"Improving the sustainability of healthcare systems through better adherence to therapies: a multi-stakeholder approach "

Background briefing

Introduction: why does adherence matter?

"Drugs don't work in patients who don't take them"[1] – as the former U.S. surgeon general C. Everett Koop said. However, policy makers, health managers and healthcare professionals often underestimate the opportunity to improve health outcomes and rationalise health expenditure through monitoring what happens after a medicine has been prescribed. The issuing of a prescription is the first step towards safe and high-quality pharmacotherapy; however, it is estimated that 20% to 30% of patients do not adhere to medication regimens that are curative or relieve symptoms, and 30% to 40% fail to follow regimens designed to prevent health problems. When long-term medication is prescribed, 50% of patients fail to adhere to the prescribed regimen.[2]

Poor adherence undermines pharmacotherapy outcomes of individual patients and carries a significant human cost in terms of patient safety and quality of life. It also presents a serious problem for health systems, both in terms of inferior health outcomes, unnecessary treatments and hospitalisations, and in terms of resources wasted through the non-use of prescribed medicines funded by healthcare systems. Furthermore, low adherence is connected to the development of resistance, which is fast becoming an urgent global problem.

We are currently confronted with figures such as the following:

- 194,500 deaths per year in the EU due to misdose and non-adherence of prescribed medication. Non-adherence is estimated to cost the European Union €1.25 billion annually.[3]
- In the UK, estimated medication costs for England in 2004 due to non-adherence were approximately €12 million. It is estimated that about £100 million each year is wasted on medication dispensed but returned to pharmacies.[4]

[1] USA Today, Doctors baffled by patients not taking prescriptions (29.03.2007); link: http://www.usatoday.com/news/health/2007-03-28-taking-medicine_N.htm

[2] http://www.pgeu.eu/Portals/6/documents/2008/Publications/08.05.13E%20Targeting%20adherence.pdf

[3] Medi-Voice project http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=3019&CAT=PROJ&QUERY=1170700793308&RCN=75025

[4] 14. Economic burden of avoidable adverse drug reactions and non-compliance in the UK, Journal of Medical Economics, 2006; 9:27-4.

- A Dutch study estimated the cost of non-adherence in the Netherlands at €234 million in 1998.[5]
- In the USA, poor adherence was estimated to cost approximately $177 billion in 2000 in total direct and indirect healthcare costs.[6]

The studies above vary in their methodology, but all confirm that adherence is a major problem. The reasons behind poor adherence are multi-factorial and complex, including social and economic factors (e.g. reimbursement and co-payments); health system factors (e.g. lack of integration of care), healthcare team factors (e.g. lack of data sharing, poor communication); factors related to the disease; as well as factors relating to individual patients (e.g. beliefs concerning medicines, psychological and lifestyle issues, lack of health literacy and lack of appropriate support networks). Because adherence is such a complex issue, and because the patient often plays a key role in the long-term management of chronic disease, strategies to tackle adherence need to take a multi-stakeholder, patient-centred approach.

Adherence as key factor to address demographic change and sustainability of health systems

To put adherence in a broader context, increased life expectancy has led to more chronic diseases and higher demand for long-term therapies. Non-adherence increases the burden on health systems at a time where there are ever greater demands on resources. Sixty-five per cent of people aged over 60 have two or more chronic conditions, but adherence rates in this age group are 60% or less. Up to 50% of cardiovascular disease hospital admissions may be due to poor adherence[1]. Older people often take multiple medications as part of complex regimes, and they are at greater risk of adverse drug reactions. Therefore, ensuring effective and safe therapies for older people is an important issue for local, national and European policy makers.

The Steering Group of the European Innovation Partnership on Active and Healthy Ageing, which is a pilot flagship initiative within the EU "Innovation Union" aiming to add an average of two years of healthy life for everyone in Europe by 2020, has recognised the importance of addressing treatment adherence and polypharmacy.[7] The Partnership will explore potential innovative solutions that can support individual patients and carers, improve data sharing and communication between health professionals, and improve the integration of care.

Adherence as a key priority for future EU Health Programmes

Improving adherence is a key factor in improving patient safety, satisfaction and the quality of healthcare tailored to patients' needs; in reducing unused and improperly used medications, increasing the cost-effectiveness of therapies and the effectiveness of chronic disease management.[8] The World Health Organization has stressed that "increasing the

[5] 4. Herings RMC, Leufkens HGM, Heerdink ER, et al. Chronic pharmacotherapy continued: pharmo report [in Dutch]. The Hague: CIP data Royal Library, 2002. (cited in Brunenberg DE, Wetzels GE, Nelemans PJ, et al: Cost effectiveness of an adherence-improving programme in hypertensive patients. Pharmacoeconomics 2007; 25: 239–251)

[6] Ernst FR and Grizzle AJ, "Drug-related Morbidity and Mortality: Updating the Cost-of-Illness Model", J Am Pharm Assoc. 2001;41:192-9.

