



PUBLIC HEALTH INSTITUTE
OF THE REPUBLIC OF SRPSKA



Research “Introduction of safety and quality standards among private healthcare providers in the Republic of Srpska (Bosnia and Herzegovina)”

conducted under Technical Services Agreement with WHO (reference 2016/655027-1)

Report on the third round of data collection: 2nd round of in-depth interviews with the private healthcare providers

Report submitted to:

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Acronyms and abbreviations

AP – pharmacies;

ASKVA – Agency for Certification, Accreditation and Healthcare Quality Improvement in the Republic of Srpska

C – certified

CH-chain of pharmacies;

NC – non-certified

IND - independent pharmacy

MoHSW – Ministry of Health and Social Welfare of the Republic of Srpska

PHPs – private healthcare providers

RS – Republic of Srpska

RS HIF – Health Insurance Fund of Republic of Srpska

RS PHI – Public Health Institute of Republic of Srpska

SA – specialist practices

ST – dental practices

NOTE ON REFERENCING OF INTERVIEW TRANSCRIPTS:

When referencing citations to specific interview, the abbreviations are used throughout the report. The abbreviations consist of:

- (1) specification of provider type (AP – pharmacies; SA – specialist practices; ST – dental practices),
- (2) specification of the number of the interview,
- (3) specification of adoption status (C – certified; NC – non-certified) and
- (4) organizational status of pharmacy (CH-chain of pharmacies; IND-independent pharmacy).

For example, the abbreviation AP16/NC/IND stands for „interview number 16 with non-certified independent pharmacy“; the abbreviation ST13/NC stands for “interview number 13 with non-certified dental practice”.

1. Introduction

The research “Introduction of safety and quality standards among private healthcare providers in the Republic of Srpska (BiH)” is conducted over the period July 2015 – December 2017, with support by the Alliance for Health Policy and Systems Research. It is financed through the Technical Services Agreements, concluded between the World Health Organization and the Public Health Institute of Republic of Srpska (WHO reference numbers: 2015/538686-1 and 2016/655027-1).

The intervention studied under the research relates to the implementation of regulation (mandatory safety and quality standards) for private healthcare providers in the Republic of Srpska (RS). The diffusion of innovation theory has been used as a conceptual framework on which the research is based. A mixed method approach has been used in designing the proposed research. Primary data, needed for hypotheses testing, were collected through (1) face-to-face semi-structured in-depth interviews (third quarter of 2015 and the last quarter of 2016) and (2) self-administered postal survey (third quarter of 2016).

The report on the third round of data collection was prepared jointly by all members of the core research team (Dr Siniša Stević, Prof Budimka Novaković, Prof Severin Rakić and Jelena Niškanović, PhD Psychology). The report will serve as one of starting points for the preparation of the overall report on the research.

The report begins with positioning of the second round of in-depth interviews as part of the overall research design and implementation (section 2). After providing contextual information, necessary for understanding the position and roles of the private healthcare providers (PHPs) in the Republic of Srpska’s healthcare system (section 3), a summary of key findings is provided for each type of PHPs, together with a comparison of the main differences among them (section 4). The summary is based on full case reports for pharmacies, dental practices and specialist practices. Within and cross case findings are then discussed in relation to the hypotheses (section 5) and the conclusion is drawn, taking into account the research question (section 6). Finally, the recommendations for local stakeholders and policy makers are provided (section 7).

2. Research objective and methods

2.1 Research objectives

The intervention studied under the research was the implementation of regulation (mandatory safety and quality standards) for private healthcare providers in the Republic of Srpska (RS). The regulation has been in place since 2012, but not all private healthcare providers have adopted it yet. Adoption rates have differed among different types of private healthcare providers.

By studying the intervention, we seek to answer the following research question: “Why does the rate of adoption of mandatory safety and quality standards vary among private pharmacies, dental practices and specialist practices in the Republic of Srpska?” Towards that objective, the five hypotheses were developed:

- Hypothesis 1: Perceived gains in professional status positively influence adoption of safety and quality standards.
- Hypothesis 2: Fear of negative financial consequences increases adoption of safety and quality standards.
- Hypothesis 3: Availability of information on safety and quality standards increases their adoption.
- Hypothesis 4: Opinions conveyed to private healthcare providers by peers influence adoption of safety and quality standards.
- Hypothesis 5: Perceived attitudes of chambers and professional associations influence adoption of safety and quality standards.

