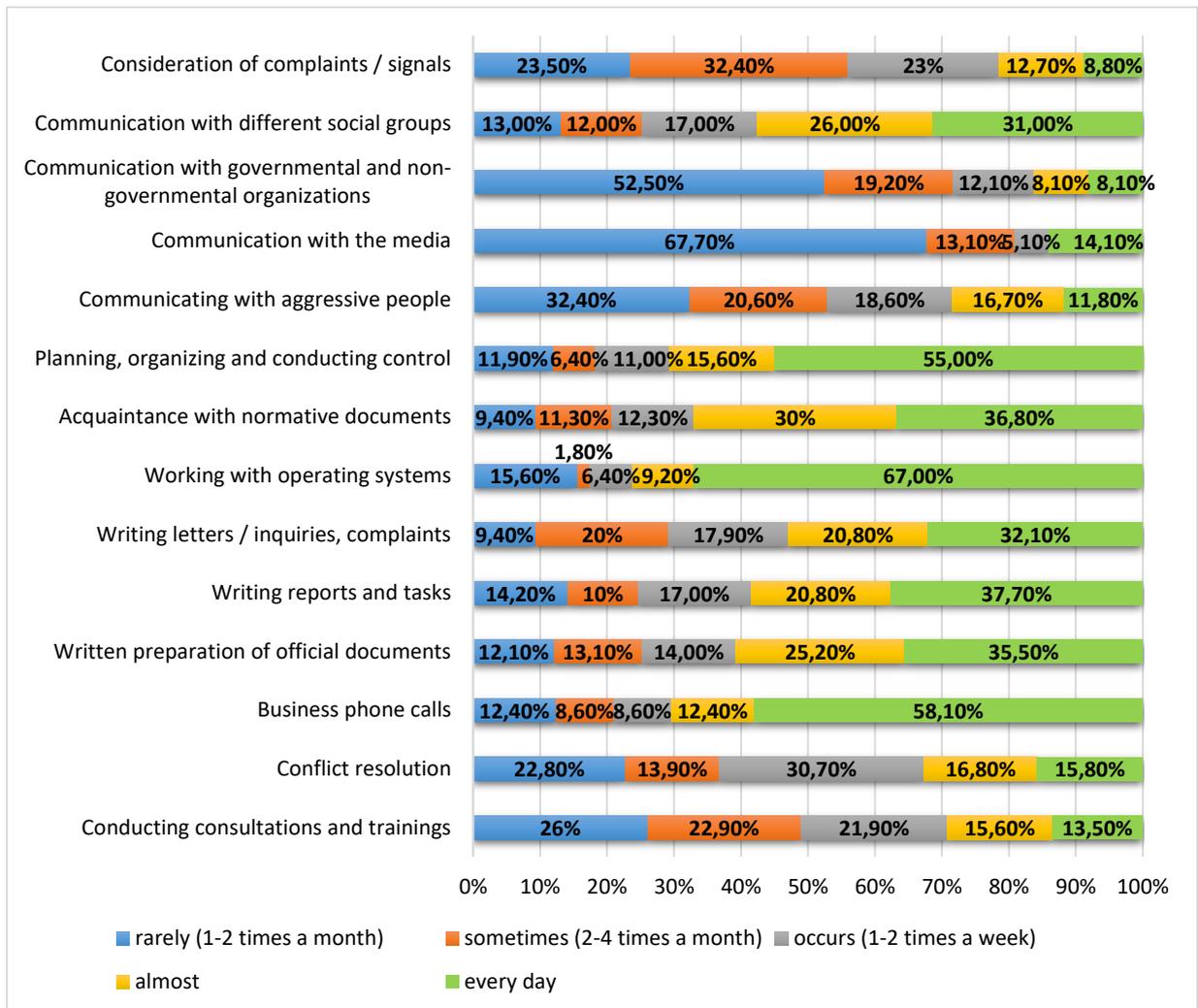
The load is a factor of the external environment that influences the behavior and the process of communication in the activity of the PHI. It is connected with management on two levels - national and local. The federal government refers to the staffing and is decided at the state level. At the local level is the organizational management. It is associated with an appropriate, flexible distribution of tasks in the service following the priorities - permanent and short-term.

The consequences of excessive workload can be managed by implementing innovative organizational solutions, as well as by organizing appropriate training aimed at building practical communication skills and techniques for managing and resolving conflict situations. In this way, stressful situations can be avoided and good practices for workplace health promotion can be introduced.

### **3.1.4. Level of communication skills and communication of PHI as an element of professional activity**

#### **➤ Level of communication skills in the activity of the PHI**

In their work, health inspectors perform tasks of a different nature daily. The obligations and situations presented in the questionnaire reflect the need to quickly adapt and switch the implementation from one task to another. The question related to the most common duties and situations in which health professionals find themselves describes various aspects of the daily life of inspectors, which they rank on a 5 - point scale. (Fig.18).



**Fig. 18. Distribution of the most common obligations and situations in the daily activities of the PHI**

The presented data show that every day and almost every day:

over ½ of the inspector's plan, organize and conduct control in public sites (70.6%), get acquainted with regulatory documents (66.8%), work with operating systems (76.2%), prepare official documents (%), conduct business telephone calls (70.5%);

There was a statistically significant relationship between the inspectors and the persons subject to control during official telephone calls. These are talks related to the official authority and implementation of the legislation. Just under half of the inspectors, who indicated that they made business phone calls almost every day, said that the other party treated them with disrespect (41.2%) ( $p = 0.015$ ). Participants who spoke daily on the phone with the controlled persons reported that they were threatened with the intervention of third parties (50%) ( $p < 0.0001$ ).

- every second communicates with different social groups (57%), forms letters, answers to inquiries, complaints, signals (52.9%), prepares written reports (58.5%);

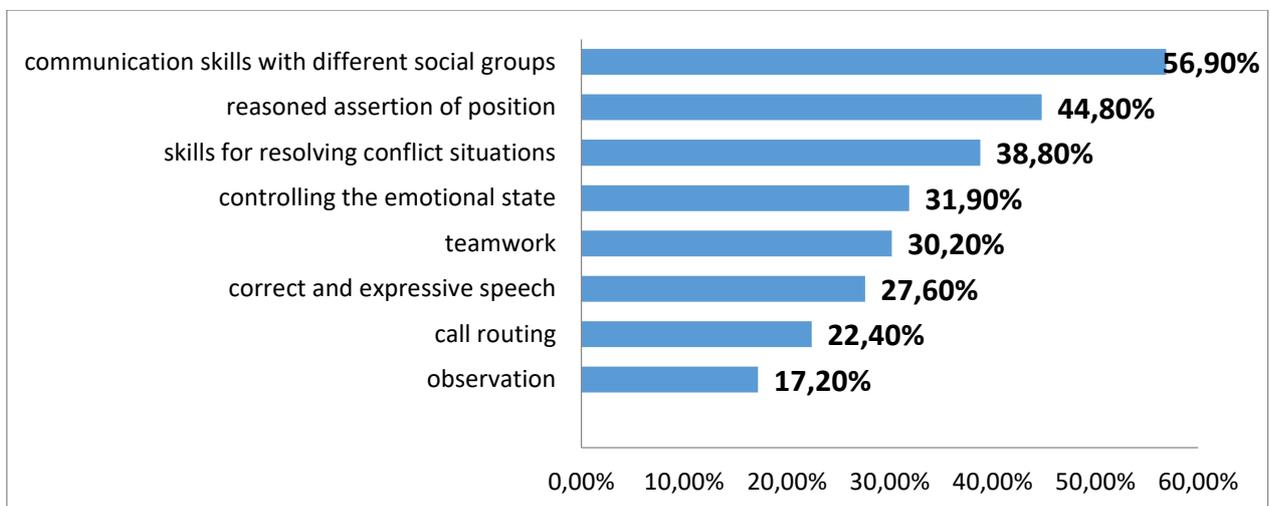
- every fifth employee reviews received complaints/signals (21.5%) and conducted consultations and training (29.1%);

- every tenth communicates with governmental and non-governmental organizations (16.2%) and media (14.1%);

The described activities confirm the high self-esteem for the workload on the part of employees and the continuous process of professional communication.

The PHI can objectively assess a situation, but it can make personal sense in its attitude to it. Therefore, the PHI cannot be perceived as a passive subject but as a person with social and psychological needs. Communication skills are required to quickly recognize the interlocutor's communication style and meet his expectations. Failure to understand the information provided may be a prerequisite for creating a conflict.

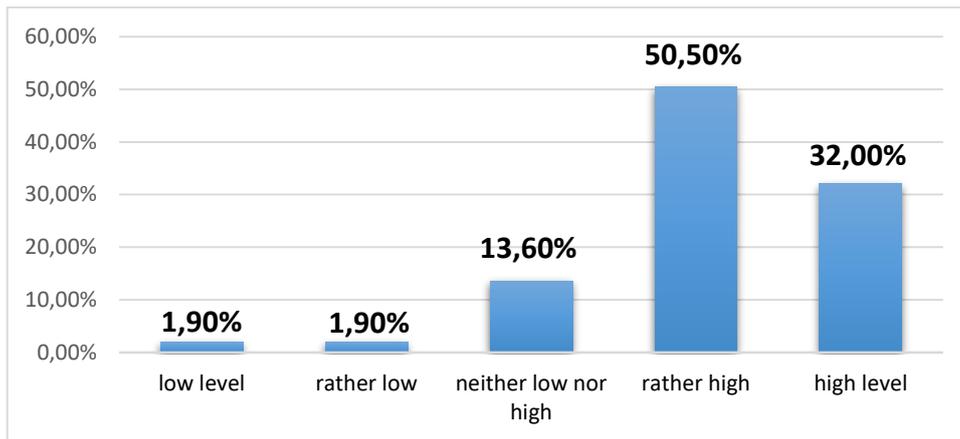
The variety of PHI activities requires specific knowledge, skills, and competencies in professional communication and the respondents consciously show the necessary skills for good professional communication. More than half of the respondents (56.9%) note that these are skills for communicating with different social groups. Just under half (44.8%) of the participants need to be able to defend their position. The share of people (38.8%) who think conflict resolution skills are required is not tiny (Fig. 19).



**Fig.19. Opinion of the PHI on the type of skills in the field of professional communication necessary for effective communication with users**

*Note \*% exceeds one hundred due to more than one answer*

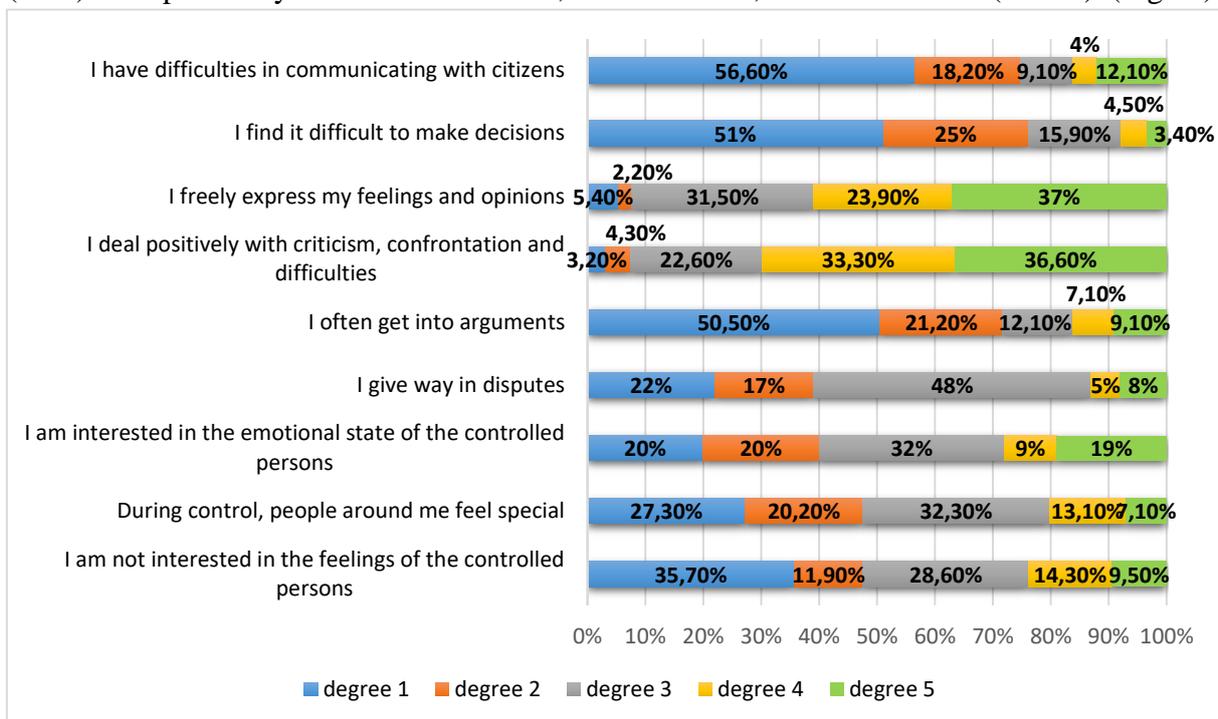
The participants in the study have a high self-esteem for their own communication skills. With the introduced 5-level scale for self-determination of communication skills / competencies, over 2/3 (82.5%) assess their own communication skills and competencies with high levels. (Fig.20).