[7] Report of the first meeting of the Steering Group, available at http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/steering-group/draft_report_1st_meeting.pdf#view=fit&pagemode=none

[8] Concordance, adherence and compliance in medicine taking. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D, December 2005.

effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments".[9] Better adherence will lead to better health outcomes and help optimise the use of scarce health resources.

The organisers believe there is an urgent need for concrete action to be taken at EU level to tackle adherence, including prioritising the topic in the future Public Health Programme and the research framework programmes. Future actions need to be framed within the organisation of the healthcare system as a whole, and should involve all the stakeholders, from patients and the public, to health professionals, to policy makers and medicines manufacturers. Priority areas with a close link to adherence include the development of interoperable eHealth and ICT-based solutions for health; promotion of rational use of medicines and combating resistance; policies relating to medicines and medical devices; information to patients and health literacy; health professionals' training and education; patient safety and quality of care; and action on healthy and active ageing.

This event aims to open the floor to a much-needed debate about adherence from the perspective of different stakeholders. It aims to raise awareness of the vital importance of adherence, most importantly to long-term therapies commonly used in treating chronic conditions in the elderly and their risk factors. It analyses the different factors that improve adherence while outlining a vision of future healthcare provision, underlining the value of a patient-centred, collaborative multi-stakeholder approach. Speakers will present examples of successful existing good practices and solutions from different contexts and explore with the audience how these may be replicated.

Terminology fact box

Adherence and compliance are both terms used to describe the extent to which a patient takes their medication as prescribed. There are however important differences between these concepts.
Compliance is defined as the extent to which the patient's behaviour matches the prescriber's recommendations. **Adherence** in turn is "the extent to which the patient's behaviour matches the *agreed* recommendations from the prescriber". Adherence is nowadays preferred by many to compliance because of its emphasis of the need for agreement and that failure to adhere should not be a reason to blame the patient.
Concordance is a more recent term which focuses on the patient-prescriber relationship and the degree to which the prescription represents a shared decision. In a concordant process the beliefs and preferences of both the prescriber and the patient are taken fully into consideration, with the recognition that the patient's views are paramount. Concordance also increasingly refers to a wider concept of patient support in medicine taking. Concordance is related to but not synonymous with adherence.

Sources: Horne, R: Compliance, adherence and concordance: implications for asthma treatment. Chest, 2006;130;65-72; Concordance, adherence and compliance in medicine taking. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D, December 2005.

[9] Haynes RB. Interventions for helping patients to follow prescriptions for medications. Cochrane Database of Systematic Reviews, 2001, Issue 1. Cited in the report *Adherence to long term therapies: evidence for action,* WHO, 2003.

About the organisers:

The Standing Committee of European Doctors (CPME) is the representative organization of European doctors through its full members, the most representative National Medical Associations of 27 countries in Europe. CPME works closely together with its other members, four National Medical Associations from associated and observer countries as well as with specialized European medical associations. CPME aims to promote the highest standards of medical training and medical practice in order to achieve the highest quality of health care for all patients in Europe. CPME is also concerned with the promotion of public health, the relationship between patients and doctors and the free movement of doctors within the European Union.

The European Federation of Pharmaceutical Industries and Associations (EFPIA) represents the pharmaceutical industry operating in Europe. Through its direct membership of 31 national associations and 38 leading pharmaceutical companies, EFPIA is the voice on the EU scene of 2,000 companies committed to researching, developing and bringing to patients new medicines that improve health and the quality of life around the world.

The European Patients' Forum (EPF) was founded in 2003 to become the collective patients' voice at EU level, manifesting the solidarity, power and unity of the EU patients' movement. EPF currently represents 50 member organisations, which are chronic disease-specific patient organisations active at European level and national coalitions of patients' organisations. Collectively they reflect the voice of over 150 million patients living with various chronic diseases in the European Union. EPF's vision for the future is high quality, patient-centred, equitable healthcare for all patients throughout the European Union.

The Pharmaceutical Group of the European Union (PGEU) is the European association representing community pharmacists. PGEU's members are the national associations and professional bodies of pharmacists in 30 European countries, including EU Member States, EEA members and EU applicant countries. Through its members, PGEU represents around 400,000 community pharmacists contributing to the health of over 500 million people throughout Europe. It is estimated that over 46 million people visit the community pharmacies in the EU member states every day.