

Pharm. IVANA SILVA

Good morning. Thank you very much. I am very glad to be here. I am here as the representative of The Pharmaceutical Group of the European Union (PGEU) that you have heard many times in the morning. We are very happy to participate in this project and to support Turkish Pharmacists' Association. This is the first time I have been in Turkey and Ankara. I am pleased to be here with you.

I am a pharmacist also, and as some of my colleagues said, a pharmacist who works for the pharmacists . This is why I hold a place in The Pharmaceutical Group of the European Union (PGEU). It is a very important experience to be here with you, to share our activities we carried out in PGEU the with Turkish colleagues. I would like to thank you for giving me the opportunity to participate this symposium, to share the experiences we have got in the sense of e-health applications and to be a part of this project.

I am very happy to be with three experts from Sweden, Germany and France who are going to share their experiences and knowledge from an European point of view concerning e-health, e-prescription, electronic health records, treatment records in Europe. Then let's start...

In my first slide, naturally, I want to tell you about e-health and how we, in Pharmaceutical Group of the European Union, approach to it. E-health is not only about numbers, reading codes but at the same time it is about communication and patients. The patient is our starting point. We start with the patient. What is best for the patient? What are the needs of the patient? This is not something about only the technological innovations. The first step is to think the patient, as it is in France. Keeping these in mind, we know that the patients have many rights. We all have many rights. I mention this just to share a point view on patients rights with you. And this is the basis of our work. We take into account what are the needs and what are the rights of the patient and how can we as pharmacists and as scientists collaborate insuring that these rights are actually complied with. It's about preventive measures and we know in our work we try as much as possible to not just cure it, help treating people but also to prevent certain situations and that's why so important our information of pharmacy level on healthy life-styles.

European Charter of Patients' Rights



- Right to Preventive Measures
- Right to personalized treatment
- Right to avoid unnecessary suffering and pain
- Right to safety
- Right to Access
- Right to Information

We should try to prevent patient errors to happen rather than to treat. Of course treatment is very important aspect of our profession. And we do it as the first analyzing method and way. It's about each patient's individual case. Because we do personalize the treatment service we provide to each patient AND it's also about avoiding suffering and pain.

What we want from our patients for the sake of them is to have best quality of life possible and to make them as healthy as possible and to help them to be treated in the best way possible. And of course it's about safety. And we'll see with using technology that safety is primarily important.

New technologies will help us in reducing errors and ensuring safety will also bring new problems that we haven't thought about before. So we have to keep in mind that safety has to be assured. And it's about access. This has been already touched this morning. We, pharmacists, are maybe the most accessible health professionals in health care system. So by insuring this accessibility through using electronic systems we are also contributing that the patient gets base benefit. This process at the same time is about accessing information. And This is not just about the access to information for the health professionals. Pharmacists need basic knowledge to provide best care to patients on daily basis. And there are also informations for patients. All I have explained constitute the framework of European Charter of Patient Rights. So we will keep these rights in mind while we are discussing our role and how we are using e-health and how we are using

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different Informations Technologies (IT). We should keep in mind how we can assure that these rights are actually being complied with.

Let me show you two examples. I would like to start with a very nice fifty eight years old Swedish lady. Her name is Karen. These are real people. And the pharmacist Selma and she carries out pharmacy profession in Sweden. Let's look at what is happening in this story?

Karen went to the pharmacy to consult with her pharmacist, Selma. And they identified that Karen has dizziness, fatigue aparteid disturbance and weight loss. And she went to her pharmacist, to learn about her situation. And then they diagnosed that she has some problems with cardial rhythm. And then she ask the pharmacist for help because she is not feeling well.

She is as many of old people taking many medicines at the same time and she's taking seven different medicines. I'm sure this is not suprising for you as well. What the pharmacist Selma's diagnosis is low blood pressure. She realizes that the patient is taking some medicines in very high dosage. So she called the doctor and the doctor has decided to lower dosage of this medication. After follow up of three months Karen was starting to feel much better. This was Swedish expample. The pharmacist used three ICT tools. She used Patient Medication Review, she used also Medication Use Review and finally the National Pharmacy Records. Of course these three ITs may be in one single system, in one single information system. Because of that these systems were developed in different times, in current situation Sweden is using these three different systems. It is possible in the future this could be emerged in one single system