2.2 Study design

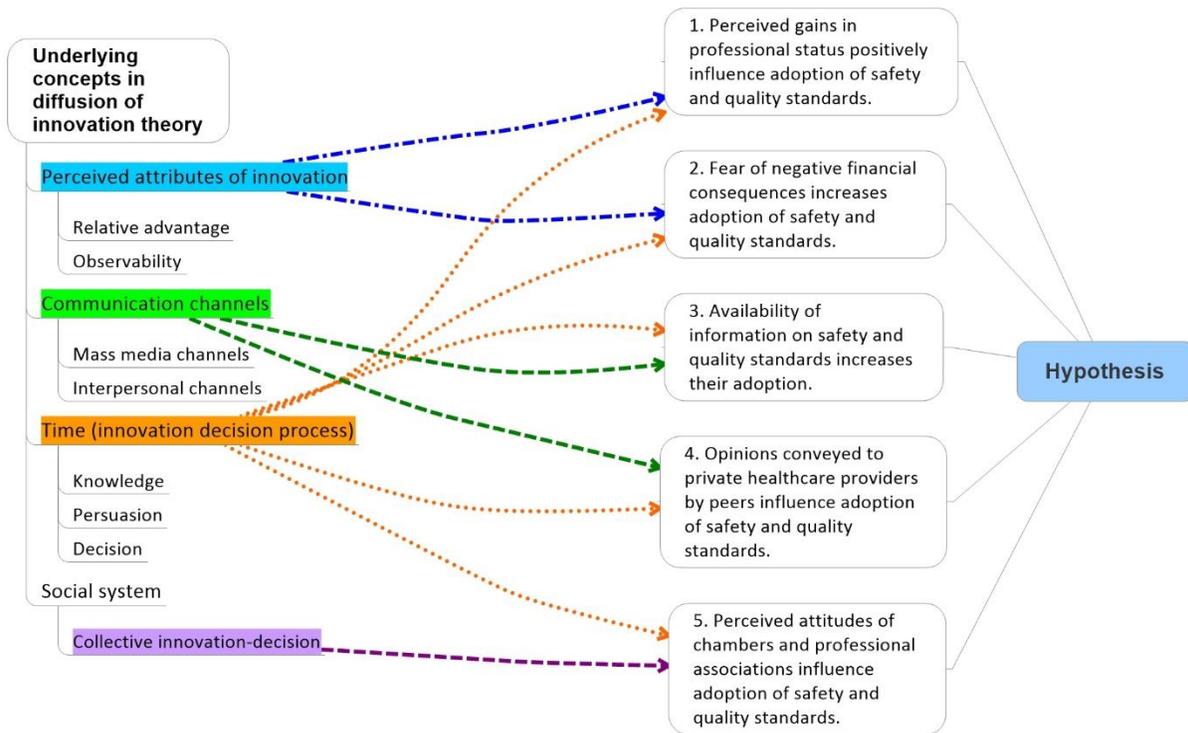
The mixed method approach was used for this research. It was implemented with a case study methodology, which allowed integration of both quantitative and qualitative data. The explanatory type of the case study covered multiple cases (case of private pharmacies, case of private dental practices and case of private specialist practices), in order to draw a single set of cross-case conclusions (why the rate of adoption varied among the cases) that could be applicable to other countries.

Multiple case study (holistic) design was necessary due to the very nature of the research question. In order to explain why there were differences in the adoption rates among the three cases, each of them had to be studied separately first. Three cases of predominant PHPs were selected for analysis. The three groups of the PHPs (pharmacies, dental practices and specialist practices), which were our units of analysis, together accounted for a share of 96% of all PHPs in the RS. Conclusions derived on the basis of these three cases can be generalised to all PHPs in the RS.

2.3 Theoretical framework

The diffusion of innovation theory [1,2] was used as a conceptual framework on which the research was based. Adoption of the same innovation (introduction of mandatory safety and quality standards) was studied in three different social sub-systems (dental practices, pharmacies and specialist practices). The rate of adoption was the main dependent variable in all five hypotheses. It could be measured and monitored through the number/percentage of certified PHPs by type.

Graph 1: Properties of innovation used in the research design



The diffusion of innovation theory defines diffusion as “the process by which an innovation is communicated through certain channels over time among the members of a social system” [1]. The four main elements of the diffusion process are innovation (in terms of this research: introduction of mandatory safety and quality standards), communication channels (in terms of this research: the means by which information on mandatory safety and quality standards got to the PHPs), time (in terms of this research: decision to adopt certification process took place over the time dimension) and the social system (in terms of this research: health system of the Republic of Srpska, part of which are interrelated private healthcare providers). These four elements were the main underlying concepts that had been used in the research design and in the interpretation of the research findings.

2.4 Data collection

The PHPs were seen as the crucial source of information on their own attitudes and experiences. Two different methods (interviews with private healthcare providers and survey of private healthcare providers) were used for data collection. We mixed qualitative (interviews) and quantitative (survey) data collection methods, while using them in sequential order. The research began with the collection of qualitative data (the first round of in-depth interviews with the PHPs, completed in November–December 2015), continued with a self-administered anonymous survey of the PHPs (the third quarter of 2016), and data collection completed with the second round of in-depth interviews with the PHPs. The main purpose of the third round of data collection was to gather qualitative data that could explain experiences and attitudes of the PHPs that were the most persistent in the decision not to adopt the safety and quality standards and not to enter the certification process.

Table 1. Structure of the sample

Type of provider	Certification status	Location (PHP density)	Interview code
Dental practice	Non-adopter	Lower density	ST13
			ST15
			ST18
			ST20
		Higher density	ST14
			ST16
			ST17
			ST19
Pharmacy	Non-adopter	Lower density	AP15
			AP16
			AP17
			AP18
		Higher density	AP13
			AP14
			AP19
			AP20
Specialist practice	Non-adopter	Lower density	SA13
			SA14
			SA17
			SA19
		Higher density	SA15
			SA16
			SA18
			SA20

In the selection of the PHPs to be included in the first round of data collection we applied stratified purposeful sampling:

1. Level 1: type of private health care providers (8 dental practices, 8 pharmacies and 8 specialist practices – stratification was based on Ministry of Health and Social Welfare’s *Registry of health providers*),
2. Level 2: status of innovation adoption (altogether: 24 non-adopters – stratification was based on the Agency for Certification, Accreditation and Healthcare Quality Improvement’s records) and
3. Level 3: PHPs density (altogether: 12 providers from regions with higher density of PHPs and 12 providers from regions with smaller density of PHPs - stratification was based on the Ministry of Health and Social Welfare’s *Registry of Healthcare Providers*).

The structure of the sample is provided in the Table 1. The PHPs interviewed in the first round of data collection were excluded from participation in the sample.

The interviews were done in October 2016 by the members of the core research team (one for each group of PHPs). Majority of interviewees agreed for the interview to be recorded with a digital recorder. Five pharmacies, two dental practices and three specialist practices did not agree to record interviews and detailed notes were taken. No problems were encountered with use of the informed consent forms. All signed forms were filled in at the Public Health Institute’s premises.