**Fig. 20. Assessment of the PHI for their own communication skills / competencies**

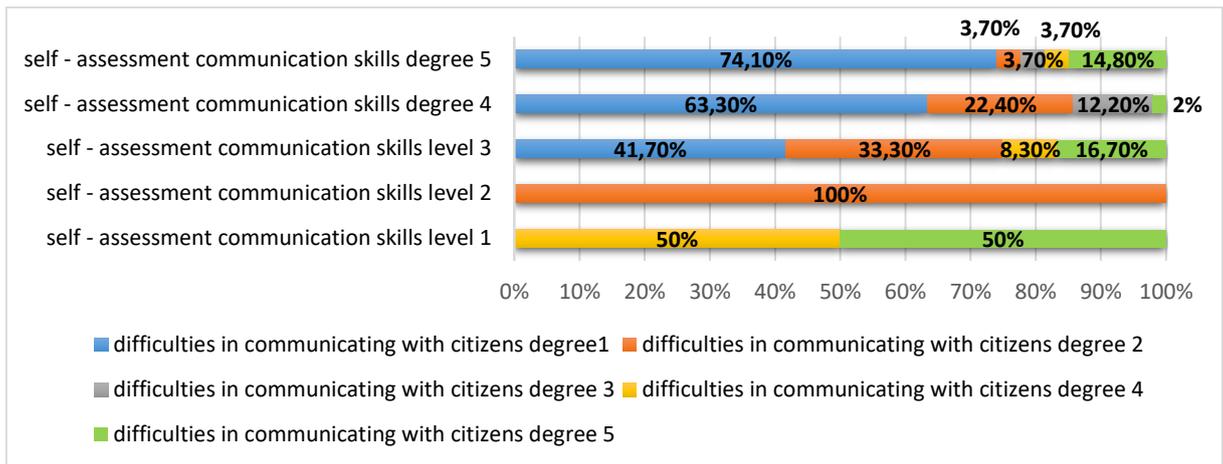
The practical process of communication in the work of the PHI includes persuasion, reasoned assertion of a position without difficulties in communication, control of controversial situations, and respect for the opinion of the interlocutor. To the question: "Which of the following aspects characterize your behavior as a Health Inspector during control?", The participants in the study again had the opportunity to rate the individual characteristics with a 5-point scale (1 - wrong, 2 - somewhat wrong, 3 - neither true / nor false, 4 - relatively true, 5 - true).

More than half (56.6%) of the respondents think that they do not have communication difficulties, do not hesitate to make decisions (51%), freely express their feelings and thoughts (37%) and positively deal with criticism, confrontation, and difficulties (36.6%) (Fig.21).



**Fig.21. Characteristics of the PHI communication during control.**

**Respondents who self-assess with high communication skills express the opinion that they have no communication difficulties** ( $\chi^2=39,539$ ,  $p=0,019$ ). Difficulties in communication indicate participants with low self-esteem for communication skills (Fig. 22).

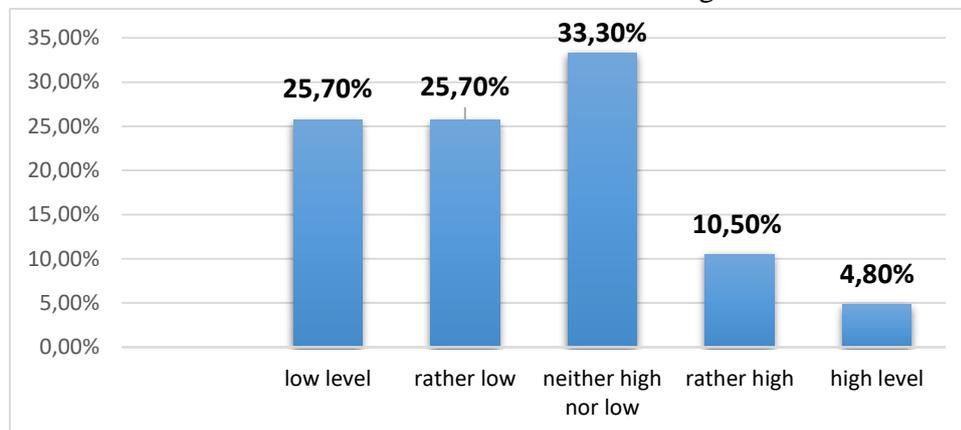


**Fig. 22. Relationship between the levels of communication skills and communication difficulties of the PHI**

**More than half of the specialists state that they have no difficulties in communication (63,8%) and respectively the levels of conflict situations in them are less frequent ( $\chi^2= 26,953, p=0,001$ ).**

Due to the specifics of the obligations of the PHI, it is likely that health professionals will find themselves in conflict situations, especially during the official control. For successful prevention or management of a potential conflict, it is important for the PHIs to have the necessary skills to assess the situation, to recognize the first signs of dissatisfaction on the part of the other party and to manage the negative consequences.

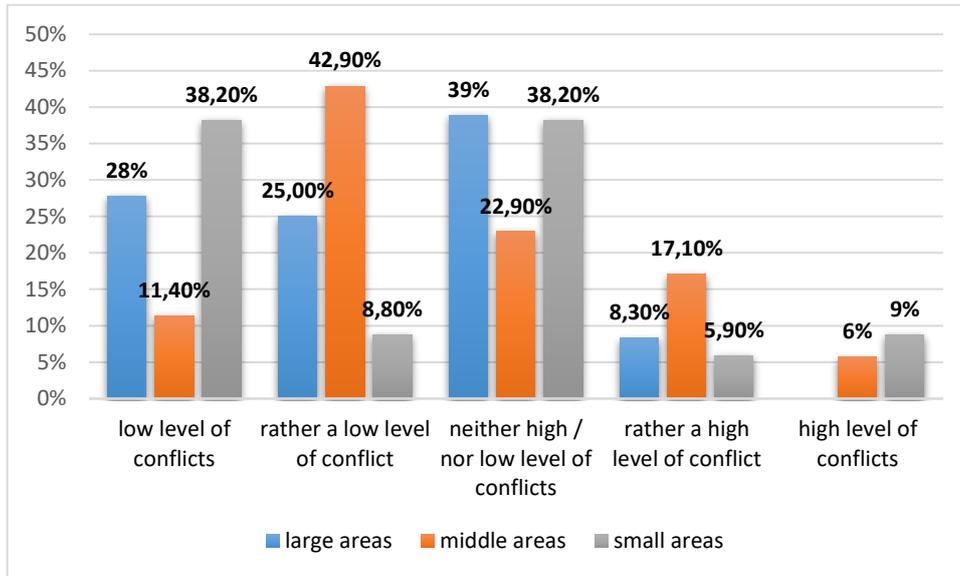
Respondents rated the subjective perception of the frequency of conflicts on a five-point scale. With the highest percentage (33.3%) the respondents indicate an average level of frequency of conflict situations at work - neither high / nor low level. (Fig.23).



**Fig.23.Degree of frequency of conflict situations in the daily life of PHIs.**

**People with high self-esteem for communication skills are less often in conflict situations (48.1%) ( $\chi^2 =26,953, p=0,04$ ). Respondents are on average involved in conflict situations, claiming that they rather have no communication difficulties (70,6%)( $\chi^2=26,95, p=0,001$ ).**

**The frequency of conflict situations is different for employees from different groups of areas of professional realization (Cramer's V 0.306, p = 0.007). (Fig.24).**

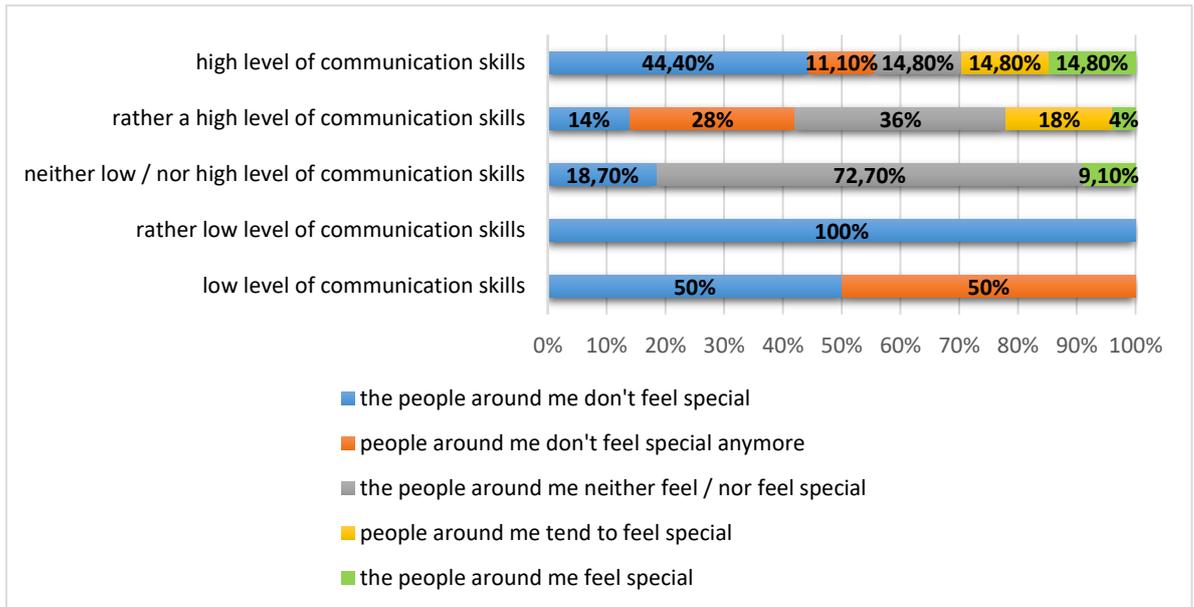


*Fig.24. Distribution of the frequency of conflict situations of the PHI by districts*

Despite the fact that the share of people who subjectively feel that the frequency of conflicts is low (4.8%) is small, over 1/3 (32.6%) of their participants have to resolve conflict situations every day.

When grading aspects that characterize the behavior of the PHI during control, every fifth (20.2%) of the employees self-determined that he has the skills to direct the conversation in a direction in which his interlocutor feels special. Such people are unlikely to get into conflict situations. At the same time, with grade 1 (27.3%) and grade 2 (20.2%), the respondents do not feel that they are capable of creating such relationships. For every third employee, the emotional state of the controlled subjects is irrelevant.

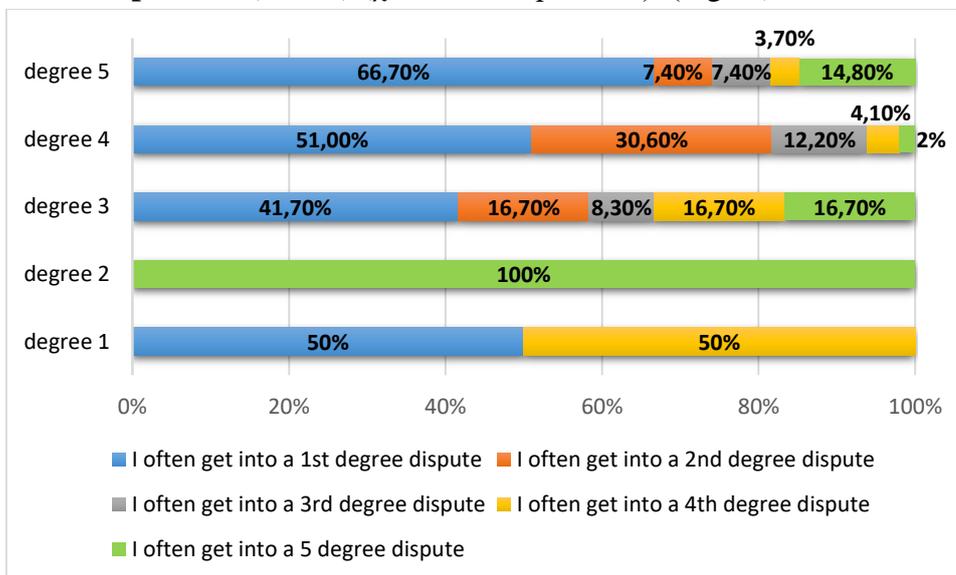
**The conclusion is confirmed by the statistically significant dependence, in which people with high communication skills do not make the people around them feel special. ( $\chi^2=29,899$ ,  $p=0,002$ ) (Fig.25)**



**Fig. 25 Relationship between the levels of communication skills and the ability to direct the conversation from the PHI in a direction in which his interlocutor feels special.**

Self-assessment for highly communicative skills is not a guarantee for an effective communication process.