By this way, Sweden Patient Medication Reviews is accessible fort he Swedish pharmacists in the treatment process and this condition allows compliance with patients and personalisation. In other words, pharmacists enter the system in the pharmacy level and they can get information about the patient. She/he can reach the information like which treatment the patient has taken; if there is one, to which drugs the patient is allergetic and the phermacist can reach the information about the previously indicated certain interactions, if there is any interaction. Therefore, many information about the patient can be had. Then,

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Medication Use Review records are used. Because the records help the pharmacist see a part of the drugs used and the pharmacists can identify the important interactions and information which emphasize the warnings that patient have by taking into account the interactions of the medicines which the patient uses. This, in general, is used for everyone. This is also a general information system which support the pharmacist and help her/him for the care of elderly people and this system, at the same time, provides opportunity for the communication with the physician.

Lastly, National Pharmacy Records. This is a national system to which all the drugs distributed are registered and it is an obligation that this information has to be found in the system. So Selma used all these three. To make sure that she provide the best care to Karen and to help her improve her health.

So we see that pharmacists make efficient contributions to provide best care. It is found that they provide an increase in quality of life. Karen after three months felt much better and her cardiac rhythm was restored. In terms of the national health system also there is a decrease in the costs originated from the physician visits due to fear. If Karen's problem would not have been solved she would have higher risk of stroke. She would probably have to go to hospital at some point. So by using the system the pharmacists are able to avoid the situation to have them and Karen will not need to go to hospital because her health problem has been solved before, the preventive measure was taken. And of course it's a decrease in costs for drugs because we know exactly what Karen need to take, we are not just prescribing and prescribing more medicines that will possibly not be helpful. She has already taken seven medicines so this is a good example of how this is enabling for rational use of medicines. And finally, of course there is decrease in health care use and cost. Karen doesn't need to go so many times to consult to doctor or to go to the doctor. She can just live her life and be happy at home with her grand children.

These are just some examples of the information systems that were used just to give you an idea of the information that pharmacists, the patient and the physician can have access. I'm not gonna go through this. It's just a specific example how this is being done in Swedish pharmacies.

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Another example I want to share with you is one from a southern country, Spain. This is about e-prescription system that they have developed. In Spain they have rigid rules. And so far it has been achieved. E-prescription systems have been developed at regional level. But more or less they have same bases. They work more or less in the same way. And in the future what is important and what the government is looking for\ with the help of the national pharmacy association, to make these regional systems interoperable. So if the patient is in the south of Spain and goes to visit a family in the north of Spain with a prescription then how his system in the south is going to work in the north? And I know in Turkey this is much more developed. This is an example how the system works.

So what happened is that the patient has this smart card and he goes to the doctor, the doctor inserts the card by which he has access to the information of the patient. He can have access to the system of the physicians where he can make the prescription that prescription goes to the centralized registry. And then when the patient goes to the pharmacy he gives his card to the pharmacist who identifies the patient with the card and enters the pharmacy system. Then, in the system, he will call the information entered by the doctor and will know what is exactly has been prescribed to this patient. He will provide medicine to patient and at the same time he enters information that the medicine has been dispensed in order to prevent repetitive prescribing. This information goes to doctor system and so when next time the patient goes for consultation, the doctor will know these medicines have been dispensed according to prescription.

So what do we see? What has been used in terms of information, communication tools? We see that there is electronic card, there is centralized pharmaceutical care information system within framework of the regional pharmacy association. They have been developed this information system that the pharmacist can use when dispensing medicine. They can get information about all the medicines and possible interactions. They have a support system that helps the pharmacists in providing the best care for the patient. And, then of course there is the prescription information system which is the one directed by the doctors. So there are three tools as well working together.

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What are the benefits? Well, patient does not need any paper anymore. He has everything on his card so he just need to have this card to go to the doctor or to go to the pharmacy. Another benefit is of course we make sure that prescriptions are recorded in the electronic system. There is no more hand writing prescriptions. And you know how difficult sometimes to read a prescription written by a doctor. We know that there is evidence that many medication errors occur because of difficulties in reading the hand writing. So this is the for sure a benefit to have a prescription system. The system also helps medication management and rational use of medicines.

There are benefits for the national health system. Papers will not use any more in this electronic system. There is immediate communication when the medicine is dispensed for the doctors. And of course again there is a higher control over prescribed medicines.

I have not mentioned what are the benefits for the pharmacists, for the health professionals but I will touch this later on. But for sure, I can imagine that you already have seen how these could benefit the pharmacists because you ultimatize some of the normally initiative tasks through the system. And you have more time for your patient so to do really what you studied for.