When the planned number of interviews had been completed, a need for additional interviews was discussed within the research team. Eight interviews proved to be sufficient to reach the saturation point for all three types of the PHPs.

2.5 Data analysis

The analysis of data collected through interviews essentially involved mapping of the primary data for each case to the properties of innovation used in the research design (Graph 1). Coding of the primary data was done by two members of the research team, who independently applied codes to the data. The codebook, developed under the first phase of the research, was used for data coding. For every third interview coding discrepancies were discussed and resolved by the coders. All other transcripts were analysed independently by two coders.

After a content analysis of each transcript, inter-coder agreement was assessed by calculating Kappa scores for double-coded transcripts [3]. The *NVivo 10* software was used for coding each transcript and for calculation of Kappa coefficient, by running a “Coding Comparison” query. The overall Kappa score, for all nodes, was found to be Kappa=0.86, which presents a very good level of agreement [4,5]. The data collected in the second round of in-depth interviews were analysed at the level of three cases (within-case analysis), before proceeding with cross-case comparisons and analysis.

2.6 Compliance with the research protocol

One minor deviation from the research protocol was noted:

1. It was not practical to use the additional stratification level, listed in the research protocol (Type of financing – services of PHPs contracted by the RS HIF or not). All the pharmacies had contracts with the RS HIF and this group of PHPs could not be stratified on the basis of the type of financing. No dental practices had contracts with the RS HIF and this group of PHPs could not be stratified on the basis of the type of financing. There was a limited number of non-certified specialist practices in the RS health system and stratification on the basis of type of financing was not fully possible.

2.7 Reflexivity

In order to avoid any influence of the research team members' positions, values and attitudes on the data collection process, the following measures were taken:

- The member of the research team that comes from the ASKVA (Siniša Stević) did not participate in data collection. All interviews were performed by other members of the core research team (Budimka Novaković conducted interviews with specialist practices, Jelena Niškanović conducted interviews with the pharmacies, and Severin Rakić conducted interviews with dental practices).
- None of the interviewers from the RS PHI was in a position to interview a PHP to which he/she had previously provided support in the preparation for the certification by the ASKVA.
- Overall objectivity of the data collection was additionally ensured by the inclusion of a co-investigator from another research institution (Medical Faculty of University of Novi Sad) in the core research team.

3. Contextual information

The Republic of Srpska is one of the constituent parts of Bosnia and Herzegovina (the others being the Federation of Bosnia and Herzegovina and the Brčko District of Bosnia and Herzegovina), which has its own legislative and executive functions and responsibilities, including those related to healthcare. This section provides an overview of contextual information, necessary for understanding the position and roles of the private healthcare providers in the Republic of Srpska's healthcare system.

3.1 Legal framework

Governance of the RS health system is centralized, with planning, regulation and management functions held by the Ministry of Health and Social Welfare (MoHSW). The *RS Law on Healthcare* [6], enacted in 2009, provided the legal framework for strengthening the structures and the processes in the establishment and improvement of safety and quality systems in healthcare. The Law equalised public and private health care providers in the health system, classifying all of them in a broad category of "health facilities". It was a significant change for a number of PHPs, as they needed to undergo a re-registration process to obtain valid registration at the MoHSW and valid court registration. In addition to accreditation (based on broader and more demanding quality standards and voluntary for providers), the Law introduced mandatory certification of both public and private healthcare providers. Through the certification process, the Agency for Certification, Accreditation and Health Care Quality Improvement (ASKVA) certifies that providers comply with safety standards in service provision. After the initial assessment, the ASKVA performs periodic re-assessments of the providers. The ASKVA makes annual plans with schedules for certification of both public and private health care providers. Based on the ASKVA's recommendation, the MoHSW verifies the completion of the certification process by issuing its certificate to individual healthcare providers. The purpose and importance of the certification process was influenced by amendments of the Law, enacted in 2015, which (1) opened up the possibility of partial certification of healthcare providers (by organisational units), (2) extended re-assessment cycle from four to seven years, (3) removed the provision that certification of provider is a precondition for provision of health services and (4) adjusted the ASKVA's sources of financing.

It took about three years to move from "having the Law in place" to actual implementation of the certification process. The MoHSW issued two necessary bylaws in the year 2012. The *Rulebook on certification procedure and registry of certified providers* [7] provided the legal framework for the assessment procedure and described the roles of the ASKVA and healthcare providers in the certification process. Through the *Rulebook on certification standards* [8], the MoHSW endorsed mandatory safety standards for different types of healthcare providers [9-11]. The certification standards have a parallel focus on patients' safety (e.g. enforcing implementation of measures for control of nosocomial infections), staff safety (e.g. enforcing measures for occupational health and safety) and environment protection (e.g. enforcing adequate disposal of medical waste). Amendments of the *Rulebook on certification standards* [8] provided a more precise scope of dental practices' standards in 2013, while the new version of

standards for pharmacies was enacted by the 2014 amendment. Not all of the requirements of the certification standards were new to PHPs. The standards included some of the legal requirements, which had previously existed in regulations, such as keeping medical records, medical waste management, occupational safety and control of nosocomial infections. The standards do not cover financial aspects of PHPs functioning, such as the requirement for fiscal cash registries, which was imposed by the *Law on Fiscal Cash Registries* [12].

There are three chambers of healthcare professionals in the RS, established by the *Law on Health Chambers* [13]: Pharmaceutical Chamber, Chamber of Dentists and Chamber of Medical Doctors. Chamber membership is mandatory for all healthcare professionals.

