

ABC project's prescription for a healthier Europe



Around 50 per cent of patients fail to adhere to the medication programmes they are prescribed, which could be not starting a course of treatment, not completing it, or missing a dose. This has serious long-term implications says **Professor Przemyslaw Kardas** of the ABC project, an initiative which aims to help improve adherence levels

The failure of patients to adhere to medication programmes severely limits the effectiveness of treatment and has significant implications for the cost of healthcare. With approximately 50 per cent of patients not adhering to medication programmes this is a major public health concern according to Professor Przemyslaw Kardas, the scientific coordinator of the ABC project. "The project aims to find out why people are not adhering to their medication and, on the basis of this, to provide guidance for European policy-makers in order to improve adherence rates, and through that to achieve better health outcomes," he says. Failing to adhere could mean not taking the medication (both due to not initiating it, and early discontinuation), taking it at the wrong time, or missing a dose; there are many reasons behind such behaviour. "Antibiotic treatments can help people quickly feel better, so they assume the problem is over. They are happy to quit the treatment after 3-4 days, when in fact they were prescribed the antibiotic for 7-10 days. Then there are people who don't believe in the doctor's diagnosis, or may have some objections against the medication itself. They may want to get better on their own without putting foreign substances into their body."

Chronic conditions

One of the major issues in terms of drug adherence levels is the impact a condition has on the patient's daily life. Patients with some chronic, long term conditions may not see any immediate benefit from taking the medication; they often start to ask whether it's still necessary to take the medication, to go through all the hassle and inconvenience it entails. "Some patients have found that nothing happens if they miss a dose of a drug. So they are happy to quit the treatment because they are fine in the short run," explains Professor Kardas. However, in other cases patients find that drugs are extremely helpful in reducing the pain caused by their condition. "Patients with arthritis often find that drugs are helpful in

reducing the number and seriousness of the symptoms. The patient would then be much happier to take those drugs than somebody who has high cholesterol but isn't aware of it and doesn't feel any positive change in their organism after taking the drug. That's one of the major reasons for differing levels of adherence. Beyond that, there is also a group of psychiatric conditions in which patients are not completely aware of having the condition, such as depression, and thus are not motivated to take any kind of drug at all."

There are also of course cases where people take excessive amounts of medication, but these are relatively rare and the ABC project's focus is very much on those who take less than was prescribed. This includes people who would seem to have the strongest motivation to adhere to their medication programme, such as

three doses a month without compromising the effectiveness of the treatment, but if you miss more than three tablets your chances are equal to those who don't take it at all."

Identifying interventions

This not only has health consequences for the patient, but is also a serious waste of money for the healthcare provider which can lead to further indirect costs that affect the wider economy. Raising awareness of the impact of non-adherence is a key part of the project's work; however, they also have more tangible aims. "To date some 200 different factors have been established that affect adherence to medication. We aim to find out the factors which are major triggers of the patient behaviours, and on this basis to identify the interventions that may change these behaviours in a positive way," outlines

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transplant patients. "People dream of getting a transplant for years, but non-adherence to medication is one of the biggest reasons for transplant rejection. The situation is similar with tuberculosis and HIV, in which the medication is available and in both cases is very important to the patients' health. In tuberculosis it cures the disease while in HIV it may prolong the life of the patient," says Professor Kardas. Regardless of the condition, failing to adhere to a medication programme has a severe impact on the effectiveness of treatment. "Take the example of oral contraceptives. Even if you only skip one tablet a month – less than 5 per cent of the total – you may ruin the whole treatment. For lipid-lowering drugs the threshold is more or less 90 per cent according to epidemiological studies. So you can miss

Professor Kardas. This work will provide important guidance for policy-makers and healthcare professionals in ensuring that patients adhere to their medication programme. "We have objectively assessed the situation in order to find out which factors are the most important in terms of non-adherence and which are the most promising in terms of both effectiveness and cost-effectiveness. We will then sum up these findings and provide policy-makers with guidance on how to solve the problem. We are also providing guidance on the development of the curriculum for medical schools in order to equip doctors and nurses with the knowledge and skills which might help solve the problem."

The first step is Doctors acknowledging that some of their patients are failing to adhere to the medication programmes they

prescribe. While ultimately it is of course the patient who has to take the medication, the ABC project team believes intervention by Doctors can help raise adherence levels. "We aim to provide European citizens with what I would call an adherence-supporting environment. Of course we must allow patients to refuse treatment, that's their right, but nevertheless we must also make them aware of the benefits of treatment."

One of the key issues is the simple fact that most people don't like taking medication. "We are much happier when we feel that we are healthy and independent rather than having to support ourselves with medication," points out Professor Kardas. "We have tried to characterise different groups of people in order to find out who is prone to non-adherence. A very interesting finding of our study was that the same people might be both adherent and non-adherent – we asked them for their adherence to long-term treatment for hypertension and at the same time we asked them about their adherence to antibiotics. There was no correlation – we can probably flag some people who are at very high risk of non-adherence, but it's not the case that the rest are at no risk."

The project is currently working to publicise its findings and researchers would

be happy to release their results to the public for use in direct contact with policy-makers at local and national levels. Patients today have an active role in treatment, and the project is keen to engage with them on how adherence rates can be improved. "I'm trying to convince the Polish Government to adopt some of the results of our project in the electronic patient records and electronic prescriptions it's currently introducing. This would give us important insights into how patients are complying with treatment, which would be the starting point for future discussions."

The development of personalised medicine could change the way drugs are prescribed, making adherence even more important in future. "Nowadays if somebody has a chronic condition their doctor is obliged to follow certain guidelines – what you receive is basically a set of drugs universally accepted for that condition," explains Professor Kardas. "In future you may receive a much more tailored form of medication based on in-depth tests that assess your genetic background and the likely effectiveness of particular drugs. Adherence will become even more important in this situation – the more effective the treatment the more important the adherence."

At a glance

Full Project Title

Ascertaining Barriers for Compliance: policies for safe, effective and cost-effective use of medicines in Europe

Project Objectives

The ABC Project aims to produce evidence-based policy recommendations for European policymakers for improved patient adherence and subsequent better use of medication, in order to obtain safer, more effective and cost-effective use of medicines in Europe.

Project Funding

PK: total budget €2,736,000,
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Project Partners

Medical University of Lodz • Bangor University • AARDEX Group • Keele University • Katholieke Universiteit Leuven

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Professor Przemyslaw Kardas, MD, PhD, graduated from the Faculty of the Medicine at Medical University of Lodz, Poland, in 1994. He received his PhD degree with honours in 1999 for his studies on patient compliance with antibiotic treatment and has worked in the Department of Family Medicine, Medical University of Lodz since 1998.