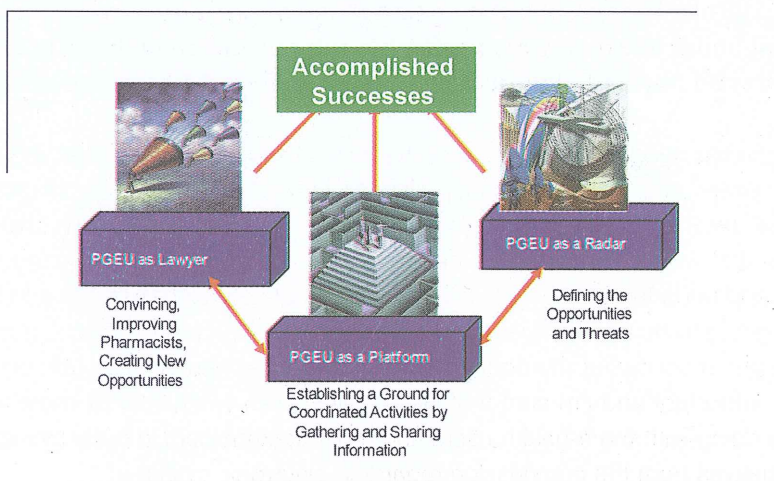
With these two examples, I have tried show you what our members are doing. We will very happy to work more about the Turkish system. So maybe next time in Sweden I can talk about Turkish example.

And this is what the PGEU is: It is very much a platform for exchange of information. Of course these examples I have showed you are about our missions in the health field. And our mission is to ensure that community pharmacists are acknowledged by their contribution to care for patients and to ensure that their maximum therapeutic benefit from the prescribed medicines.

I have not mention it but in the Swedish and Spanish prescription systems there is also information on non-prescription medicines. So this is a very important aspect. Because we know that there are some situations where only prescription medicines are in the system but if you actually want to provide best care to the

patient you need to know what other non-prescription medicines the patient is taking. So if you want to identify complete interactions or possible traumatic problems you do have to know exactly what are the medications that the patient is taking. And of course within our mission we have as well the promotion of health and prevention of diseases. And we do represent four hundred thousand community pharmacists in Europe. Over one hundred and sixty thousand pharmacists from all our member countries are in this network. This is an important figure because forty six million citizens visit pharmacy every day and this is 10% of the EU population. So we do have very close contact with population. And this is very important to emphasize ever and ever again to make sure that people understand how much a pharmacist contacts with the population. We are an organization, incredible organization, that wants to contribute to better health care.

We should make sure that every one understands -both at the population level, governmental level and other health professionals' level- that we are as pharmacists health professionals. And some times we have to underline this because not every one understands because much of our profession is private. They don't see pharmacists immediately as health professionals. We have to insist on this aspect. This might be suprising but it is the truth.



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We provide evidence and examples that prove the pharmacies are health centers where care can be provided for patients, where health information can be provided for patients.

Pharmacists are there for providing care to patients so using e-health systems, using electronic systems in pharmacy we are trying to reach a better society. So, as PGEU we are basically a leader. We are everywhere trying to understand what is going on. It's a master that we are trying to gather more information to understand what are the trends and what is going on so that we can inform our members and let them know what is going to be in the future. So, we have to pay more attention, we have to invest more and we have to be active. And we work as a platform for exchange of information and also we advocate. So to make sure that pharmacists are seen as health professionals and pharmacies as health centers we have to advocate these to politicians, to other health professionals and to the population in general. This constitutes majority of our job. We are working in particular areas. We look at legislation, we look at professional developments, we look at legal proceedings and communication.

This is the huge list of areas where we are active as PGEU and as our members. In addition, there is a lot of different activities of us that somehow more directly or indirectly will be linked to e-health. The health care system has transformed in a way that data can be available electronically. Remember my first slide it is about patients, **it is not about just data, it is not just about numbers, it is not just about how many medicines have been consumed but it is about patients. So how is the patient in all these electronic complex system?**

When we are developing electronic systems we have to take into account what are the users' needs. This is about patient and this is about health professionals who will use the system on the daily bases. It is not just about having a fantastic system that works. So, when developing the systems, we need to go in to the bases and to understand how this is going to be beneficial for patients and how this is going to be used actually and accepted by health professionals, not just by the pharmacists but the doctors, nurses and other health care staff. So this is very important and I'm sure that Helen will explain you a little bit more what we are doing with the e-health users and other stakeholders in order to mature the initiatives from the commission regarding electronic systems.



