

(E)Hospital knows that hospital managers need to keep up to date with the latest innovations and news across all medical specialities to better understand the needs and challenges of each hospital department. For this reason we have been publishing specialist supplements with each issue. Two copies are included: An insert for your own use and a pull out to pass on to a relevant colleague.

This issue the focus is on pharmaceuticals. We spoke to Dr. Roberto Frontini, the President of the European Association of Hospital Pharmacists, to find out more about innovation in hospital pharmacy and the future of the discipline. Anita R. Vila-Parrish introduces us to data-driven hospital supply chains for intelligent pharmaceutical inventory management strategies. The news section covers the Field Administration of Stroke Therapy—Magnesium (FAST—MAG) trial and a breakthrough approach to identify new drug candidates through genome sequencing.



THE INNOVATIVE HOSPITAL PHARMACIST

Imagination, Skills and Organisation

Interview by Lee Campbell

The 2014 annual congress of the European Association of Hospital Pharmacists (EAHP) takes place in Barcelona and this year's theme is the innovative hospital pharmacist. Dr. Roberto Frontini, President of the EAHP took some time out of his busy schedule to talk to (E)Hospital about the congress, innovation in hospital pharmacy and the increasing importance of collaborative care.

The upcoming EAHP congress will focus on the "Innovative Hospital Pharmacist". How would you describe an innovative hospital pharmacist and what can attendees expect at the congress?

I think innovation is relative to your environment. For some countries it is common practice to have a pharmacist working on the wards together with nurses and doctors but in other countries this is an innovation. We have to understand that innovation is about taking the next step and improving the situation and outcomes.

Innovation is a step in the right direction and each step towards innovation is important. This is why at the congress we will also have a session dedicated to best practices. Best practices are also part of innovation and we will not just be showcasing the latest high-tech and organi-

sation-changing innovations but also the smaller steps you can take on middle and lower levels. These innovations are just as important.

The congress subtitle "imagination, skills and organisation" are three essential management traits. How are hospital pharmacists putting them into practice?

The first point, imagination is very important. Without setting goals we cannot progress in our professions and work towards the future. For this reason we have as a basis, the Basel statement from the International Pharmaceutical Federation (FIP). And we are actually reviewing this statement to create a vision of what hospital pharmacists will have as a goal. This is what pharmacists have to imagine and to adapt to their local situation to fulfil their goals.

In terms of skills, we have to learn a lot. I am not worried about learning in terms of pharmaceutical science because we have literature and every pharmacist has opportunities to go to seminars, to continue education and to read articles. I am much more worried about what we have never learnt: communication and the transfer of our knowledge to our colleagues (doctors, nurses, administrators). We need to be able to explain why we are doing something and why it is important. Communication skills are even more important when it comes to dealing with patients. When communicating with patients we need to change our perspective. Pharmacists as well as doctors are used to talking about diseases and treatments but the patient does not think in scientific terms. We need to transfer our knowledge of the disease to the ac-

tual situation of the patient and this needs skills that we are not trained in at all. This is something that worries me and must change.

Organisation is also important. We have limited resources, which means organisations need to make the right priorities. We must start with projects that are really important and not waste a lot of time and energy and resources on projects which only benefit a small number of people or projects without positive outcomes.

Innovation in healthcare is a key current trend, mainly in terms of new technologies. Do you think there is a danger that too many innovative ideas are implemented without thorough research and testing?

Yes, yes and yes! There are a lot of pseudo-innovative medicines, especially if you look at how fast the FDA and EMA approve new drugs and the pressure of the industry to authorise drugs. If you look

at the current situation, the general idea is not to approve a new drug because it is better than another one, just because it works, which could mean it is no better than other drugs on the market. The quality of the data used is also a key issue. We have a lot, and I mean a lot, of manipulated data used in the approval of new drugs. If you take a more detailed look at the research you will discover that industry research is often manipulated, looking at a very specific condition or choosing a very specific type of patient to demonstrate a particular outcome that is in the interest of the agency.

introduction of CPOE (Computerized Physician Order Entry). We introduced this technology without training and we had more errors than before. So it is very dangerous, you need training because neither you nor I can sit in a cockpit of an aeroplane and start the plane! Even if the technology of the plane is fantastic.