**There is a link between self-assessment of good communication skills and behavior during an argument. Participants who indicated poor levels of communication skills had low levels of conflict situations ( $\chi^2=28,265$ ,  $p=0,036$ ). Those with high levels of communication skills often get into arguments ( $\chi^2=30,417$ ,  $p=0,019$ ) and do not relinquish their position (66,7%) ( $\chi^2=47,715$ ,  $p<0,001$ ) (Fig.26).**



**Fig. 26. Relation between the levels of communication skills and the behavior of the PHIs during a dispute in the exercise of official control**

**Respondents who often get into disputes have to resolve conflicts almost every day or daily ( $\chi^2=24,849$ ,  $p=0,039$ ).**

The expressed self-assessment for good communication skills does not correspond to the actual behavior in the work environment. High self-esteem for communication skills defines

employees' sense of confidence in their skills and abilities. As a result, they gain the courage to speak in front of an audience and defend their position. At the same time, the presence of conflict situations in any service affects the professional communication of employees.

**Relationships of the PHI with the communication in the activity of the PHI as an element of the professional activity**

PHI enter into professional communication at the vertical level and horizontal level with managers, colleagues and persons subject to control. In order to establish the inspectors' relationship with each group, we presented various statements related to the work process. Respondents graded the proposed statements on a five-point scale (1 - wrong, 2- rather wrong, 3- neither wrong / nor true, 4- rather true and 5 - true), allowing to determine the impact of interpersonal relationships on the process of the professional communication of the PHI.

**Relationships with managers in the activities of the PHI**

In the relations with the managers, the respondents give a primarily positive assessment of the support from their superiors. Just under half of the participants (43%) strongly confirm that the leaders support the inspector's actions. As somewhat true, 19.6% note. The majority of respondents (52%) state that they do not conflict with managers. The share of people who are adamant that they have conflicts is not small - 21%. (Fig.27).

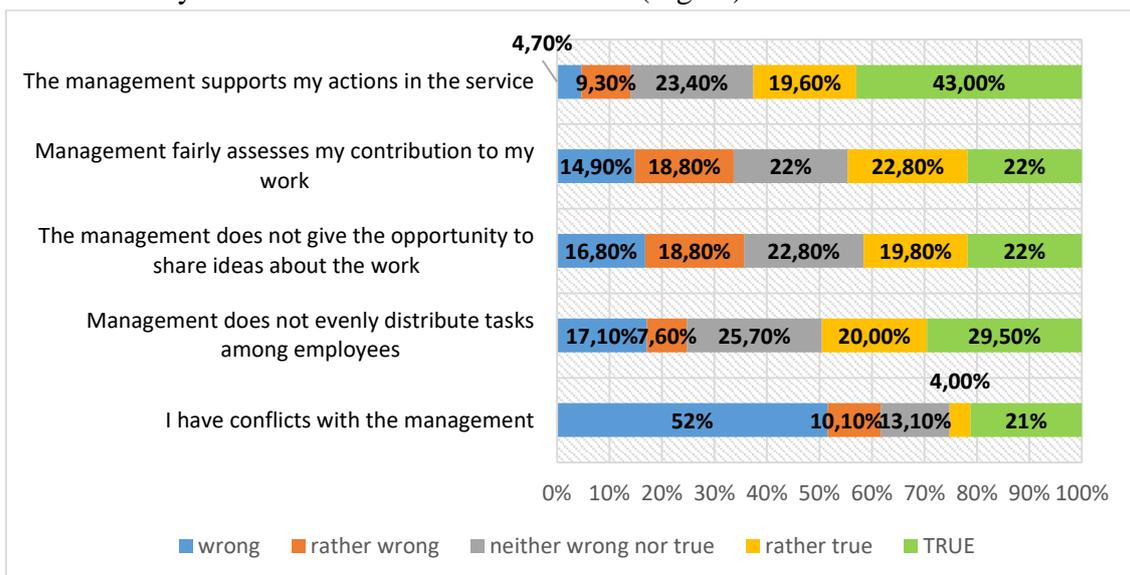


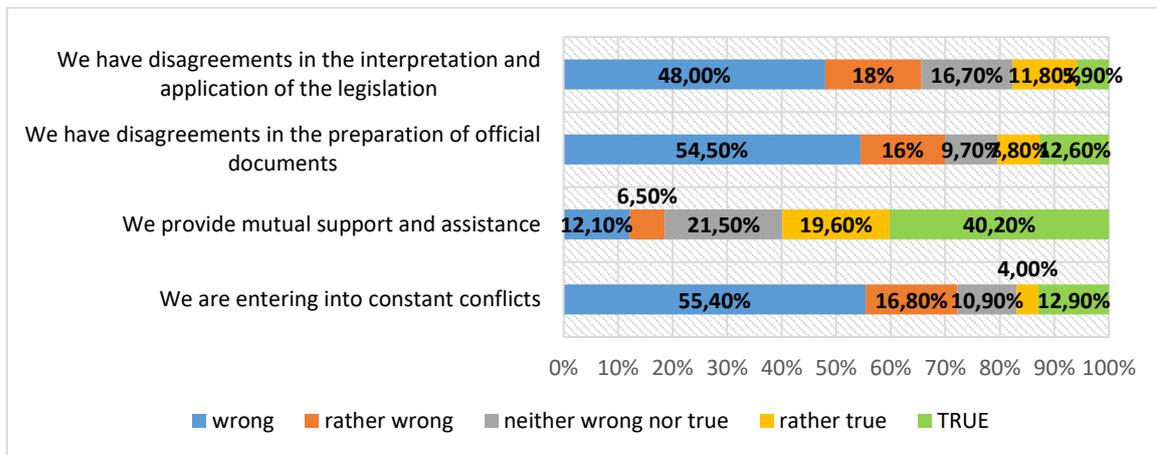
Fig. 27. Aspects of the relationship between the PHI and their managers.

**There is a statistically significant relationship between conflicts with managers and the average frequency of conflicts** ( $\chi^2=28,535$ ,  $p=0,021$ ). According to the majority, managers do not evenly distribute tasks among employees (29.5%). According to 20%, the statement is rather true.

**Relationships with colleagues in the activities of the PHI**

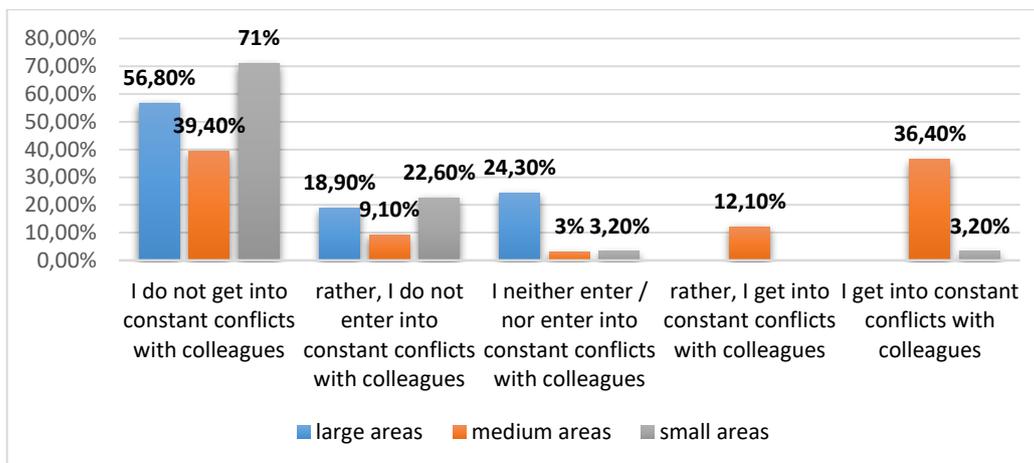
In the work of the PHI the main activities are related to the legislation, the implementation of official control and the preparation of documentation. In this regard, we pay attention to the relationship with colleagues. More than half of health inspectors say they are on good terms with their colleagues. The respondents are of the opinion that they provide mutual support (59.8%), do not enter into conflicts with each other (72.2%), do not have disagreements in the

interpretation and application of the legislation (65.6%) and accordingly do not disagree with the preparation of official documents (69.9%). Every sixth employee disagrees with the above statements. The share of people who think that they do not have the support and assistance of colleagues is not small (18,6) (Fig. 28).



*Fig.28. Aspects of the relationship between the PHI and colleagues*

One in ten respondents (12.9%) said they had conflicts with colleagues. Conflicts with colleagues involve mainly working participants from the middle areas (Fig. 29).



*Fig. 29. Existence of conflicts with colleagues in the districts*

From the age groups these are the respondents between 31 and 44 years (21.4%). Regarding the length of service, the highest degree of conflicts was noted by the participants with professional realization between 10 and 20 years (23%), followed by the persons with employment under 1 year (20%).

**There is a correlation between relationships with colleagues and high levels of conflict frequency. Conflicts increase when the values of deteriorating relations with colleagues also increase ( $r = 0.259$ ), concerning disagreements in the interpretation and application of the legislation, disagreements in the preparation of official documents, the lack of support and cooperation between them, and the existence of conflicts between them.**

The presence of conflicts with colleagues can reflect on communication and relationships with citizens in the exercise of official control.

**Relationships with persons subject to control (business operators and staff) in the activities of the PHI.**

The "inspector - society" relationship is fundamental in the activity of the health civil servant. We pay considerable attention to this type of communication because it is aimed at achieving the goals of public policy in the field of public health and building trust in the state.

Every third respondent has entered into conflict situations with the controlled persons (36.3%) and has been threatened with the intervention of higher institutions / persons (37%) (Fig. 30).

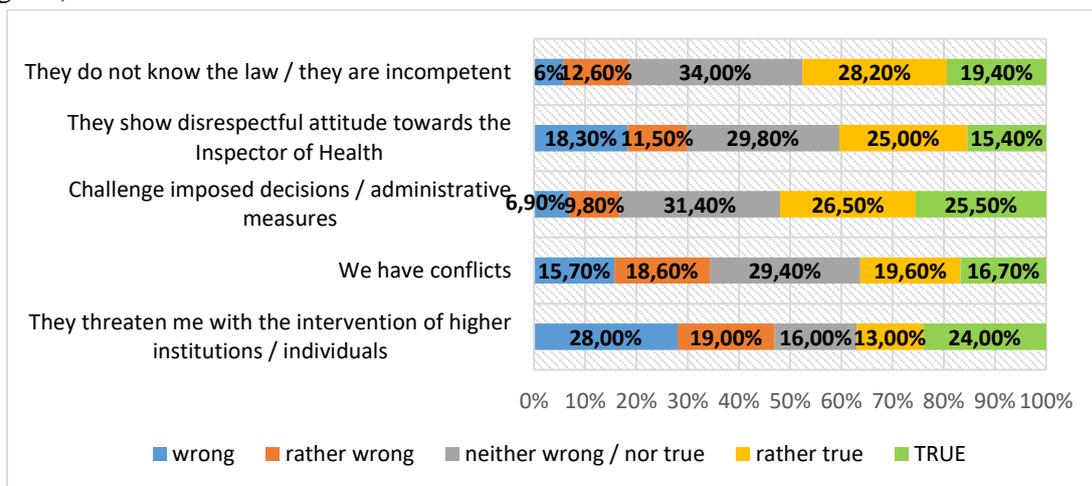


Fig.30. Aspects of the PHI's relationship with business operators

In one case, the inspectors marked the feeling of conflict in their daily lives as low, and in the other case, they indicated that they had conflicts with the persons under control, which contradicts the subjective self-assessment. **The highest level of conflicts with business operators and staff is noted by participants who have a high self-esteem for their communication skills. (75%)** ( $\chi^2= 28,265, p=0,003$ ).

**The main reasons for conflicts between inspectors and persons subject to control are:**

- **threats involving third parties (76.5%)** (Cramer's V = 0.470, p <0.0001)
- **the disrespectful attitude of economic operators / staff towards PHI (58.8%)** (Cramer's V = 0.419, p <0.0001)
- **contestation of imposed decisions / administrative measures (58.8%)** (Cramer's V = 0.405, p <0.0001)
- **incompetence on the part of the staff at the sites (52.9%)** (Cramer's V = 0.380, p <0.0001)

**The general perception of the frequency of conflicts is influenced by the disrespectful attitude of the persons subject to control (Cramer's V = 0.275, p = 0.024) and the threat from the controlled persons with the intervention of third parties (Cramer's V = 0.277, p = 0.031) .**

Just over half of the respondents (55.1%) give specific recommendations on the request: "Suggest actions that would improve your professional relationship." We divided the proposals

into four main groups, related to the nature of the work, the organizational environment, workplace relations, education and training.