IT use in Pharmacies

- **Pharmacist Information support**
- **Pharmacist Decision support**
- **Pharmacist Reporting**
- **Patient records**
- **Administrative processes**
- **Orders management**
- **Quality control**
- **Electronic Communication and connectivity**

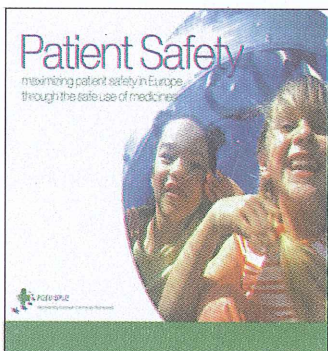
And how do we use IT solutions in pharmacies? If you have your own pharmacy you know how the system operates. For others outside the pharmacy world I want to explain how we use it. We use it in different forms. We have it as an **information support system** and we saw it with the first example I provided with the Karen and Selma. We use it as an **decision support instrument**.

We have all these information that can help the pharmacists to identify certain aspects that need to be reminded or that need to be taken in to account when we provide some information to the patient, while deciding what to do in a specific situation. Of course there is also an important way of using the systems which is about reporting. Whenever there is a medication error which is identified either a concrete error or near beast, this is actually reported back so others can learn it. And you prevent future errors to happen. And also there are patient records and medication records. So we be sure about the intervention made. This is actually recorded. So we know that next time when the patient comes to the pharmacy or the next time when the patient contacts with the doctor or other health professional. This information is actually known. So we do not repeat the interventions and we do not miss the important information.

Of course there is the administrative part of using these electronic tools which allow better communication. For example, ordering medicines for the stock of

the pharmacy is related that. It is about quality control. I have been learning more about the system in Turkey about allocation of medicines at pharmacy level. And it is about electronic communication of connectivity. It is about also how these can enable better communication between health professionals. How pharmacists and doctors, for example, can work as a team. I will later explore this.

So the use of information and communication technology in the pharmacy is very useful if it is well used. And it should enable what I call attraction in health care system. What do I mean with this? You know that traffic lights are used for facilitating the traffic and so that the traffic is not stuck in the specific area. So if we see these as the pharmacy, the pharmacy is facilitating the flow of patients within the health care system. This can be facilitating by using electronic information systems. So that the patient can be posted either to hospital or to the general practitioner or just home. And the pharmacists can actually be in the center of this activity. This could be seen as an idealistic thought. But it is happening in reality and maybe this is something we need to explore and emphasize further.



And all these are about **patient safety**. And this is very much at the core of our activity in PGEU and for sure pharmacists all over Europe. We have been developing statements to emphasize this aspect of our activity as pharmacists. So that politicians at each level, politicians who sit in the commission, technocrats who sit in the commission or politicians who sit in the parliament start having a better understanding of what we do as pharmacists and how our activities and interventions have impacts on patients.

I was mentioning to you that we are active in e-health. E-health is a topic that is part of our work program. But there are many things happening at this time which somehow could be indirectly or more directly linked to this e-health developments in the EU. I have just listed here some of the initiatives that are currently available in EU level which will somehow have an impact or promote the use of electronic tools to ensure better health for the EU citizens.



- Cross border care and Patients' Rights Directive - European template for prescriptions; promotion of e-Health

- Anti-Counterfeiting measures - medicines authentication at pharmacy level vs track and trace systems

- Health Strategy; Pharmaceutical Forum; Information to Patients Directive - Health information

- Communication on eHealth Interoperability

- Communication on Telemedicine

- Recommendation on Patient Safety

- Green Paper on the EU Workforce for Health

Cross border care and **patients rights** are the new priorities These are about patients going from one country to another country and how do they show that they are traeted in the best way in a different country, which is not the country where they permanently live. With this specific proposal we aim to promote the use of e-health. And these systems will enable in the future to communicate between different countries and even within the country. We are looking very much in to this directive, in to this proposal and which is going to be discussed throughout.

There is a particular aspect where PGEU is active because this directly proposes European templates for prescriptions. So that, there is a common basis of a prescription that could be recognized everywhere. And we are currently collecting information from different countries to see what are the common elements in prescriptions, in Sweden, in Turkey, in Sapin, in Portugal and in the UK. So we can identify the common elements that could be part of such prescription and this could possibly be used in future e-prescription systems.