3.2 Roles of private healthcare providers

There are three types of non-state providers in the Republic of Srpska: (1) private healthcare providers, (2) complementary and alternative medicine providers and (3) non-governmental organizations. The private healthcare providers significantly contribute to service delivery in the RS, particularly at the primary healthcare level. Significant part of dental services for adult population is provided by private dental practices. With only a few public pharmacies, the network of private pharmacies assures access to different types of medicines and medical supplies. The number of private family medicine practices is still low and they serve less than 5% of the RS population. The number of private specialist practices and specialist centres has grown in the RS since the RS HIF started contracting with selected private sector specialists (e.g. paediatrics, gynaecologists, ENT, ophthalmologists, dermatologists), in order to ensure access to such services in rural areas of the RS.

Table 2. Private healthcare providers in the Republic of Srpska (June 2016)

Types of private healthcare providers	Number of providers in the MoHSW's registries	Number of certified providers	% of certified providers
Pharmacy	404	194	48%
Specialist Practice	97	32	33%
Dental Practice	173	5	3%

3.3 Other important stakeholders

The RS Health Insurance Fund (RS HIF) administers the mandatory health insurance scheme, in accordance with the RS *Law on Health Insurance* [14]. The Fund contracts services of both public and private healthcare providers. The following types of the PHPs have contracts with the RS Health Insurance Fund:

- private pharmacies (all private pharmacies have been allowed to enter into the contract with the RS HIF at the time of the research implementation)
- selected private specialist practices (contracting with specialist practices commenced in 2010; the 5-years contracts with the practices started to be renewed in 2016)
- private family medicine practices,

- selected private specialist centres and
- selected private hospitals.

The RS HIF's annually enacted rulebook on principles, conditions and criteria for contracting did not recognise certification status as one of the contracting criteria in the period 2014-2016 [15-17]. The RS HIF does not contract services of private dental practices (provision of dental services is contracted with public primary healthcare centres instead).

The Public Health Institute (RS PHI) supported the certification process mainly because of its own commercial interests (having experience with the preparation of public healthcare providers for certification, the RS PHI was able to offer its expertise and support to private providers on commercial basis). It provided services to individual PHPs, but also to the Association of Private Medical Doctors of the RS and Chamber of Dentists of RS.

The Inspectorate of the Republic of Srpska, established in accordance with the *Law on Inspections* [18], includes different types of inspections. The PHPs are subject to control performed by the Market Inspection, Health Inspection, Work Inspection, Fire Safety Inspection, and Urbanistic and Ecological Inspection.

4. Key findings

A summary of key findings for each type of PHPs is provided in this section, together with a comparison of main differences among them. The summaries are based on the full case reports for pharmacies, dental practices and specialist practices.

4.1 Summary of case study 1: Pharmacies

The objective of this part of the study was to contribute to finding the answer as to why the rate of adoption of mandatory safety and quality standards (certification process) has varied among private pharmacies in the RS. During this phase of the research, 8 face-to-face semi-structured in-depth interviews with pharmacists who were owners/managers of non-certified private pharmacies were conducted. All the pharmacies that participated in the second round of the interviews operated independently.

This round of interviews showed that the pharmacists from non-certified pharmacies did not see many advantages of the certification process (*“None what so ever. People have continued to work as before”* AP20/NC/IND), and have mainly focused their attention on disadvantages of certification such as cost (*“Financial issue is important. It is not just implementation of standards, but also payment, which costs a lot”*, AP18/NC/IND) and additional administrative burden (*“I have received the information that it is an additional burden, that they have to stay longer after work to fill in the forms”*, AP19/NC/IND). Also, the majority of the interviewees from the non-certified independent pharmacies thought that certification standards were not sufficiently adapted for implementation in the pharmacies (*“I believe that standards are too demanding and that pharmacies have already implemented most of those things during the registration process”*, AP19/NC/IND) and that the process is not producing visible benefits (*“Honestly, I have not seen any benefits, although I do not know many colleagues that have passed through the process, maybe a few, but I have not noticed any benefits”*, AP23/NC/IND).

Owners or managers of the non-certified pharmacies were mainly active in obtaining information about certification (*“mostly, I was looking for information by myself and checking the websites”*, AP23/NC/IND). The Agency for Certification, Accreditation and Healthcare Quality Improvement, the Pharmaceutical Chamber and the Pharmaceutical Society were their main information sources (*“I got information mostly from the ASKVA, Chamber and Society”*, AP17/NC/IND). The official web sites and organized professional events that covered the issue of certification were the main communication channels for them (*“I was informed through the lectures organized by the Chamber and by the ASKVA’s website”*, AP19/NC/IND).

Significant knowledge about the process of certification was demonstrated by one half of the respondents (*“I used to work in a pharmacy that was both accredited and certified. Now I have the knowledge to adapt the system to my pharmacy”*, AP17/NC/IND), while the other half admitted that their knowledge was insufficient (*“My knowledge is very superficial”*, AP19/NC/IND). Most of the interviewees from the non-certified pharmacies expressed negative attitudes towards the certification process (*“I feel that this process brings only stress and tension”*, AP22/NC/IND). It seems that the cost of certification and the administrative burden were the

main factors for non-certified pharmacies to delay the application of the certification process (*"I have waited till the last minute to apply for the certification, mostly due to the financial reasons"*, AP19/NC/IND). Still, some interviewees stated that they were just waiting for the ASKVA to schedule the assessment (*"We prepare ourselves slowly, waiting for the ASKVA to call. Will it be sooner or later, I do not know"*, AP17/NC/IND). Most of the interviewees did not really consider the risks of rejecting the certification process, as they felt that they had to go through certification after all (*"I have not thought of the risks, we will be certified eventually"*, AP22/NC/IND).