**The proposals related to the nature of the work are:** *"More publicity for the work of the RHI and the inspector" (4.3%), and "restoration of the authority of the service" (1.7%).*

**Suggestions related to the organizational environment.**

Every tenth (9.5%) of the specialists proposes to increase the salaries. According to 2.6% of the respondents, it is necessary to make changes without specifying what the changes should be. The number of employees should increase by 1.7%. Another 1.7% want a change in regulations. To improve the activity, the workers think that a better partnership with other institutions is needed (0.9%), support for the Bulgarian business (0.9%).

**Suggestions related to workplace relationships**

A part of the participants in the survey (6%) indicates that they want to participate in teambuilding organized by the service. Teambuilding is essential for building interpersonal relationships in an organization, uniting the team, developing collective values, and stimulating teamwork. Another motive that can lead them to the idea is the high workload (67.2%). In addition, respondents want a clear and accurate organization of work (3.4%) and respect for the opinion of the PHI (1.7%).

**Proposals related to education and training**

Almost every fifth respondent (17.2%) stated that there is a need for additional specialized training / courses, seminars and consultations. For 3.4% it is necessary to increase the educational qualification degree (QC).

**3.1.5. Training - specific knowledge and skills**

The skills for professional communication should be mastered in training and further development in the course of professional realization. More than half of the health professionals participating in the survey (52.6%) claim to have undergone specialized training to build professional communication skills during their training as public health inspectors. However, according to the Ordinance on Uniform State Requirements, for the specialty "Public Health Inspector," the subjects in which topics related to communication skills are considered are "Medical Ethics and Deontology" and "Medical Psychology," and there are no other mandatory specialized disciplines in "Communication skills."

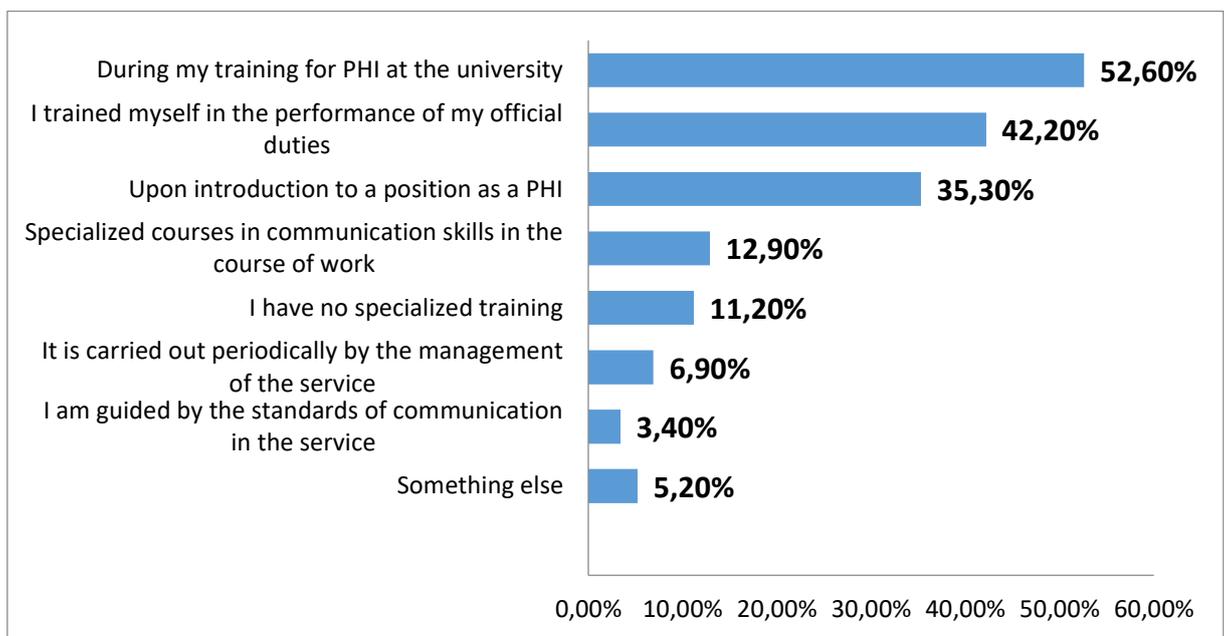
One in three (35.3%) states that they undergo specialized training at the start of work and induction, and 12.9% state that they experience such training in the course of their professional activity. According to normative documents, there is specialized training at the Institute of Public Administration (IPA) based in Sofia. The system is intended to introduce the civil servant's position and is a fundamental basis for each newly appointed inspector. In this course, one of the seven modules is "Personal Effectiveness." The module includes topics in communication skills, teamwork skills, results in orientation, and ethics in administration. However, the total duration of the seven modules is 24 hours, and in our opinion, they are not enough to master the necessary communication techniques.

For 6.9% the specialized training is carried out by the management. Persons hold management positions with basic training in medicine and administration who do not have the

professional competence to conduct technical training in communications. Instead, managers can assist the activities as consultants in the implementation of the legislation.

Nearly half of the respondents (42.2%) state that they study independently during the performance of official duties. Whether these individuals build the proper communication techniques and coping skills in stressful and conflict situations is not clear.

Every tenth (11.2%) is categorical that there is no specialized training in professional communication skills (Fig. 31).



**Fig.31. Place of specialized training of the PHI for building professional communication skills**

Note \*% exceeds one hundred due to more than one answer

### **3.2.Results of in-depth interviews with public health experts**

Sixteen individual in-depth interviews were conducted in the cities of Sofia and Varna with experts working in RHI and other institutions related to PH. The study was born in the period October 2020 - August 2021. It covers ten thematic areas related to the work of PHI, reforms in their service, the impact of reforms on the work of health inspectors, motivation, workload, and training in the workplace. Respondents are presented with numbers from PH-1 (Public Health-1) to PH-16. Of all participants, 11 have higher education in medicine (from PH - 1 to PH - 11), 5 of them have a doctorate in medicine; 4 - PHI (from PH-12 to PH - 15), and 1 - expert - sociologist (PH-16)

The thematic areas of the interview were divided into five groups: areas related to the characteristics and profile of the PHIs, sites linked to motivation; areas related to workload, areas related to communications and training, proposals for optimizing the workplace of the PHI, and proposals for optimizing the professional communication of the PHI.

#### **Areas related to the prevention and characterization of the PHI profile.**

Issues related to the place of prevention in our country is vital because it defines the role of the PHI in prevention and its personification as a significant figure in the process of public health.

The majority of experts (15) believe that prevention in Bulgaria is not a priority but should *"be at the forefront of healthcare"* (PH-12). Evidence of this is the less attention paid to occupational morbidity, morbidity with temporary incapacity for work, and socially significant diseases. Furthermore, experts note that there are projects and programs aimed at prevention, but it is actually *"carried out in isolation and sporadically"* (PH-1) and *"there is not enough funding"* (PH-16).

Interviewers are unanimous that the role of the PHI in the activity of prevention is significant and has a place at all its levels. *"These are the only specialists with polyvalent knowledge in all areas of hygiene"* (PH-13), *and prevention is their primary role"* (PH-12). They define health inspectors as the *"backbone of public health prevention"* (PH-8) and the main link between national policy and health information activities. Experts believe that the work of the PHI is, in principle, preventive, and communicating with different groups of citizens contributes both to the preservation of public health and the prestige of preventive institutions. *"The behavior of the PHI is important because it builds the authority of the civil service"* (PH-2). *"Authority is built with a calm tone, respect, respect for human rights"* (PH-8). It is noted that in the past, the PHI was an influential figure to be respected. *"Now everyone is turning negatively to specialists—however, civil servants like their job"* (PH-4).

According to the experts, the PHI is an essential figure for prevention, which must be well trained to know, be motivated, and have a desire for work and self-improvement.

#### **Areas related to the motivation of the workplace of the PHI.**

In a pilot survey conducted in 2018 among health inspectors working in the RHI and RFSD systems, none of the respondents defined their profession as prestigious. The prestige of an organization is an indicator of the quality of work. It is an incentive for staff to take responsibility and requires the use of skills and abilities of employees. In the interview, we pointed out that the prestige of RHI / RFSD institutions is considered low by health inspectors. The opinion was confirmed by a majority of experts (11). Four of them believe that the anti-epidemic measures introduced against the spread of COVID-19 have increased the importance of the institution, *"as RHI and PHIs have been shown to play a key role in controlling the infection"* (PH-15). due to negative public attitudes, low pay, and insufficient prevention in the activity. *"The moment with the financial side is thin, we live in a material world and when a person cannot satisfy his needs, has low self-esteem, does not want to develop"* (PH-15)

In order to determine the motivating and demotivating factors of the institution in which the PES works, we asked the experts: **"How does RHI / RFSD attract (motivate) or repel (demotivate) PHIs?"**

To the question, out of 16 interviewees, four did not indicate any motivating factor. Therefore, the motivating factors, according to the majority of the interviewees, are reduced to two: RHI is almost the only place where health inspectors can be realized, which is confirmed by the motive to keep the job for every fifth Inspector (22.4%) and the privileges that receive specialists as a civil servant.

The main demotivating factor for the inspectors (11 of the interviewees) is the low salary. Every third participant (30%) in the questionnaire showed that he was not satisfied with the financial remuneration. Four identify the work as potentially conflictogenic and stressful. Other repulsive factors are the low prestige, the lack of career opportunities, the limitation of the

functions of inspectors, unclear and often changing regulations. The lack of opportunities for career development is also confirmed by every third employee in RHI (33.6%).

#### **Areas related to the workload of the PHI.**

The staffing of the workplace determines the effective performance of duties in any service. The presumption is that with an insufficient number of employees, the workload will be higher. The interviewees strongly believe there is a staff shortage and emphasize the need for new, trained, and qualified professionals. The lack of staff was also proven by the workload and the growing engagements among the surveyed inspectors. ( $\chi^2 = 19.312$ ,  $p = 0.004$ ). The experts negatively note that due to the lack of PHI in some places, the number of units is being transformed, other specialists are being appointed, and they do not have the necessary training to control public health.

It was noted that the average workload of the Inspectors (between 3 and 4 sites attendance per day) is within normal limits. *"This is not much, but PHI also has many written work and files reports"* (PH-2). However, inspectors found high workloads. Apart from the routine activities, the high self-assessment of workload is assumed to be related to the additional activities in the COVID situation. Confirmed with the following question: **"Do you think that after the outbreak of the pandemic from COVID - 19 changed the organization and activities of RHI and PHIs?"**. This issue indirectly assesses the increased workload of health inspectors and is related to the current epidemic situation. Almost all experts agree that the COVID situation has led to a change in areas of action. Non-RHI-specific activities have emerged in priority areas. *"The PHI, which had specialized in other areas of action, had to move to a more intensive way of working, in new areas - border control, going to the homes of patients and contact persons ..... Now the PHI is more busy, working with people (sick, contact), the situation is more nervous, there are always dissatisfied, complaints, signals, non-stop duty, together with the police, especially at peak times could not even take leave"* (PH-2). Health inspectors are noted to be *"heroes, how they endure everything"* (PH-4).

#### **Areas related to the building of communication skills of the PHI and the reforms affecting the communication between the health professionals.**

All interviewees believe that the PHI must have communication skills. One of the respondents stated that communication skills are embedded in the competencies of civil servants, and they must comply with the Code of Ethics for Civil Servants. To the question: *How are the professional communication skills of the PHI currently being developed?*, The answers were in several directions. All agreed that the communication skills of inspectors should be acquired during the study, and the best approach is to have specialized training on this topic. It was confirmed that upon introduction to the position of "inspector" and in the course of professional realization, there is no mandatory specialized training in communication skills. RHI staff were aware that there was a training course for newly appointed civil servants at IPA. According to the experts, the topics for communication skills are mainly aimed at introducing the position, the specifics of the responsibilities, and the issues related to the administrative activity. In work, *"they only get acquainted with the rules, there are no specialized courses"* (PH-7). For the inspectors, *"the advantage is the specialized courses related to control, and the communication skills are left behind"* (PH-5). And the more

complex cases with the Ministry of Health, *"but they do not teach in terms of communication skills"* (PH-15).