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There is another subject which is about folk remedy and pharmaceutical transformations. And this is again a way of using information systems and how this can be used to ensure that the medication that is provided to the patient is semantic and not counterfided or false. There are top priority areas in the health. Several studies are being carried out on how high quality and patient sensitive information can be obtained. It is accessible to patients and the citizens in general but studies aim to promote the accessibility through the internet. The internet is not so new anymore but it is necessary to reach the patients. How do we make sure that information is actually fonded and accurate so we are not generating ruinous information that could be rarely used by patients and actually have an impact on their health.

Of course we always say that health professionals such as pharmacists and doctors should be the primary source of information. Then if you want to reach out more people you have to think other channels of information or we have to make sure that the information is accurate and evaluated before it is disseminated. And there is another important subject which I know that Helen will touch as well and I am sure Stephan will also touch that is the cross-border e-health communication .

I don't know if in Turkish it sounds as well as in English but it is sure that this is an initiative from the commission to ensure that what is being developed in different countries actually communicates with each other. So a system that is being developed for example, in Denmark will communicate the system that is actually been developed in Italy for example. How can we achieve that? So this is a very big challenge for the incoming years. There is also a new initiative from the Eurpoean commission which is the communication of tele-medicine. This is about the services to be provided at a distance using electronic systems to do that. It's about, for example, tele-radiology where there is certain area in a country where they do not have radiologists and they need them. So they can consult through tele-consultation with a radiologist experts in another region of that same country.

We all know that we are facing shortages of qualified health professionals so this is something that we will probably have to see as possible solution on how

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does this work or could work. How could this be linked with pharmacy? Well, there is also possibility of tele-consultation with patients so using these systems to consult with the patients who is sitting in his home and measuring his blood pressure and this information is being actually included in the system and communicated to the doctor but also could be communicated to the pharmacist. So this is something we need to keep in mind.

How these new developments will have an impact in the way you work in the pharmacies. And of course I have been telling you about patient safety all the time and there is a recommendation that has been just released yesterday, which is the recommendation of patient safety and how member states should work together to show that patient safety is actually the basis of what we do. And there is as well a new paper on EU works on health. I was just mentioning there is shortage of health professionals. We need to understand the dimension of these shortages and how this is going to be a problem in the future and how can we actually find some solutions to ensure that either we bring more enthusiastic students to study health and to become pharmacists. But also how can we use other solutions like electronic solutions to assist and provide health services in areas which there are probably very few health professionals working in very specialized hospitals.

Please keep with me. It is difficult to talk and talk all the time but I hope this is informative enough. So when we look at all these initiatives from the commission, from the parliament, from the member states how can we see it from our side, from pharmacists, from other health professionals, from associations? How should we see it and what issues do we have to discuss under this big visions that are developed that EU level? Well, we have to take into account ethical aspects and code of conduct when developing all the solutions. We need to give this in mind. Of course, there are legal aspects that have to be dealt. Data protection and mobility were mentioned this morning by the president.

Important aspects to keep in mind when discussing the development and deployment of eHealth

- Ethical aspects (privacy; confidentiality; professional codes of conduct)
- Legal aspects (data protection; liability)

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- Organisational aspects (continuum of care; team work)
 - Economic aspects
 - Technological aspects

What happens when there is a problem in prescription, in electronic prescription? Who is going to be actually liable for that? Is it the prescriber? Is it the pharmacist? Is it the system? Who is liable? There is also very important aspect, more important probably than the technology. It is about organisational aspects, is about how, for example, hospitals, pharmacies and general practices are going to collaborate with each other using such a system. How can these systems show that there is a better communication between not just health care settings but health care professionals as well? How do you make sure that this is happening and how do you make sure that actually there is continuity of care and there is acceptance by the health professionals and of using these by the patients.

So, the organisational aspects have to be taken into account and sometimes these are more important and more relevant in developing and deploying new systems. The available technology is very important as well because the technology is there but how are we going to use it? It is probably the key issue. Of course there are economic aspects. Studies show that there is a long term return of investment when we use new technologies but there is to start with huge investment that has to be done? And who is going to do this investment? Pharmacists alone? I don't think so. So, when deciding what to do in terms of e-health systems we have to think about the benefits and the risks. We should not built a system just because it is fun, it is popular or everyone is doing. And we should be sure whether this is actually what we need. It is not about copying what others are doing but adapting to our own reality, our national original reality. So this is very important and I am sure you have thought about that when looking into the systems developed in Turkey. So almost finalizing.