It seems that peer influence was not very important for the pharmacists in making their decisions on the participation in the certification process (*"No, they have not influenced me, there is no need for any influence, I know my job"*, AP22/NC/IND), while the positive position of the Pharmaceutical Chamber of the RS on certification seems to be influential in accepting the innovation (*"The Chamber's position is that certification is great. The Chamber supports it and has contacts with them [the Agency] as well"*, AP19/NC/IND). Similar can be stated in regards to the position of the Pharmaceutical Society of the RS on introduction of the innovation (*"The Society has positive attitude, they provided us with procedures, they are on their web site, they provide us with guidelines"*, AP20/NC/IND).

The interviewees mentioned administrative burden as the most important obstacle to the implementation of the certification standards (*"I have to mention again, the thing about too much administration, the paperwork. This is the only problem"*, AP23/NC/IND) and proposed a few possible improvements to the certification process that might contribute to more successful implementation, such as price reduction (*"If the price was lower, probably more people would go for it. Price should be adjusted, I think that more people would opt to complete the process sooner"*, AP18/NC/IND) or a simplified procedure (*"Something that should be done is adjustment of practice and procedures. You cannot burden the colleagues with things that are not priority"*, AP18/NC/IND). The interviewees advocated a view that the Inspectorate of the RS should be primarily in charge of the control of their professional work, not the ASKVA (*"In my opinion, health inspection should be in charge. Everything else is obsolete. They are the most competent to control and monitor the work of the pharmacies"* AP20/NC/IND). They expressed a variety of opinions regarding possible involvement in the process, if it were not mandatory - ranging from very favourable to the certification process (*"I think I would. I believe that we need to develop ourselves professionally"*, AP18/NC/IND) to quite negative statements (*"No. Never, because I think this is all obsolete"*, AP20/NC/IND).

The sample included pharmacies from higher and smaller density regions. However, no significant differences were identified between the interviewees coming from these two subgroups.

4.2 Summary of case study 2: Specialist Practices

The objective of this part of the study was to contribute in finding answers as to why the rate of adoption of mandatory safety and quality standards (certification process) varied among private specialist practices in the RS. During this phase of the research, 8 face-to-face semi-

structured in-depth interviews with owners of non-certified private specialist practices were conducted.

The specialist practices' owners/directors mainly commented that they had not been informed about the advantages of quality and safety standards implementation from their colleagues from certified specialists practices (*"No, nothing particular. You can present everything on your specialist practice notice board, so that the patient can see it, but the patient is the one who is spot on when judging the quality of a service; he is your best inspector and everything else"*, SA17/NC). The interviewees focused on negative consequences of certification, the most important being financial issues and excessive administration (*"The price of certification might represent a problem; it should not be increased; it should even be adjusted"*, SA22/NC; *"The most frequently mentioned negative aspects are: high material costs and excessive administration"*, SA19/NC). One half of the interviewees had objections to quality and safety standards, mainly stating that they were general and unadjusted to certain types and sizes of specialist practices. The other half of the interviewees had a positive opinion on the quality and safety standards, because they could reduce the risk of adverse events, improve the organization of work and improve management in the practice (*"Certification standards positively contribute to a better organisation of a practice"*, SA23/NC). Regarding visibility of the innovation, it seems that the respondents did not notice any changes in certified healthcare providers (*"The quality of a service and doctor is not judged by the fact whether a provider or an individual is certified or not, rather, it is judged by the number of patients and their confidence in their doctor. Have you visited a healthcare provider after the implementation of certification; has anything changed? You should meet patients elsewhere and conduct an anonymous research to hear their opinion about the only one certified practice in town"* (SA18/NC).

The Agency for Certification, Accreditation and Healthcare Quality Improvement of Republic of Srpska (ASKVA) and the RS PHI were the most available sources of information about quality and safety standards. They were followed by colleagues that had certified practices. The most used communication channels were the internet and lectures provided by the ASKVA and the RS PHI (*"Information that were available at the Agency's web site. Nothing beyond"*, SA19/NC; *"The Institute of Public Health... Agency"*, SA21/NC).

A half of the interviewees believed that they had sufficient knowledge about innovation and skills required for implementation of the quality and safety standards (*"I think I have. Since on two occasions I was a director, before and after the war, I am quite familiar with the terminology; perhaps the quality would not be at an adequate level, but I think the form would be satisfied"*, SA17/NC), while the other half was not certain about their level of knowledge (*"I would not be brave enough to implement them by myself; I think I need some help"*, SA22/NC). The general attitude about the certification process was a negative one. Majority of the non-certified specialist practices' owners/directors believed that certification would not lead to improvement of safety and quality of healthcare in the Republic of Srpska (*"No, it will not, because it is not important"*, SA20/NC). The principal motivation for certification delay was its high price, followed by the lack of professional benefits related to quality and safety standards implementation (*"High price of certification; too much time employees need to dedicate to certification"*, SA19/NC).

It seems that influence of colleagues was important in the decision making process (*“Opinions of colleagues influenced my decision. If my colleague says: ‘I will not do it until I have to’, I think the same. Everyone gets retired and no one gets certified. Sadly, but true”, SA18/NC*). The majority of the interviewees were not familiar with the attitude of the Chamber of Medical Doctors of the RS toward quality and safety standards (*“The Chamber had no active attitude toward me regarding certification. I cannot remember that the Chamber ever presented its official attitude”, SA22/NC*). The attitude of professional associations toward certification did not influence the decision to delay the certification process in none of the non-certified specialist practices (*“The attitude of the Association of Private Doctors of the RS did not influence my decision to delay certification”, SA21/NC*).