To the question: **"Do the reforms in the activity of the PHI affect the process of communication?"** It was noted that the work of specialists is becoming more and more stressful, and potential opportunities for conflict at all levels are being created. The inspector has to *"play the role of a mediator"* (PH-6), *"the requirements for PHIs are increased, and the relations with the citizens are aggravated"* (PH-7), *which requires good communicative competence"* (PH-6). It was noted that *"recently people have become suspicious, feel pressure and ..... as soon as entering the site PHIs are perceived as a threat"* (PH-15) The importance of the behavior of PHIs in a given situation was emphasized. *"The first words are important to relax the situation. If the PHI is not competent and mentally stable, conflict can arise"* (PH-15). According to another participant: *"Communication is reduced to a shallow level, .... sometimes there is no vertical and horizontal one"* (PH-12).

#### **Proposals regarding the optimization of the workplace policy of the PHI.**

The organization of the control, when the Hygienic and epidemiological institution was the main structure, is assessed as the most successful so far.

According to the participants, the reforms introduced new moments, and there are still disputed areas and transfers of responsibilities between the individual institutions in the RHI, the RFSD, the RIEW, and the Municipality. They draw attention to optimizing the policy of the state administration by precisely and regulating the activities. Some experts suggest that the emphasis in the RHI should not fall only on the control activity but also on the prevention. Interviewees believe that the organization in the civil service should be linked to an adequate assessment of local needs. Among the proposals of the experts is the return of the authority of the service, by promoting the profession by involving the media, making a documentary about the work of the PHI, increasing staffing, motivating employees to improve their financial pay, and granting more rights to the service and management to make internal changes at their discretion.

#### **Suggestions for optimizing the professional communication of the PHI.**

The interviewees agreed that the work of the PHI is stressful and stressful. Given both the nature of professional responsibilities and as a means of mental health prevention, workers must have good communication skills, conflict resolution skills, teamwork, and more. The proposals for optimizing the professional communication of the PHI are mainly related to the perceived need for specialized training to build essential knowledge and skills of those working in this field. Respondents believe that communication skills training should start in higher education, introducing *"compulsory disciplines in communication techniques"* (PH-13), *"not just ethics"* (PH-7). The opinion is shared that there should be pieces of training both at the beginning of work and in the professional realization. However, attention is drawn to the fact that it is more difficult at the workplace because the situations are different, *".... there is no time, there are no such specialists"* (PH-2) to conduct the shoes. Most experts respond to the centralized training and note that *"it is not necessary to always be in Sofia. It would be good for them to be organized in the office spot, but by specialists"* (PH-7). *"It is essential to have such pieces of training periodically because the situation is changing"* (PH-15). *"It is good to organize the courses for everyone in the service"* (PH-5).

### **3.3. Factors from the work environment influencing the professional communication and behavior of the PHI**

Each of the analyzed factors - motivation, satisfaction, workload, communication skills directly or indirectly affect professional communication and the creation of interpersonal relationships in the workplace. Some of the factors are related to the presence of conflict situations in the activity of the inspectors.

These are:

- **level of satisfaction** - when the level of satisfaction increases, the number of conflicts decreases.

- **level of workload** - the conflicts increase with the increase of the workload, with the rise of the growing commitments, with the redundancies of the position of inspector.

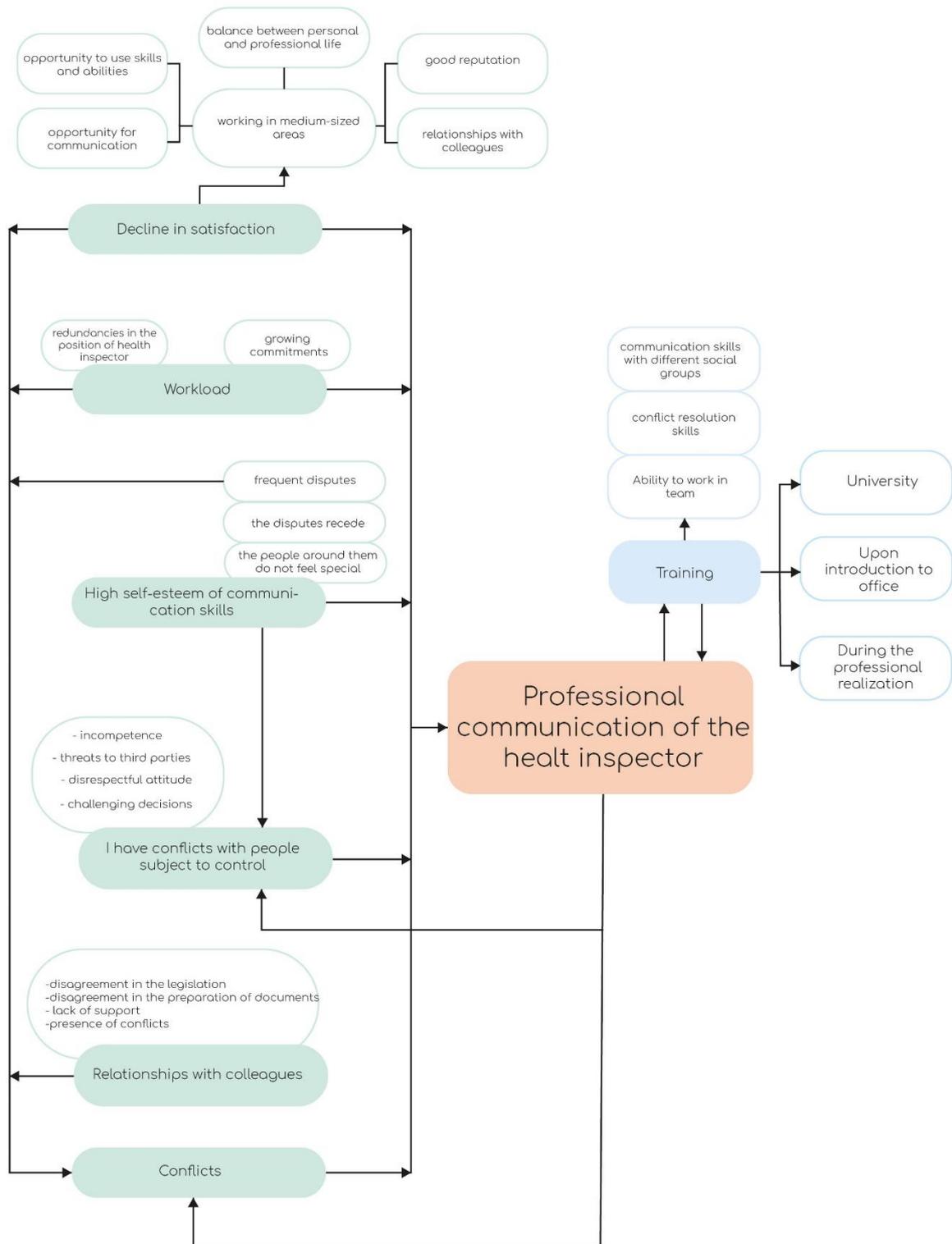
- **interpersonal relationships in the workplace**, both with colleagues and with the persons under control. Although some inspectors consider that they have good communication skills, they often get into disputes with the persons under control, and their behavior cannot be described as empathetic. In addition, disagreements with colleagues regarding the implementation of legislation, the preparation of official documents, and the lack of mutual support also lead to increased conflicts in the workplace.

The presence of conflicts is an indicator that the factors of the professional environment influence the professional communication and behavior of the PHI. Therefore, involvement in wars and their management is determined by the developed communication skills in training at three levels - in the university, at the introduction to the position, and during the professional realization.

According to the inspectors, skills are needed to communicate with different social groups, manage conflicts and work in a team. The experts confirmed that mastering various communication techniques and applying them depending on the situation is possible by building a specialized training system at three levels: during training at university, before induction, and postgraduate training during professional development.

Training at the three levels is needed given the ongoing reforms in the civil service and the increasing demands of society on civil servants.

The influence of the factors from the working environment on the professional communication and behavior of the PHI is presented in fig.32.



**Fig. 32** Factors from the working environment influencing the professional communication and behavior of the PHI

### 3.4. PROFESSIONAL - PERSONAL PROFILE OF PHI

From the analysis of the results obtained from the opinion of the surveyed PHI and experts, we can outline the modern professional-personal profile of PHIs.

Today, PHIs are health professionals acquiring higher education with a Bachelor of Science degree and opportunities for continuing education.

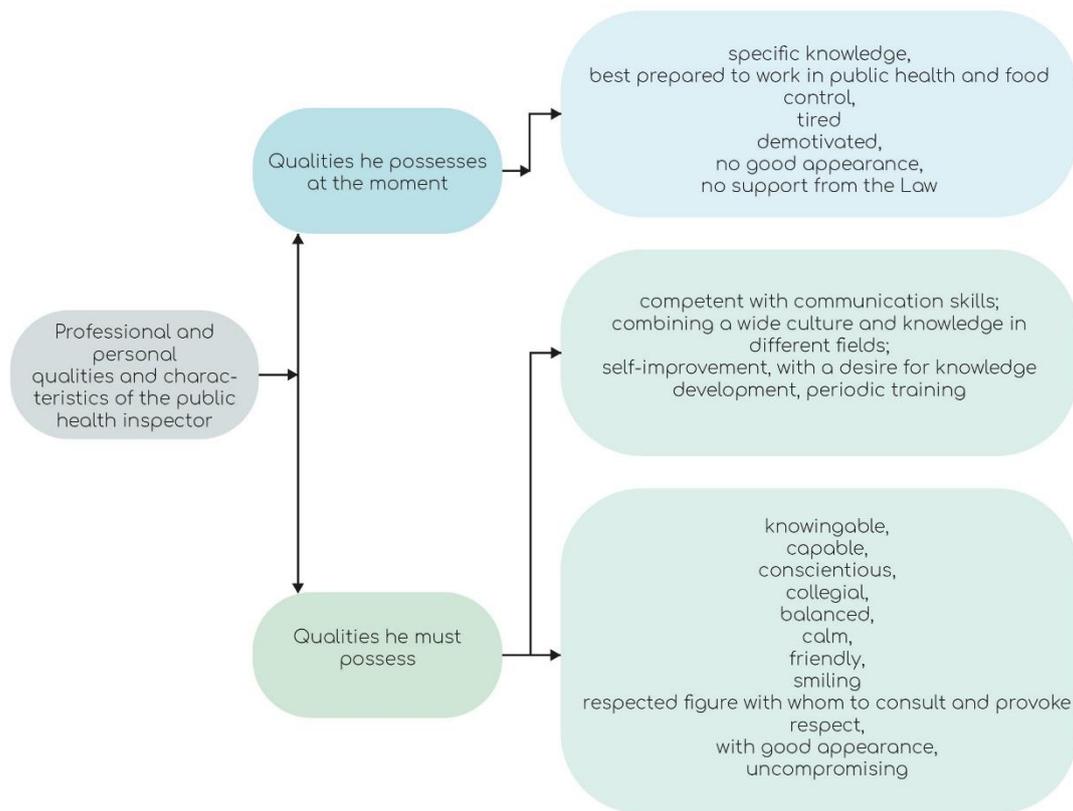
In the Republic of Bulgaria, PHIs are civil servants, realized mainly in the RHI system.

The analysis of the expert opinion shows that the PHI has specific knowledge and is best prepared to work in the control of public health and food. However, he seems overtired, demotivated, does not look good, and is not sufficiently supported by the Law.

The experts summarize the profile of the PHIs and derive various leading characteristics for them, as follows:

- PHIs should have a good appearance that corresponds to the "seriousness of the service";
- His behavior should be *"respectful," "respectful of the interlocutor" and defending his position, "without compromising"*;
- The PHI has good theoretical and practical training, has the necessary knowledge, skills, and competencies, which is a prerequisite to be *"motivated" and "willing to work"*;
- Professionals must *"build the authority of the institution" and "preserve the image of the service."* They are expected to have a high professional level, good communication skills, a combination of *"broad culture and knowledge in various fields"*;
- PHIs should *"improve themselves,"* periodically acquire new knowledge and continue their training;
- The PHI should develop his professional self-confidence, work conscientiously, be *"knowledgeable," "able," "balanced," "calm," "friendly," "smiling," "a respected figure to consult with, and to evoke respect."*

Fig. 33 schematically presents the desired professional and personal qualities and characteristics of the PHI.



**Fig.33. Professional - personal qualities and characteristics of PHIs**

In our opinion, the professional profile of the PHI is based on various characteristics, including professional specifics, personal and demographic factors.

The demographic characteristic shows a predominance of women, with an average age of  $45 \pm 2$  years. And professional experience  $18 \pm 2$  years. There is a tendency for this professional group to age.

Professional characteristics of PHI: In practicing the profession, inspectors are satisfied with the opportunity to communicate with different social groups, the excellent balance between professional and personal life, and job security, with expectations for prestigious, practical, challenging, and exciting work. Some demotivation is observed due to low pay, high levels of stress, and workload. As the age of employees increases, there is a decrease in motivation, the prestige of the profession, the sense of usefulness in society, career development, and the ability to use the skills and abilities of inspectors. As satisfaction increases, the number of work conflicts decreases.