I was mentioning that about the technology of course. Maybe it is about how we use these and how we make available to patients and to citizens in general. And of course it is much about technology, it is about how we provide information and medicines, it is not just about medicines but also about information on healthy life-styles and nutrition.

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In addition, we know that mental health problems are getting more and more. And we have to take into account that health is also related with literacy. We should know that the patients will not have to use the systems. You need to have literacy in a certain level in order to understand and use these systems. And we do not want to eliminate the human-human contact totally. Consultations between patient and doctor, patient and pharmacists, pharmacists and doctors are not replaced by the technology. This can not be replaced by the technology. I have mentioned these in connection with the transformation of the health care system. And this is about providing better solutions, better health solutions for a population that is around 80.

I know that in Turkey population is still quite young but the population is getting older and older in Europe. So we just want to have people not reading very small, little things in the patient leaflet so we want them to be happy having time to do their own things in a healthy way. So the prescription and medication records are our key messages. Of course, we, as PGEU and our members, see that prescribing is a key for collaborative care approach and it is not just about transmitting information in one way but about communication. Communication is about having interaction between who parties. And you know having more communication between the describer and dispanser so between the doctor and pharmacists decrease several risks in the care. Electronic prescription and medication record system do not only save us from paper but ensures that important patient information is provided. In reality, we know that it is for the sake of the patient.

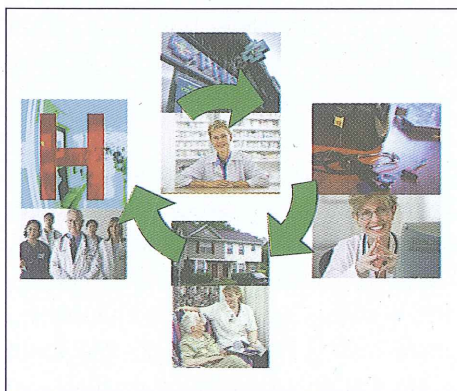
And also by the electronic medication records have a huge potential to contribute to overall medication management as we have seen in the example of Karen. So this process is about how this flow of information between hospitals, pharmacists, and general practice and home care happens in the very nice way and in a continuous way. We know that this is already happened and happening in some countries, in some regions but there is still a long way to go. It is about the reach the ideal health care system. So it is about using information and communication technologies to make sure that there is a contuniuing care. There is collaboration between stakeholders and here stakeholders we mention is health care professionals, patients, politicians so decision makers and payers.

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We have different people; payers, physician, pharmacy and the patient. And it is about communication and confidentiality but there are other parameters in the equation. Because if you want to go ahead with implementing the systems, these systems have to be clear, they have to have legal clarity and certainty but we have to be brave. So, courage is needed. We need charismatic leaders.

I want my pharmacy to actually provide the best care and I know that using electronic systems will enable me to do that. But you have to have willingness but also the recognition by your government that is very important. And you have to be confident, competent. And how the patient consent to circulate her data in this system is also important.

So, final words. I will repeat it, everything is about communication. It is about insuring that we are actually making a good communication with the patient and with other health care professionals. And of course communicating and advocating what we are doing to decision makers are also important. It is about the patient and other health professionals. It is about improving the medication and making sure that medicines that are used are the ones that really will have a benefit for the patient.



E-health is about attitudes, it is about being couraged, being brave and it is also about having positive people around us to realize it. It is not just about delivering a box of pills to the patients. It is actually a struggle that is taking place that should be recognized both by the patient and all the other stakeholders in health care. It is about providing information but only high quality information.

Does this actually have a positive impact ? How can we prove it? What else could we do? So, it is important to keep in mind that we have to evaluate what are we doing. You should provide IT solutions in the first hand. Again, I leave you with this image about the patients.

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Our profession is practised in streets because patients are there. If there were no patients, there would be no cities in which our service is needed. We are here for many many years already. If we continue to have patients our profession continues to be usefull to health care and to our member states. Thank you very much.. I don't know if you have some questions or comments?

QUESTION- How long the information of diseases is kept in the chips?