All the interviewees believed that the MoHSW via inspection system should and must regulate occupational safety and quality in private healthcare providers’ practices (*“I am sure that the Ministry should be at the head of the process”, SA22/NC*). Majority of the interviewees would not consider joining the certification process if it were not obligatory (*“Never. If it was not a legal obligation, I would not do it then”, SA18/NC*).

In order to reconsider their decision on delaying certification, the interviewees believed that the health authorities had to adjust the quality and safety standards to the type and size of a practice, reduce the price of certification and enable covering a part of certification costs by the government: *“I think the following should be done: adjusting the quality and safety standards to the type and size of a practice and the number of employees, reducing the price of certification, and simplification of certification procedures.”* (SA 19/NC); *“Certification standards are very general; they should be precisely adjusted to the type and size of a practice. It should also be necessary to reduce the price of certification as much as possible. Why doesn’t the government cover a part of costs, if certification is a legal obligation and it serves to improve the quality and safety of healthcare services?”* (SA 23/NC).

The sample included specialist practices from higher and smaller density regions. However, no significant differences were identified between the interviewees coming from these two subgroups.

4.3 Summary of case study 3: Dental Practices

The objective of this part of the study was to contribute to finding answers as to why the rate of adoption of mandatory safety and quality standards (certification process) has varied among private dental practices in the RS. During this phase of the research, 8 face-to-face semi-structured in-depth interviews with the owners of non-certified dental practices were conducted.

Non-certified providers did not perceive that the certification process might be beneficial in any way to the dental practices (*“I have not heard anyone boast about certification, nor that it was beneficial to practices”, ST15/NC*). In their responses, they mainly focused on disadvantages of the certification process, such as associated expenses (*“waste of money on an unimportant matter”, ST14/NC*), increased amount of paperwork (*“as soon as you enter the practice in the morning, you need to fill in ten pages of documentation, which nobody needs later”, ST18/NC*) and

disruption of service provision (*“It was noted in public healthcare facilities that it... takes away precious staff time, which should be dedicated to patients; not only dentists’ time but also dental nurses’ time”*, ST20/NC). Also, the observability of results of certification seems to be low among dental practices (*“Patients make their own decisions, get information from other patients and make their own conclusions. It seems to me that some papers don’t matter too much to them”* ST15/NC). Interestingly enough, the interviewees mostly considered the standards to be attainable and achievable, as the requirements were close to the existing functioning of the dental practices (*“standards are suited to our practice”*, ST16/NC).

Information wise, the Agency for Certification, Accreditation and Healthcare Quality Improvement in the Republic of Srpska was the first source of information to many of interviewees, although the Chamber of Dentists and colleagues (peers) were also mentioned as an important sources of information on certification (*“My colleagues were the most important source of information to me... They are close to me and we understand each other”*, ST14/NC). In line with this finding, the interpersonal communication with peers was the most important communication channel, predominantly informal communication in a group of friends (*“no one else offered information”*, ST14/NC). It seems that a majority of dentists did not even try to find the additional information on certification.

It seems that there is not sufficient body of knowledge about certification standards and process among dental practices. Almost all interviewees from non-certified practices demonstrated misinformation and lack of knowledge on certification process and standards (e.g. *“We need separate room for the sterilisation... we need 200 m² of premises”*, ST19/NC). This has probably influenced their attitudes about the process which seems to be rather negative (*“I hope that the program will fail and that our practice will not have to certify”*, ST13/NC). Main motivation for non-adoption of certification standards by non-certified dental practices was perception that it would bring significant negative consequences, such as a reduced number of patients and lower income of certified practices (*“Would this later dictate prices of our services... If money is required for the certification process, I have to take it from the patients, ST16/NC*). Regarding the risks, in general, the interviewees from non-certified practices did not perceive any major risk related to non-adoption of the certification process (*“certification cannot help me in attracting the patients”*, ST18/NC), however, the risk of fines was mentioned by the dentists (*“We have to complete the certification or we will be fined – that’s the only reason”*, ST14/NC).

Even though the interpersonal communication with peers was a significant source of information, the peers seem to have less influence on dentists’ decision making process than the Chamber of Dentists of the RS (*“I formed my opinion without colleagues”*, ST18/NC). A majority of the interviewees regarded the Chamber to be against certification, all the time; from the beginning until now (*“We had two meetings on certification within the Chamber and did not agree to it. President of the Chamber requested for the certification to be postponed and abolished... Nothing could be changed. I still haven’t seen or haven’t got information that something has changed or was simplified”*, ST19/NC), and this position did have influence on the dentists up to a certain point. Regarding influence of the professional associations, the prevailing impression was that they had no official position on certification (*“when I attended training to obtain points for licencing extension, I didn’t hear any official attitude”*, ST15/NC) and that none of

the associations influenced the dental practices' decision on the acceptance/rejection of the certification standards and process.

The financial and administrative burdens were recognised by the majority of the interviewees as the most important obstacles to the implementation of the innovation in the dental practices (*"we will need a lot of time and money"*, ST16/NC; *"practice needs one employee, who will only do the compulsory paperwork"*, ST18/NC). A majority of interviewees recognised that the capacities of the existing control mechanisms (the Inspectorate of the RS) were limited and therefore the ASKVA had a role in improving the quality of care. Still, certification was seen as yet another imposition by the authorities, and it seemed that the interviewees would not be interested in participating in a voluntary program (*"We have to complete the certification or we will be fined – that's the only reason. If there was no fine, if there was voluntary entry to certification program, nobody would go into it"*, ST14/NC).

The interviewees stated that certain improvements should be made to increase the adoption of the certification process and certification standards by dentists, such as reduction of costs and efforts associated with certification and better availability of information on certification.