What are the main barriers to innovation in hospital pharmacy?

There are a lot of barriers to innovation in hospital pharmacy. First of all, I must unfortunately say that money is a key barrier because really, innovations start with an investment. I say investment because innovation is not just an increase in costs, if successful it will bring improvements and hopefully value for money. Currently, in order to be successful you have to first make your project visible and create awareness. This includes explaining your motivations and why such an innovation is necessary.

The second important barrier is that we as pharmacists have a lack of time and personnel to dedicate to evaluation. We start projects and we know they are good but we need to evaluate these projects and share the results with the hospital administration and doctors and nurses. We have to explain the situation before, the steps we have taken and the improvements that have been made. This is an important process but it takes time and currently we have a lack of time.

The third major barrier is mentality. Unfortunately a lot of pharmacists are very conservative. In many respects this is a good thing: I am also very conservative when it comes to medicine, we use the medicine we are familiar with. However, many hospital pharmacists are too afraid to innovate and look to the future. For me, this is a major barrier to overcome.

We often equate innovation with expense, particularly in the current economic climate. How can we be innovative without breaking the budget?

I think that this is something the industry is telling us. They are telling us they need a lot of money for investment purposes and how expensive the cost of research is. However, this is not true. If you look at the data, even published in the New England Journal of Medicine, it is clear the industry is making a 25% profit by putting only 15% in to research. There is clearly a misbalance.

I really believe that real innovations don't cost so much. They need an investment but this is true of many things, for example, if you invest in a house you are not spending more than you would to rent an apartment. Just the opposite, you are creating value and true innovations create value. They are not costs, they are investments, and if we look at the general ideas of 50% adherence worldwide. We are wasting 50% of our expenditure in medicine and that is an enormous amount of money we can save. If we are innovative we can improve this, we can reduce waste and make systems more efficient. If there are drugs that reduce the length of stay in the hospital then you are not actually paying more. What I am disappointed in the pricing policies of the pharmaceutical industry because they are telling us something that is absolutely not true.

What have been the three most important innovations in hospital pharmacy in recent years?

I will start with a technological innovation because I think that it is very important. In recent years more and more hospitals have started to use barcoding in hospital pharmacy. Single units have barcodes and these are scanned at the point of care along with the patient bracelet to ensure we are giving the right medication to the right patient at the right time. I think this is a very significant innovation, it is a technology that is a really good investment and we are supporting it as an association (EAHP).

My second innovation is not technological but it is very important. It is the fact that in the last three years the awareness of the pharmacist has changed from a medication-oriented mentality to a patient-oriented mentality. We have

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at the current situation, the general idea is not to approve a new drug because it is better than another one, just because it works, which could mean it is no better than other drugs on the market. The quality of the data used is also a key issue. We have a lot, and I mean a lot, of manipulated data used in the approval of new drugs. If you take a more detailed look at the research you will discover that industry research is often manipulated, looking at a very specific condition or choosing a very specific type of patient to demonstrate a particular outcome that is in the interest of the agency.

Secondly, technology is wonderful. I like my iPhone, I like my computer, I like my navigation system but technology without proper user-training is very, very dangerous. We had some very good examples of this situation. For example the

switched our perspective to focus on the fact that we are serving patients. This is one of the biggest steps we have taken in the last years.

The third most important innovation concerns education, namely the new EU Directive of Mutual Recognition of Professionals. The law was approved in 2013 and it has opened the door for specialisation in pharmacy on the European level. I think this is a big step forward for hospital pharmacists to create a new harmonisation of skills and competencies for hospital pharmacists in Europe.