Pharm. IVANA SILVA- This is something can vary from country to country. And, I cannot give you a universal answer. How long a certain information be kept is something that has to be discussed in terms of legal contexts in the different countries. On the other hand, if there are cronic conditions this would be identified in the patient's health record. If there are more epitonic situations it depends on how long you go back. This is something that I cannot provide you a complete answer because it varies country to country and system to system.

QUESTION- Hello. How long has this system been used in the European Union? When did it start first? In which countries is it used? Thank you.

Pharm. IVANA SILVA- Thank you for your question. I think both Helen and Stephan and also Maria Lauren will give you examples of how these happened in different countries. It diferenciates from country to country. We know that Scandinavian countries like Denmark and Sweden are more advanced. They started earlier in terms of using for example e-prescription systems. There is not a unique solution that has been used everywhere. There was a recommendation from the commission to go ahead and start deploying more these kinds of solutions for their strategic objectives. Well, this means that not everyone is doing it. So, there is a need for a push from European Commission to make sure that member states will continue think about these and take action in bringing into reality.

QUESTION- Hello. Which ministry does organize this system? Is it possible for hackers to stock this information in case of a collapse of the system? How is the information is kept? Thanks

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Pharm. IVANA SILVA- Thank you very much. Very interesting question. Basically the ministries of health are holding the negotiations. Of course in some point we have to involve finance and economic ministries because it has to be funded by someone. But who takes basically place in discussions at EU level are representatives of the ministries of health. And we have to learn with other situations and other systems, how can we prevent situations to happen. And these are actually the aspects of data production that has to be further discussed. And there are also ethical aspects that have to be further discussed. And there is a need for looking into other sectors like the bank sector to learn with them. And how could it be applied into a sector like the health sector which is still dealing the first steps in this area. So, it is about learning with other sectors as well. And, making sure that we can avoid as much as possible. But, there are certain situations that are out of our control. How can we ensure that the data that is circulating from the patient is actually protected as possible.

QUESTION- I am sorry for speaking Turkish. First of all, thank you very much. You provided a very good summary. Actually, I have 5- 10 questions but I will wait until the end of these two days. I would like to emphasize a very important point that you have underlined. You said this is a system and tool. You put you are working for the welfare of the patient and trying to ensure the improvement of patient and the system as well as rational drug use. I think this is very important. Generally, all the pharmacists think that electronic system is just a tool for payment. Of course, it is an important tool for the payment system but it is a more important tool to understand and follow the patients. We should give more importance to that aspect. Thank you for emphasizing this point. I do not know whether there are people from the ministry. Yes, thank you. Maybe, the ministry should focus more on the economic aspects, patient safety and legal dimensions. We, as pharmacists, should discuss how can we be more beneficial to the patients in this system. Thank you.

Pharm. IVANA SILVA- Thank you. If I can also emphasize another aspect. The technology should not replace the pharmacists or the doctors or that human contact because if there is a failure in the system, it is minimized by the experts working in the electronic system. But in any case if there is failure you will always

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solve it with your own knowledge that you have gained during your professional life. So, if the system fails you can always count on your own knowledge as a pharmacist to take care of the patient. Of course, we want these system to go ahead because they will facilitate our lives in terms of giving more time to provide best care to the patient. But we should not be afraid of if the system fails. You are just doing what you have been doing all the time in your professional activity. That is why so important not to think of a technology as a replacement of what we are. It is just a supporting solution. I just wanted to emphasize.

QUESTION- What are the problems you have faced in practice? How could you solve those problems? What kind of solutions you have find when a patient lost her card but had to go to emergency service and when the system did not work?

Pharm. IVANA SILVA- Thank you. This is very important. That is why it is so important to listen to those who are actually on a daily basis using these to identify the possible problems. And think of how can we solve them when we are developing these systems. So, while developing the IT solution you should take into account the probable problems. So, what are you going to do? I'm sure that I cannot give you my concreed experiences because there are certainly experiences reported to the developers of this technology. We should think about the B plans in the system. A patient should not be refused treatment or care because of not having his card with him. So, this is something then extra to be taken into account and sometimes it could be that the systems are being thought without having this in mind. It is so important to listen to patients and health professionals who are using these on the daily basis to make sure that this aspects are actually already thought when the sytems are being developed. I'm sorry that I can not give you a complete example. Maybe my other colleagues will give you that example but the command I can make is that these things have to be thought before but not just when it happens one day. If they happen they should be reported so we can learn this situation. And thank you very much. It was a pleasure and if you have any other questions I will be around the next two days.

Thank you.