Dental practices from smaller density regions emphasised more strongly the financial burden related to certification, than the practices from higher density regions. No other significant differences were identified between the interviewees coming from these two subgroups.

Table 2. Cross-case comparison of the findings

Properties of innovation*	Subcategories	Pharmacies	Specialists practices	Dental practices
Perceived attributes of innovation	Advantages	Minor	None	None
	Disadvantages	Major	Major	Major
	Observability	No visible effects	No visible effects	No visible effects
Communication	Sources of information	ASKVA, Pharmaceutical Chamber, Pharmaceutical Society	ASKVA, RS PHI, peers	ASKVA, Chamber of Dentists, peers
	Communication channels	Internet, seminars, lectures	Internet, seminars, lectures	Interpersonal communication
Innovation decision process	Knowledge	Inconclusive**	Inconclusive**	Insufficient
	Persuasion	Negative	Negative	Negative
	Motivation	Negative	Negative	Negative
Influences from social system***	Peers	Minor	Major	Minor
	Chamber	Minor	None	Moderate
	Professional associations	Minor	None	None

* Based on the diffusion of innovation theory [2]

** One half of the interviewees stated that they had significant knowledge about innovation, while the other half of the interviewees stated that their knowledge was superficial

*** Related to delay/rejection of the innovation

4.4 Cross case comparison of findings

Perceived attributes of innovation: Advantages of the proposed innovation were not noticed by any of the types of the private healthcare providers, while the interviewees from all of the types stated that the process had significant disadvantages. Most of the providers emphasised cost, administrative burden and time required for meeting the standard requirements as major disadvantages, while the standards were mainly seen as too demanding and obsolete. Significant observability of the innovation was not noticed by any type of the private healthcare providers.

Communication: The main source of information about certification for all the PHPs was the ASKVA. However, a multitude of sources were mentioned including the Pharmaceutical Chamber of the RS, the Pharmaceutical Society of the RS, the Public Health Institute, the Chamber of Dentists and peers. It is interesting that the Internet (websites) and professional events with lectures were the main source of information for the pharmacists and doctors from specialist practices, while interpersonal communication was the most important channel of communication for the dentists.

Innovation decision process: The knowledge about innovation was insufficient among the dentists. It was difficult to determine the level of knowledge about innovation among the interviewees from pharmacies and specialist practices, as one half of the interviewees in these two groups stated that they had significant knowledge about innovation, while others said that their knowledge was superficial. All three groups of providers have a negative attitude towards innovation. In relation to motivation, all three groups have chosen to delay the introduction of innovation due to the high price of the process and its demanding nature.

Influences from the social system: Peers exerted minor influence on non-certified pharmacies and dental practices during the decision making process on rejection/postponing adoption of innovation. It seems that peers had more important influence on the owners of specialist practices' decision to reject/delay adoption of innovation. Generally, professional chambers had little influence on the providers to reject/delay adoption of innovation. Still, it seems that the perceived negative attitude of the Chamber of Dentists towards certification exerted moderate influence on the dentists to reject/delay adoption of the certification standards and process. Professional associations were not influential in relation to the delay/rejection of certification standards and process (despite the fact that the Pharmaceutical Society of the RS had very positive attitude about the introduction of innovation).

5. Discussion

Hypothesis 1 was about the influence of possible gains in the professional status of providers on the adoption of mandatory quality and safety standards. Based on the findings presented in the case reports it was evident that only a few owners/managers of non-certified pharmacies and non-certified specialist practices expected gains from certification related to professional status or more effective management of the pharmacy/practice. For a majority of interviewees, this was not a primary motivation for adoption/rejection of the innovation. The results of this phase of research do not allow for the hypothesis 1 to be confirmed. This might be related to the very nature of private for-profit healthcare service provision. With no clear link between improved professional status and improved PHPs' business results, this attribute of innovation was not seen as advantageous by the majority of PHPs and it was not perceived as important for providers' adoption of the quality and safety standards.

Hypothesis 2 was about fear of negative financial consequences and its influence on the adoption of mandatory quality and safety standards. The findings of this phase of the study allow for a partial confirmation of the hypotheses. The fear of negative financial consequences was important, but not the critical factor in the decision making process for all three types of the private healthcare providers. It is important to keep in mind that (1) all privately owned pharmacies have a contract with the RS HIF and are continuously renewing the contracts, (2) majority of privately owned specialist practices have contracts with the RS HIF, which are renewed periodically (every five years) and (3) privately owned dental practices do not have contracts with the RS HIF for provision of dental services. This helps in explaining why the owners of the non-certified pharmacies did feel that the risk of losing contract with the RS HIF was significant, while this was not so important for the owners of specialist practices (2 out of 8 interviewed providers had a contract with the RS HIF) and was not considered as a significant risk by owners of the dental practices.

Hypothesis 3 was about the availability of appropriate information about innovation and its influence on the decision making process. Based on the findings, it can be assumed that the availability of information has influenced the adoption/rejection of innovation. A half of the interviewees from the pharmacies received sufficient and correct information about innovation from trustworthy sources (the ASKVA and the Pharmaceutical Society of RS) and they did not reject innovation as such, but they have been waiting for the ASKVA to schedule the assessment process. The other half of the pharmacies, most of the dental practices and most of the specialist practices demonstrated a significant level of misinformation about the certification standards and process. As a general rule, they have been objecting/delaying the introduction of innovation.

Hypothesis 4 was about opinions of peers and their influence on the adoption of innovation. From the study findings it can be concluded that for the majority of non-adopters the opinions of peers was not relevant. This was not the case for the owners/managers of non-certified specialist practices, who valued opinions of peers as important. However, it can be concluded that they were more likely looking for collegial support to justify the already made decision to postpone the adoption of the innovation.