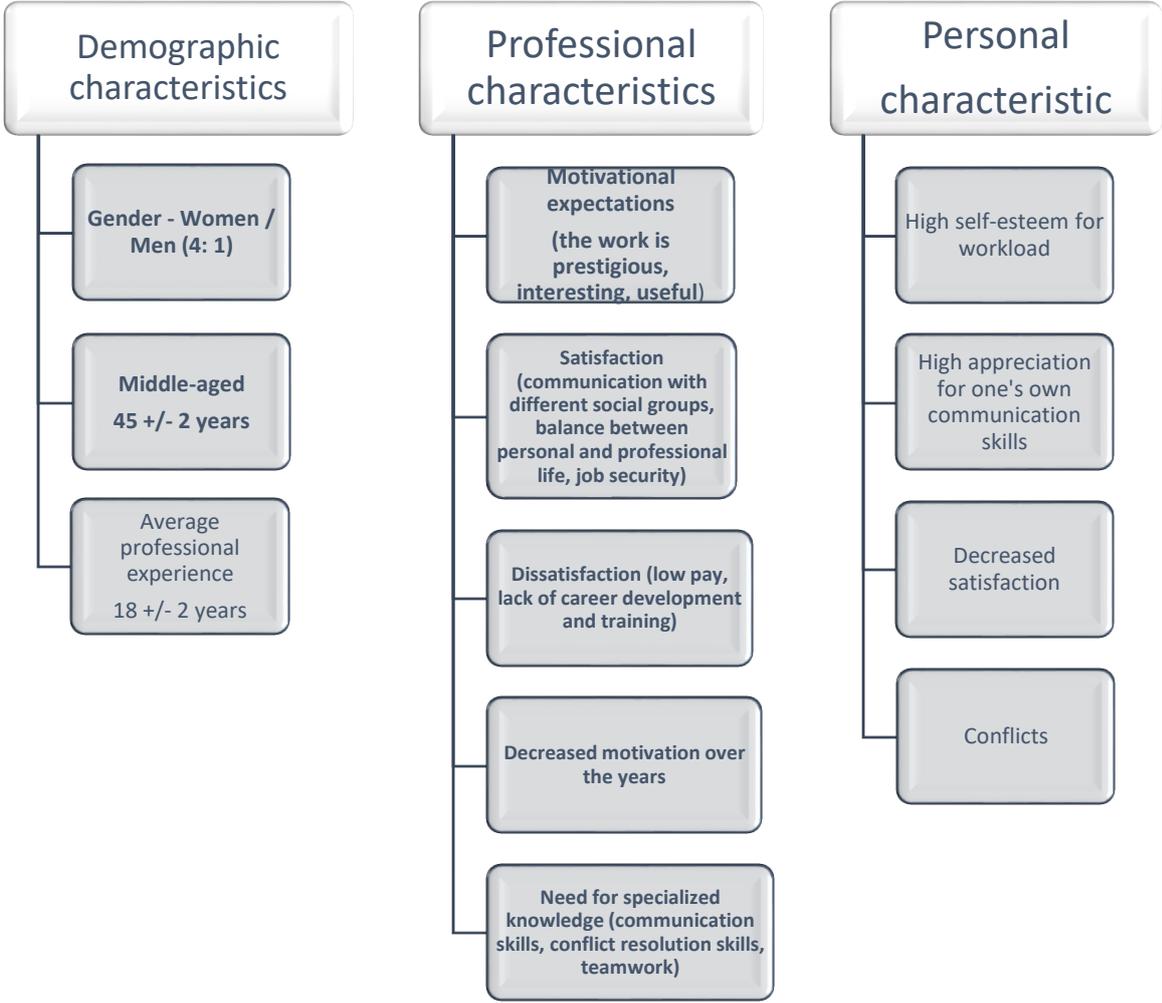
The majority of employees are aware of the need to master good communication skills, conflict prevention and resolution skills, and teamwork skills and declare the need for specialized training in this area. However, their work is busy, and the specifics and intensity of daily communication often lead to conflict situations.

Personal characteristics of PHIs: High self-esteem for good communication skills does not reduce stress and tension at work. Even subjectively assessed, high levels of stress and strain affect mental health. Even though the PHI evaluates itself with good communication skills, it often participates in disputes, and hence - in conflict situations. Contrary to the self-assessment of good communication skills, the inability of inspectors to create a positive emotional

atmosphere when communicating with those under control is an essential factor in preventing potential conflict. When such occurs, intransigence is instead manifested, and this does not lead to a constructive outcome.

Specific personality characteristics of inspectors working in medium-sized cities show the lowest level of satisfaction with various indicators, which can be considered a prerequisite for the emergence of mental and behavioral states. These features in the personal profile of the PHI can be detailed through targeted specialized studies and psychological assessments and then to plan the implementation of certain specific measures and interventions.

FIG. 34 presents the professional profile of the PHI, based on professional and personal characteristics and characteristics manifested by the PHI in the process of professional activity.



*Fig.34. Professional profile of PHIs*

### 3.5.SWOT – ANALYSIS OF PROFESSIONAL COMMUNICATION AND BEHAVIOR OF PHIs

Based on the obtained results we made a SWOT-analysis of the professional communication and behavior of the PHI (Table 4).

*Table 4. SWOT - analysis of the professional behavior of the PHI*

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• preparation from a university (Medical University) on health promotion and disease prevention;</li> <li>• have specific knowledge for exercising official control over public health;</li> <li>• continuously contributes to increasing the prestige of state institutions for prevention;</li> <li>• availability of the status of civil servants and all the resulting privileges;</li> <li>• available regulatory framework, regulating the behavior of the civil servant;</li> <li>• provide better communication on three levels:               <ul style="list-style-type: none"> <li>- managers</li> <li>- colleagues at work</li> </ul> </li> <li>• persons subject to control;</li> <li>• declare the need and readiness for specialized training in "Communication Skills";</li> <li>• have security in the workplace</li> <li>• there is a relative coverage between job expectations and actual assessment;</li> </ul>	<ul style="list-style-type: none"> <li>• restriction in the rights and development arising from the status of civil servants;</li> <li>• negative attitude in society and the persons subject to control;</li> <li>• Lack of regulation for compulsory specialized training in communication skills at all three levels:               <ul style="list-style-type: none"> <li>- in a university</li> <li>- upon introduction to office</li> <li>- in the course of professional realization;</li> </ul> </li> <li>• redundancies;</li> <li>• replacement of the PHI position with other staff;</li> <li>• there is no opportunity for career development;</li> <li>• there is no possibility for trainings;</li> <li>• low wages;</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• taking measures at national level to promote the activities of PHIs in society;</li> <li>• stimulating the regional institutions for conducting trainings related to increasing the personal and professional satisfaction, managing the conflict situations, acquiring leadership skills;</li> <li>• introduction of continuous training throughout the professional path;</li> <li>• opportunities to participate in discussing problems, related to public health;</li> </ul>	<ul style="list-style-type: none"> <li>• frequent reforms at the organizational level;</li> <li>• change in public perceptions and perceptions of the role of PHIs in the healthcare system;</li> <li>• redundancies of the PHI;</li> <li>• increasing growing commitments</li> <li>• introduction of additional requirements to the PHI;</li> <li>• increasing the level of daily workload;</li> <li>• increasing the level of stress;</li> <li>• the presence of conflicts;</li> <li>• resistance from management;</li> </ul>

## **IV. APPROACHES TO OPTIMIZING THE PROFESSIONAL COMMUNICATION OF PHIs**

### **APPROACHES FOR IMPROVING AND MAINTAINING PROFESSIONAL COMMUNICATION AND BEHAVIOR OF PHI**

The data from the study show that the activity of PHIs is associated with a high workload and a significant frequency of conflicts in the implementation of official control. In addition, with increasing age, there is a decrease in job satisfaction, and one of the reasons for this is the negative image of the RHI institution. All these factors can lead to chronic stress in the workplace and, consequently, to some anxiety-depressive and behavioral manifestations, which hinder both the daily functioning and the work of the PHI.

The proposed model includes a brief description of the approaches for optimizing the professional communication and behavior in the PHI activity at the organization level. The tools used are designed for assessment and self-assessment of inspectors to maintain professional communication and behavior and stress prevention.

At the heart of health promotion and disease prevention activities are essential to building positive public attitudes towards the institution, increasing the authority and prestige of the service. In this way, public confidence in the work of the PHI would grow. For this purpose, in addition to the introduction of adequate national policies regarding the state administration, it is necessary to provide specific training both in the university and in the introduction to the office and during the professional implementation of the PHI.

#### **4.1. MODEL FOR OPTIMIZATION OF PROFESSIONAL COMMUNICATION**

##### **4.1.1. System for monitoring, control and analysis of the behavioral characteristics of PHIs**

- **Monitoring and control of the behavioral characteristics of inspectors.** The monitoring can be carried out by the head of the department and documented in a Risk Identification Card. The following signs and manifestations are observed: fatigue, stress, aggression, distraction, lack of concentration, irritability, nervousness, apathy, refusal to perform tasks, refusal to take responsibility, errors in filling in official documents, received signals/complaints against the person. , reports from previous observations to identify the risk, complaints, and alerts of citizens, governmental and non-governmental organizations against a specific person; occurred momentary states with a particular behavioral characteristic; sharing by employees during structural meetings with management. Figure 35 shows a "Risk identification card in the professional communication and behavior of the PHI"
  
- **Analysis and assessment of the motivation and satisfaction of the PHI through a Questionnaire.** A questionnaire assessing the conditions and results of the work, examining the psychological microclimate. (Appendix sample questionnaire to support the assessment of motivation and satisfaction of the PHI by the manager) The questionnaire is an example, directs the manager to a possible level of motivation and

satisfaction. At the discretion of the head of the PHI, seeks specialized support and assistance.

It is recommended that the sociological surveys be conducted for three years and six months after introducing reforms in the work organization.

- **Analysis and assessment of the mental health of the PHI** - To objectify the mental state, it is necessary to use specific assessment tools and a specialist in the field. Application of professional questionnaires to assess mental health at work and regularly, based on professional adaptation.

#### **4.1.1. Implement preventive measures to combat occupational stress**

##### ➤ **Application of the first preventive measure**

###### **A 1. Change of operating mode:**

- Alternation of fieldwork with work from the service and document circulation;
- Alternation of fieldwork with work in the duty room;
- Alternation of official control with sampling for laboratory analysis;
- Carrying out official control according to the risk assessment of the site - alternation of official authority in areas with a lower assessment with sites with higher risk assessment;
- Cancellation of additional shifts;
- Optimization of working hours by giving additional days off in the day after duty;
- Mandatory visit and control of sites in a commission of two employees and not just one specialist;
- Support from the management in carrying out control. (The Head may, together with the Inspector, carry out official rules and / or appoint a more experienced person to provide assistance and assistance)

**A 2. Training for communication skills** - Specialized training to improve communication skills, conflict management, problem-solving, teamwork, and others.

**An individual approach is used in the application of preventive measures to combat occupational stress. The standards can be implemented individually and jointly (A1 + A2).**

*Additional measures can be applied to support communication and improve professional communication:*

##### ➤ **Second preventive measure to improve emotional state.**

###### **Supporting the psycho-emotional state.**

- emotion ventilation groups,
- groups for sharing experiences and ideas
- informal group activities (team building).

The type of group work is determined by a specialist if necessary.

**They are organizing mental health interventions.** It is used in burnout, anxiety-depressive states, behavioral disorders, and aggressive manifestations; the employee must consult a psychologist/psychiatrist.

The application and monitoring of the preventive measures are described in the **Map for the application of preventive measures (Fig. 36).**

### Risk identification card

of.....

*(Име, фамилия на служителя, подлежащ на наблюдение)*

Date:.....

*(specify specific date, month, year)*

Identified risk	Analysis and evaluation of motivation and satisfaction	Analysis and assessment of the mental health of the PHI	Need to change identified risk
<p><b>Direct observation of an employee</b></p> <input type="checkbox"/> Fatigue <input type="checkbox"/> Stress <input type="checkbox"/> Aggression <input type="checkbox"/> Distraction <input type="checkbox"/> Lack of concentration,  <input type="checkbox"/> Irritability <input type="checkbox"/> Nervousness <input type="checkbox"/> Apathy <input type="checkbox"/> Refusal to perform tasks <input type="checkbox"/> Disclaimer, <input type="checkbox"/> Errors in filling in official documents <input type="checkbox"/> Received signals / complaints against the person <input type="checkbox"/> Occurred momentary states with a certain behavioral characteristic <input type="checkbox"/> Sharing by the employees during structural meetings with the management <input type="checkbox"/> Other .....	<input type="checkbox"/> Questionnaire to support the assessment of motivation and satisfaction	<input type="checkbox"/> Evaluation questionnaires	<input type="checkbox"/> No  <input type="checkbox"/> Yes (suggestions)
	Result (described by department head)	Result: (described by a specialist)	

*Fig.35. Map for identification of the risk in the labor process of the PHI.*

## Map for application of preventive measures

of

.....  
 (Name, surname of the employee to be monitored)

Observation period:

from.....to.....