Moving to the future, your keynote speech is entitled "The Hospital Pharmacist 2020: A Changed Profile". Could you give us a preview of what this profile will be like?

Well I cannot tell you the whole speech before the congress but I can tell you a few things! I put an additional question mark in the title: a changed profile? Why? Well because when I was preparing the keynote I went through the history of pharmacy and I discovered that our profile, which is now believed to be very modern and the future of pharmacy, was already in the 18th century very well described in contracts, etc. But we seem to have forgotten this so I think it is not so much the profile but the environment that has changed.

True innovations create value

I will focus on two aspects. The first is the informed patient. It is very different to the past when patients had little opportunity to be informed about their condition and the different treatment possibilities. Now it is exactly the opposite, indeed sometimes our patients are more informed than we are! The only problem is the source of this information...

The second aspect I will focus on is communication. Communication has become much more complicated. Previously communication was simple; it was local and face-to-face but now we are work-

ing in very complex systems with lots of different technologies. Communication is now a crucial point in keeping these systems running.

Many hospitals and managers are looking to break down the traditional silos within the hospital and focus more on cross-departmental cooperation and multidisciplinary teamwork. Hospital pharmacists are a good example of this cooperation, what advice could you give to managers on this topic?

I would say continue, continue, continue! I believe that collaborative care is the only way to provide care in an economic and cost-effective fashion. There is a lot of evidence in terms of literature, which indicates that collaborative care is a key point for the future. We must continue to break down all the barriers between health professional groups; between doctors and nurses, between pharmacists and doctors, between administrators and pharmacists, etc. We have to work together, to accept the point of view of others and to integrate these into our care.

I think in many countries in Europe, including Germany, but especially in the eastern regions of Europe, we need more visibility as pharmacists. We need to convince the administration to support pharmacy with staff and technology because the perception is still that pharmacy is just supplying drugs but this is not true. It is an important part of our job but not the only part. If you want to have pharmacists on the ward you need staff and investment. There is evidence that pharmacists on the ward save money and improve patient outcomes. It is helping doctors and nurses to provide better quality care. This is what we need in our complex system: to have all healthcare professionals involved together in collaborative care.

Finally can you tell us more about the European Summit on Hospital Pharmacy? What was the idea behind this event and what does it hope to achieve?

This is a very ambitious summit and I am proud to say that it is the first worldwide initiative to bring together not only pharmacists but also patient groups and healthcare professionals to decide about the future of our profession.

In terms of background to this summit,

in 2008 the International Pharmaceutical Federation (FIP) organised a global congress in Basel where hospital pharmacists got together and created a statement on the future of hospital pharmacy. As little as six years later, the FIP is already reviewing the statement. But the EAHP began to review this statement some years within our working group as there have already been significant changes in our profession. During this review we realised that we needed the opinions of our other stakeholders: patients, doctors and nurses.

The summit will put the statements to a vote, like FIP did in Basel but with a very big difference: this time it will not just be pharmacists that vote but also groups of healthcare professionals (doctors and nurses) and patients. Half of the votes will come from pharmacists and one quarter patient groups and the other quarter professional groups. This means the pharmacists will never have a clear majority over the other stakeholders. We will achieve an agreement on the future of hospital pharmacy between pharmacists and the key stakeholders, which is both unique and risky for pharmacists as the future of the profession depends on all three groups.

We have already internally reviewed the Basel statements and made a proposal. There were 75 Basel statements and we have reduced this to 48 statements in six different fields of activity. Now we have moved on to the next step, the external facilitated Delphi process. We sent out the statements to the stakeholders and our members and through the Delphi process we are updating the statements. We will present some of them at the congress and the summit will be the final vote on the statements.

I am very happy because some of the input that came from patient groups and medical professionals is very interesting. So in the end I think we will not only have the future of hospital pharmacy but also the future of the role of hospital pharmacy in the acute team, in a collaborative care team. That is the real goal of the summit.

Interviewee:

Dr. Roberto Frontini
President
EAHP