Hypothesis 5 was about perceived attitudes of the chambers and professional associations and their influence on the adoption/rejection of the mandatory safety and quality standards. The findings from this phase of the research allow for the hypothesis to be confirmed. The Chamber of Medical Doctor of RS and the Pharmaceutical Chamber of RS did not have a clear position on innovation and did not significantly influence their members' decision making regarding participation in the certification process. On the other hand, the Chamber of Dentists of RS was perceived to be opposing the certification. This perception (1) might have negatively influenced the dental practices' decisions regarding the adoption of certification standards and process and (2) could be an additional argument for the owners of the dental practices to justify the already made decision to postpone the adoption of innovation.

The influence of professional associations on the decision making process was also considered. The owners of the specialist practices and dental practices clearly stated that their professional associations did not have a clear position on innovation and had not influenced their decision making process. On the other hand, the Pharmaceutical Society of the RS had a positive attitude towards certification; its members were actively involved in the process and have offered continuous and significant support to its members to fulfil the legal obligation. The Pharmaceutical Society as such has exerted influence on its members to accept the certification standards and process.

6. Conclusions

The aim of this phase of the research was to gather qualitative data that could explain the experiences and attitudes of the PHPs that were the most persistent in the decision not to adopt the safety and quality standards and not to enter the certification process. The conclusions from this phase need to be combined with the findings from previous phases of the research in order to find the answer to the question: “Why does the rate of adoption of mandatory safety and quality standards vary among different types of private healthcare providers in the Republic of Srpska?” Towards that answer, we tested five research hypotheses. Based on the findings of this phase of the research, it can be concluded that:

1. Perceived gains in the professional status did not have significant influence on the decision of the non-certified private healthcare providers to postpone the adoption of the safety and quality standards.
2. Lack of fear of negative financial consequences contributed to the decision of the non-certified private healthcare providers to postpone the adoption of the safety and quality standards.
3. Availability of information on safety and quality standards increased their adoption.
4. Opinions conveyed to the non-certified private healthcare providers by peers slightly negatively influenced the adoption of the safety and quality standards at the attitude forming stage.
5. Perceived negative attitudes of the chambers have, to some extent, influenced the decision of the non-certified private healthcare providers to postpone the adoption of the safety and quality standards.
6. Perceived positive attitude of professional associations has, to some extent, influenced the attitude of the non-certified private health care providers towards the safety and quality standards.

Summing up this phase of research, we believe that the rate of adoption of mandatory safety and quality standards varies between different types of private providers mainly due to (1) different level of availability of information on the safety and quality standards and certification process, (2) different level of fear from negative financial consequences and (3) differences in perception of the chambers’ attitudes to the safety and quality standards and the certification process. These findings need to be compared to the findings from the previous phase of the research in order to reach an overall conclusion on the relative importance of different factors for the adoption of innovation by the private healthcare providers.

7. Policy implications/Recommendations

The findings of the third phase of the research confirmed the following implications for policy makers, identified in the previous phases (grouped according to the stakeholder who could be responsible for the implementation of the recommendations):

1. Recommendations to the Ministry of Health and Social Welfare of RS:

- Consider the possibility of shifting some of the certification costs away from PHPs (to other sources of financing).
- Consider the possibility of more clearly providing public support to the certification processes among the private healthcare providers.
- Consider the need to make more direct announcements about the certification of PHPs and explicitly demand from the providers to enter the certification process.
- Consider alternative approaches to tackling the problem of illegal provision of dental services – approaches that would look beyond the mandate of Inspectorate of the RS.

2. Recommendations to the ASKVA:

- Put more efforts in the information and education of PHPs. Organise a series of meetings/seminars, to explain to non-adopters what certification is, what its advantages are, what the certification process looks like, what it looks like to have certification implemented in a private practice, how much time certification takes in everyday work, what additional work is required daily and how much time it takes away from patients.
- Consider alternative approaches to covering assessment costs by the PHPs (e.g. payment in instalments).
- Organise events to present results of the certification process and share experience of certified PHPs with other providers.
- Put more focus on public promotion of the providers who successfully completed the certification process.
- Put more focus on the explanation of the purpose and importance of the certification process to the general public (e.g. current and future patients).

3. Recommendations to the RS Health Insurance Fund:

- Consider the possibility of specifying the completion of the certification process as one of the mandatory criteria for contracting
- Consider the possibility of the RS HIF's participation in promoting the use of certified providers' services (as safer for the insured population)

4. Recommendations to the chambers:

- Come up with an official position regarding certification and announce it publicly to the members
- Make examples of internal procedures available to dental practices by the Chamber of Dentists of RS

5. Recommendations to the professional associations:

- Continue the provision of support to individual pharmacies in complying with the requirements of the certification standards (the Pharmaceutical Society of RS)
- Consider how the experiences of the Pharmaceutical Society of RS could be useful in adjusting the approach used for the provision of support to the members of the associations (other professional associations)
- Consider the possibility of including healthcare quality and safety related issues in the programs of healthcare professionals' continuous education

6. Recommendations to the Inspectorate of RS:

- Consider the possibility of routinely checking the certification status during all health inspectors' visits to PHPs.

7. Recommendations to the Public Health Institute of RS:

- Continue supporting the certification process through provision of training on the management of risks in infection control and assistance to the PHPs with the development of internal procedures.

A few additional implications for policy makers were generated in the third phase of the research:

- Set a deadline for the completion of the certification process and communicate it clearly to the PHPs (the MoHSW).
- Facilitate participation of the non-certified PHPs in the certification process, by scheduling the assessment of the PHPs that have already applied for certification (the ASKVA).
- Organise a training on the adoption of examples of internal procedures to specificities of work in individual dental practices (the RHI RS).

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