..

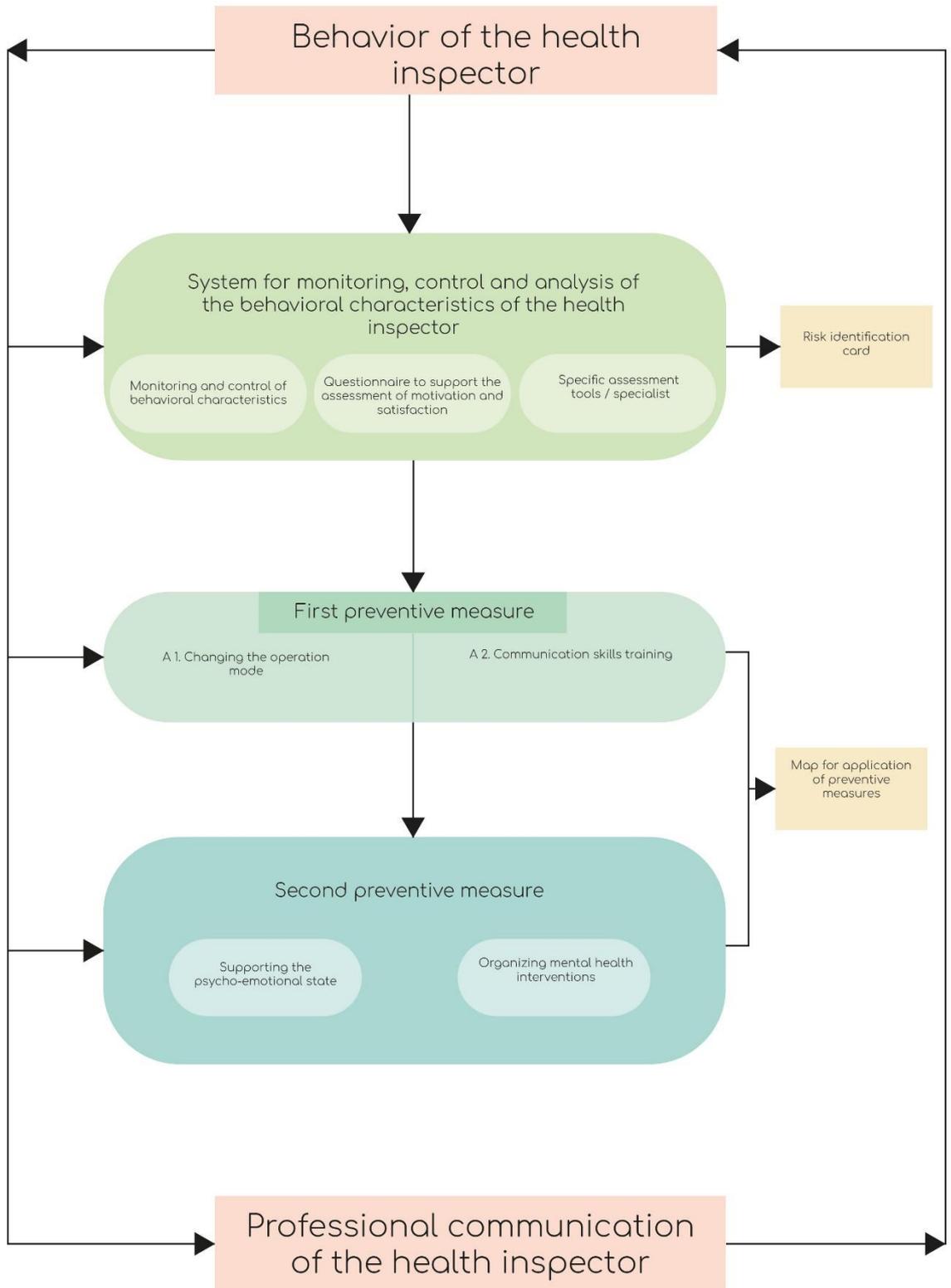
(specify specific date, month, year)

Preventive measures				Result of the preventive measure	Need to change the preventive measure
Първа мярка		Втора мярка			
Changing the operating mode	Training	Supporting psycho - emotional state	Organizing mental health interventions		
<input type="checkbox"/> Alternation of field work with work in the duty room; <input type="checkbox"/> Alternation of official control with sampling for laboratory analysis; <input type="checkbox"/> Carrying out official control according to the risk assessment of the site - alternation of official control in sites with lower assessment with sites with higher risk assessment; <input type="checkbox"/> Cancellation of additional shifts; <input type="checkbox"/> Optimization of working hours by giving additional days off in the day after duty; <input type="checkbox"/> Mandatory visit and control of sites in a commission of two employees, not just one specialist; <input type="checkbox"/> Support from management in exercising control. (The Head may, together with the Inspector, carry	Type:.....  Date.....  .....	<input type="checkbox"/> Emotion ventilation groups Date.....  Date.....  <input type="checkbox"/> Groups for sharing experiences and ideas Date .....  Date .....  <input type="checkbox"/> Informal group activities (team building)  Date .....	<input type="checkbox"/> Consultations with a specialist  Type of specialist: .....  Date: .....  Date: .....	<input type="checkbox"/> No.  <input type="checkbox"/> Yes (suggestions)	

out official controls and / or appoint a more experienced person to provide assistance and assistance) <input type="checkbox"/> Other		Date: .....  .....			
--	--	-----------------------------	--	--	--

**Fig. 36 . Map for application of preventive measures in the labor process of PHIs.**

**In Fig. 37 presents the theoretical model for supporting the professional communication of the PHI.**



**Fig. 37 Theoretical model for supporting the professional communication of PHI.**

**For the implementation of the MODEL FOR OPTIMIZATION OF PROFESSIONAL COMMUNICATION several main stages are applied:**

**First stage:** It is necessary to involve all employees at the very beginning of the process. Inspectors should be familiar with the process; to pay attention to the importance of their role in building continuous feedback to the final results. The study of motivation is a process that begins at the beginning of the position and is further developed during the professional realization. It is necessary to study the future expectations of employees when they are hired, even before the start of the work process. The obtained data should serve as a basis for comparison with subsequent sociological surveys for motivation and satisfaction in the course of employment. (Appendix 1)

**Second stage:** The next step is to conduct research related to motivation, satisfaction, and stress in the workplace periodically in professional experience. This also includes the direct observations by the management for deviations in the behavioral characteristics through a Risk Identification Map (Fig. 35).

**Third stage:** Based on the results of the study and monitoring, the main preventive measures that can be applied in this case are identified. The preventive measures are 2 in number:

- change and optimization of the work regime and training for communication skills
- support the psycho-emotional state of the employees by forming groups for ventilation of emotions, sharing experiences/ideas, team building. In the presence of burnout and anxiety-depressive states, behavioral disorders, aggressive manifestations, the employee must consult with a psychologist/psychiatrist.

**Fourth stage:** Deciding on the implementation of a specific preventive measure;

**Fifth stage:** Implementation of a specific preventive measure. Describe the applied preventative measure, reflecting the type and date of its application in the Map for preventive measures (Fig. 36).

**Sixth stage:** Measurement of the results of the applied preventive measure.

The manager again observes the behavioral characteristics of the employee and describes the results in the Map for the application of preventive measures (Fig. 36). Answers the questions:

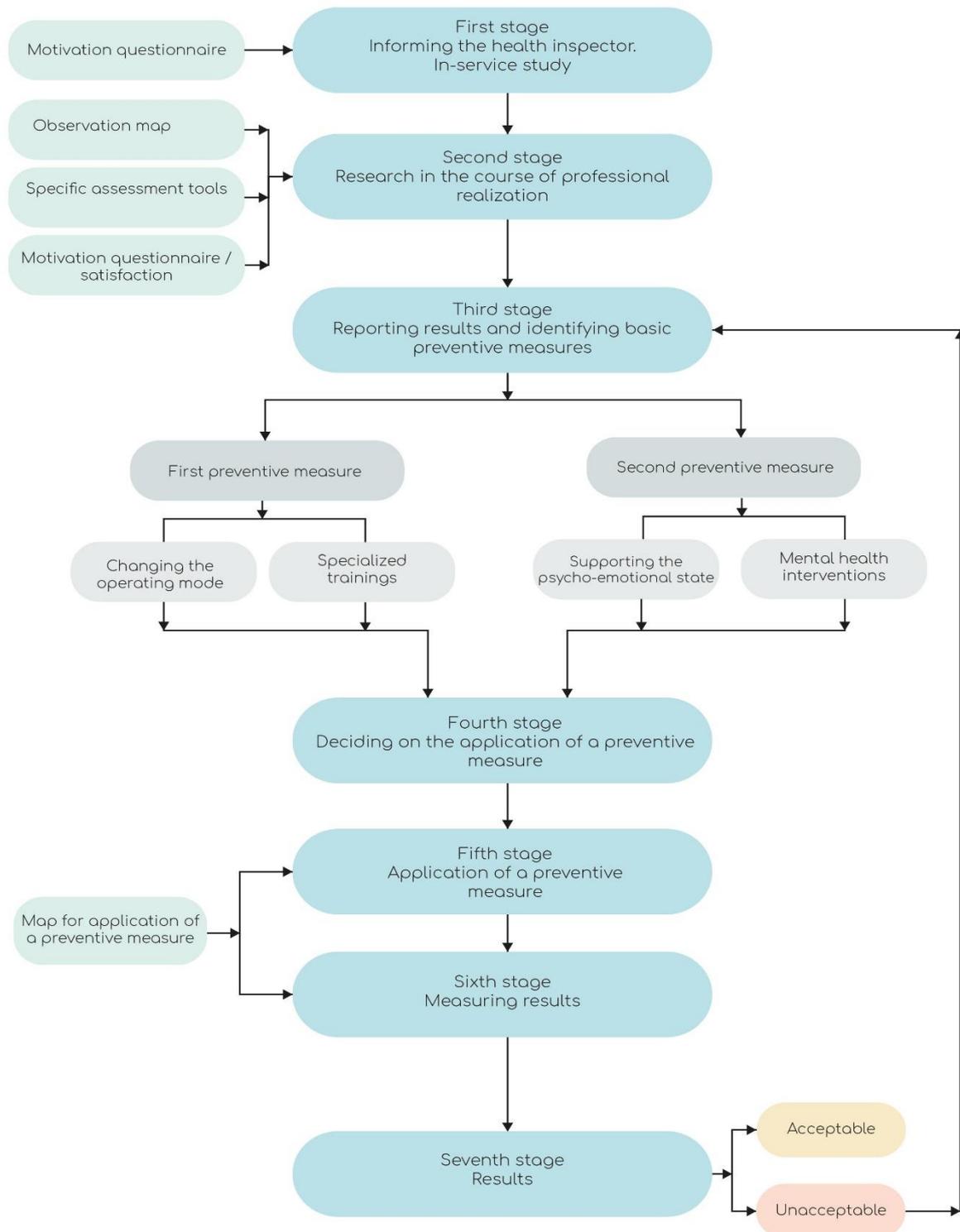
- Is there a change in the behavioral characteristics of the observed person?
- What is the change? - positive or negative direction.

**The seventh stage:** Need to change the preventive measure. There are two possibilities:

- The results are acceptable, and the preventive measure is applicable.
- The results are unacceptable. Therefore, it is necessary to adjust the preventive measure and return the decision-making process.

The two cards: the Risk Identification Card and the Preventive Measures Card, are kept in the Inspector's file and are used for comparison in future observations.

The seven-step theoretical model for evaluation of behavioral characteristics is presented in Fig.38 .



**Fig.38.Theoretical model for evaluation of the behavioral characteristics of PHIs.**

## **4.2. MODEL OF TRAINING OF THE PHI THROUGH THE INTRODUCTION OF SPECIALIZED PROGRAMS FOR DEVELOPMENT OF COMMUNICATIVE SKILLS AND CONFLICT RESOLUTION**

The survey found that levels of satisfaction with learning opportunities were low.

At the same time, a large part of the interviewed and interviewed employees state the need for specialized training for acquiring communication skills, conflict resolution skills, etc.

Primary education is the basis on which the inspector builds his competence and improves over time. In addition, good communication skills are needed to deal with various situations generated in the work process, personal qualities, and systematic updating of knowledge.

That is why we propose to improve the training of PHIs in this direction on several levels.

### **4.2.1. HIGHER EDUCATIONAL INSTITUTION**

The qualification "Inspector of Public Health" is obtained in our country after passing the necessary training in the specialty. It is held in the Medical Colleges at the country's Medical Universities in a standard form for three years. These are six semesters during which disciplines meeting the Unified State Requirements (USR) are studied. Graduates receive an Educational Qualification Degree (EQD) in the professional bachelor's degree in Public Health Inspector. In the Ordinance on USR in our country, there are thematic units of communication skills in "Medical Ethics and Deontology" and "Medical Psychology." Still, in our opinion, the hours are not enough to master the necessary communication techniques. In this regard, we offer a developed curriculum on "Communication skills and conflict management," which can be applied as an elective subject in the training process of the specialty "Public Health Inspector. The course aims to study the basic principles of effective communication between PHI, management, colleagues, and persons subject to control. The creation of effective communication between the PHI, business operators, and society contributes to the understanding of the actions of the citizens, improves the management and the health information activity in the field of public health. Moreover, communicative competence is necessary for creating and maintaining interpersonal relationships. Therefore, communicative competence requires constant development of communication skills and continuous improvement of acquired skills in further education and professional activity.

### **4.2.2. AT THE LEVEL OF WORK**

Upon taking office, the newly appointed inspector undergoes a training course for a civil servant at IPA, based in Sofia. The introductory training is divided into seven modules with a total of 24 hours and aims to introduce future employees to the state administration. One of the modules is called "Personal Effectiveness" and includes topics in communication skills and teamwork. In our opinion, the hours for conducting the entire training course are not sufficient for mastering the necessary communication techniques and managing an effective communication process. From the conducted research and interviews among experts, it was established that there are no specialized courses in communication skills during the professional realization of the Inspectors. The training is carried out on-site by the management staff who

do not have this qualification. In this case, the movements refer to acquainting the PHI with the ones introduced in the normative changes.

We believe that the introduced teaching hours in IPA of 24 lessons for seven modules are insufficient to master various communication skills. At the same time, there are no specialists to introduce PHI in the changing communicative environment due to the civil service reforms. This can lead to tension among workers and the emergence of stress in the workplace.

The specific proposal is that there should be specialized modules both in the initial introductory training for civil servants and in the current professional training of the PHI, due to the changing environment and the increased social requirements of the society towards the specialists. It would be most appropriate for the training to be conducted on-site in the office, with a specific frequency, by specialists in communication skills. The proposal is also supported by the opinion of the experts in the interview. Training should be at the individual level or in groups. At the personal level, activity is assigned depending on the assessment of observation of behavioral reactions. Group training can be carried out periodically, with an element of upgrading, at a certain period: starting work, every three years, during structural reforms in the service. The groups can be divided into three levels:

- A group of newly appointed employees with the employment of up to 1 year.
- Group with employment up to 10 years
- Group with more than ten years of experience.

The organization of the pieces of training can be carried out by specialists from the Medical Universities in the country. The training topics should be carried out at different levels, which should have a building effect. The sections should be aimed at mastering the basic communication techniques, managing an emotional state, conflicts, and learning the skills of self-observation and self-assessment. This will provide an opportunity to discuss various professional problems and cases and find a possible solution. In this regard, we offer a Curriculum for postgraduate training, "Contemporary trends in professional communication of the PHI." The curriculum is directly focused on the activities of the PHI. It consists of 3 modules, each module serving to upgrade the employee's basic knowledge, skills, and competencies during the training in higher education.

The first module is aimed at studying modern methods and tools in PHI communications. Attention is paid to oral verbal communication, non-verbal behavior, and the main approaches in forming effective communication of the PHI. It focuses on dialogic forms of communication, developing skills for observation, listening, and creating personal communication strategies in the PHI. The main emphasis is on the creation and maintenance of effective interpersonal relationships in the activities of the PHI.

The second module covers the modern requirements for writing correspondence. There is a strict focus on the formation of administrative decisions. Emphasis is placed on selecting written messages and preparing documents in the conditions of different situations (complaints, prosecutorial requests, conflicts, etc.).

In the third part, the topics are focused on communication with the persons under control and the emergence of conflict situations in the performance of official duties. The practical classes allow for a selection of effective communication techniques in case of a dispute and defend the PHI's position. Thus, the emphasis is on conflict management.

## V. CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTIONS

### CONCLUSIONS:

**1. The workload of the workplace affects the professional communication of the PHI.** It is reported as a subjective feeling. It is supported by the growing commitments ( $\chi^2 = 19.312$ ,  $p = 0.004$ ), the reforms in the structures of the organization and the frequent changes in the legislation ( $\chi^2 = 19.312$ ,  $p = 0.004$ ). The workload affects the PHI's relationships with the controlled persons and the level of conflict situations with them ( $p = 0.010$ ). The redundancies of the "inspector" position lead to conflict situations in the communication process (OR = 2.125,  $p = 0.000$ ), disrespectful attitude towards PHI (41.2%) ( $p = 0.015$ ) and threats from third parties (50%) ( $<0.0001$ ).

**2. There is low professional satisfaction among PHI.** The motivating factors are job security (36.2%) and the nature of the civil servant's work (sense of usefulness - 32.8%, ability to use skills - 31.9%). Demotivating factors are the opportunities for career development (42.3%), the level of pay (42.2%), and the opportunities for training (38.8%). Dissatisfied with almost all indicators are the employees in the medium-sized regional centers regarding the opportunities for communication ( $\chi^2 = 30.34$ ,  $p <0.0001$ ), the opportunities for using skills and abilities ( $\chi^2 = 33.902$ ,  $p <0.0001$ ), the balance between personal and professional life ( $\chi^2 = 20,049$ ,  $p = 0,017$ ), a sense of usefulness from work ( $\chi^2 = 23,1$ ,  $p = 0,003$ ) and relationships with colleagues ( $\chi^2 = 23,16$ ,  $p = 0.008$ ). Job satisfaction is a prerequisite for reducing conflicts. ( $r = - 0.204$ ).

**3. In the work of the PES, the frequency of conflicts increases.** It is associated with increased workload (OR = 2.246,  $p <0.007$ ), with increasing commitments (OR = 2.124,  $p <0.007$ ), with redundancies in the position of "inspector" (OR = 2.125,  $p = 0.000$ ), with increasing age (OR = 1.039,  $p <0.048$ ). The negative relations with the colleagues refer to disagreements in the interpretation and application of the legislation and the preparation of official documents. Lack of professional support and cooperation is a prerequisite for conflicts ( $r = 0.259$ ).

**4 Conflicts in the activities of the PHI are mainly with the persons subject to control.** The reasons are the disrespectful attitude of the persons subject to control (Cramer's V = 0.275,  $p = 0.024$ ), the threat from the controlled persons with the intervention of third parties (Cramer's V = 0.277,  $p = 0.031$ ), ignorance of the law (Cramer's V 0.380,  $p <0.0001$ ) challenging the imposed administrative measures (Cramer's V 0.405,  $p <0.0001$ ).

**5. Emotional and behavioral characteristics influence the professional communication of the PHI.** The high self-assessment for communication skills (82.5%) predetermines the lack of difficulties in the communication of the PHI ( $\chi^2 = 39.539$ ,  $p = 0.019$ ). Despite the high self-esteem of their communication skills, PHI often get into arguments ( $\chi^2 = 30, 417$ ,  $p = 0.019$ ), do not show a tendency to change their position ( $\chi^2 = 47.715$ ,  $p <0.001$ ), and do not show empathy in contact with the controlled persons ( $\chi^2 = 29.899$ ,  $p = 0.002$ ). Highly self-assessed communicative competence does not correlate with the frequency of disputes and conflicts in everyday professional activity ( $\chi^2 = 24.849$ ,  $p = 0.039$ ). High job security is directly related to the frequency of conflict situations (OR = 1.564,  $p <0.023$ ).

**6. There is no system for building professional communication skills of the PHI.** Isolated training in communication skills is mainly in the introduction to the position and explanation

of the specifics of the responsibility. The programs related to the behavior of the civil servant at the national level are intended for the managerial staff and do not reach the status of the PHI. The increase of the professional competencies in communications consists in acquainting the management with the normatively - determined requirements for observance of the ethical principles. The PHI (42.2%) developed communication skills independently in practice but without mastering the necessary communication techniques to deal with different situations.

**7. The optimization of the professional communication of the PHI is possible through interventions on psycho-social factors and the provision of specialized training.** The factors that influence the professional touch and behavior of the PHI are diverse. They are related to the professional self-assessment for communication skills, the workload at the workplace, and the presence of conflicts in the process of professional communication of the PHI. Factors for managing professional communication are the motivation and job satisfaction of the PHI and specialized training in communication skills.

**8. The derived professional profile of the PHI shows good professional training, availability of necessary knowledge, skills, competencies, and good communication skills.** Some demotivation is observed due to low pay, high levels of stress, and workload. As the age of employees increases, there is a decrease in motivation, the prestige of the profession, the sense of usefulness in society, career development, and the ability to use the skills and abilities of inspectors as satisfaction decreases, the frequency of work conflicts increases. Busy, specific, and intensive professional activity leads to conflict situations. PHIs should develop their professional self-confidence, work in good faith, be *"knowledgeable," "able," "balanced," "calm," "friendly," "smiling," "respected figure to consult and seek respect."*

## **RECOMMENDATIONS**

### **To the Medical Universities where training in the specialty "Public Health Inspector" is carried out:**

1. Introduction of specialized training in general and specific communication skills by optimizing the compulsory subjects and their hours when optimizing Uniform state requirements.
2. Introduction of specialized training in general and specific communication skills by optimizing the movement in the profiling and particular disciplines included in the curriculum of the specialty "Public Health Inspector," EQD: "professional bachelor in ..." by expanding knowledge and skills, forming the specifics of professional communication and behavior.
3. In the specialty "Public Health Inspector" curriculum to be included for studying the elective course "Communication skills and conflict management."

### **To the places for the professional realization of Public Health Inspectors (RHI, RFSD)**

1. Introduction of specialized training in communication skills at two levels:
  - upon introduction to office;
  - periodic postgraduate training in the course of the professional realization.Training should be organized and conducted by specialists.
2. The professional qualification of the Inspector is to be stimulated and supported by the management in the state organization to increase the satisfaction and quality of the work of the PHI.
  - To stimulate the motivation for work and the satisfaction of the PHI to increase the effectiveness of the applied prevention and prevention of diseases.To reduce occupational stress at the organizational level to improve working conditions, optimize time; team building and teamwork skills; personal self-control, self-observation, satisfaction; even distribution of forces and time for work and rest.

## **YIELD**

### ***Contributions of a theoretical nature***

1. The first wide-ranging, purposeful, and in-depth study of the influence of the factors of the professional environment on the process of communication in the activity of the PHI has been made.
2. The professional-personal profile of the PHI is determined.
3. A SWOT analysis of the professional communication and behavior of the PHI was made.
4. The factors influencing the professional communication of the PHI have been studied, and the possibilities for its optimization have been revealed.
5. A theoretical model for optimization of the professional communication of the PHI and an algorithm to it have been developed.

### ***Contributions with practice - applied nature:***

1. A curriculum has been developed for an elective course, "Communicative skills and conflict management in the activities of the PHI," forming the specific professional behavior among students of the Board "Inspector of Public Health."
2. A curriculum for postgraduate training, "Modern trends in professional communication of the PHI," has been developed, developing, and upgraded the specific professional behavior of inspectors working as civil servants in the RHI and RFSD system.
3. Practical guidelines for optimizing the professional communication of the PHI and a Questionnaire to support the assessment of motivation and satisfaction of the PHI are proposed.
4. Proposed cards for identifying the risk at the workplace of the PHI and undertaking preventive measures are proposed.
5. The results can be used by department heads to optimize interpersonal relationships in team members' professional communication and communication skills.

## SCIENTIFIC PUBLICATIONS IN CONNECTION WITH THE DISSERTATION

- 1. Tosheva Ya., S. Pavlova,** Formation of professional communication skills of the PHI in the process of education in higher education, Journal of the Medical College - Varna, MU-Varna, Volume II, 2019, issue. 1, pp.26 - 32
- 2. Tosheva J., S. Pavlova,** Motivation and satisfaction - factors for the formation of professional communication of the inspector of public health in the implementation of official control, Academic Journal "Management and Education," University "Prof. Dr. Assen Zlatarov," Burgas, Volume 16 (6) 2020, pp.111-116
- 3. Tosheva Ya., S. Pavlova,** Business position on the behavior of the public health inspector in carrying out official control in public facilities, Proceedings of the IX scientific session of the Medical College Varna, Volume 10 (2021): add. 1, pp. 163-168