

Case Study Summary Greece

Summary

Inappropriate polypharmacy issues have emerged in various settings and geographic areas in Greece, but efforts to articulate them and sensitize the public have been isolated rather than systematic so far. Although e-prescription implementation is widespread ($\approx 98\%$ coverage nationwide) and disease-specific guidelines (therapeutic protocols) have been developed, e-prescription still remains in the “data recording” stage, polypharmacy management is only associated with direct economic indicators, and medication review policies, pharmacovigilance and reliable reporting (alert) systems are scarce or absent. Health spending has dropped since 2009, as a result of government-wide efforts focused on reducing the large budgetary deficit. Medication safety is not adequately taken into account and dispensing of OTC medicines through enterprises other than pharmacies may endanger prudent use of medicines (1).

Electronic Patient Health Record and e-prescription data analysis have not been incorporated into the National Healthcare System infrastructure. Incentives and opportunities for participation in polypharmacy management and medication adherence programmes for health professionals or patients are fundamental. Collaboration of all stakeholders in healthcare, the establishment of the “case/care manager” and patient education remain unexploited drivers for change. Lack of coordination of institutions and authorities and overlap of their responsibilities, gaps in health care policies, healthcare workforce and infrastructure shortages, Primary Healthcare insufficiencies and cultural issues have become key barriers to the development of a strategic plan and the implementation and evaluation of relevant policies.

Structured, comprehensive programmes and national, regional or local policies, guidelines and legislation regarding polypharmacy management and medication adherence have not yet been developed. In contrast, healthcare professionals design and participate in initiatives of medication management activities with the primary motive of improving their practice for their patients. However, these activities are local, restricted to health professionals and patients that wish to participate, are not reimbursed, are not supported by the state and are not scaled up.

There is an urgent need to implement a polypharmacy management policy, by following both ‘top-down’ (from the State) and ‘bottom-up’ (from the society) approaches. This case study provides valuable insight into why there are not any policies regarding polypharmacy and adherence in Greece how relevant programmes could be developed, implemented and evaluated; and, explores which barriers and facilitators could have an impact on change.

Characteristics of the case study

Name of the programme

Polypharmacy Management Policies in Greece

Locality/region and country

Greece (Hellenic Republic) – Nationwide

Health care system overview

The Greek National Healthcare System is mixed financed (Beveridge + Bismarck) (2). The state participates in the budget with 29%, social insurance by 39% and the private sector by 32%. Decisions on health issues are centralized. Physicians have been prescribing, mainly through e-prescription, since 2010. Pharmacists dispense the medication, nurses provide care and all other health professionals provide support. Patients participate in the cost of their medication in a range of 0%, 10%, 25% to 100%, depending on the disease, medicine group and health insurance coverage. Reviews of medication records, patient education and advice on medicines are provided voluntarily by medical doctors and/or pharmacists. The healthcare system is generally characterized by an oversupply of doctors and a shortage of nurses, which causes operational and service distortions and supplier-induced demand phenomena. Moreover, health spending has dropped since 2009, as a result of government-wide efforts focused on reducing the large budgetary deficit.

Programme aims and objectives

There are neither structured, comprehensive programmes nor are there regional or local policies, guidelines and legislation, regarding polypharmacy and medication adherence, in Greece.

The widespread implementation of e-prescription has rationalized and modernized medicine prescription and facilitated the decrease of pharmaceutical costs in the country, ensuring smooth and safe information exchange among prescribing healthcare professionals, pharmacists and social insurance institutions. However, statistical outputs delivered by e-prescription have not yet been utilized for the designing of a national strategic plan, focused on polypharmacy.

Regretfully, polypharmacy is not always sufficiently justified and appropriate. Although single disease-oriented therapeutic protocols have been developed, in practice their implementation is not monitored and is not linked either to treatment or appropriate polypharmacy. Therefore, there are often incidents of harmful drug interactions and contraindications being overlooked, as well as multiple, usually dose-dependent, side effects. Medication personalization and cost/benefit ratio for each patient is not usually evaluated or taken into consideration.

In the absence of a formal policy and/or programme, some contributions are coming from different professional groups in healthcare that choose to provide better services to their patients and perform medication reviews and medicines optimisation, including:

- Community pharmacists offer pharmaceutical care to patients and this service includes management of prescribed medication, OTC remedies, vitamins and supplements and food-drug interactions.
- Hospital pharmacists in some state (public) hospitals review medication for inpatients and out-patients, communicate with prescribers and confirm the "benefit-no harm" principle in the prescribed medication (e.g. incompatibilities, side effects, 7-rights of medication).
- Medical doctors, mostly general practitioners and some specialised ones, usually in primary healthcare settings, keep health records of their patients and have an overview of all administered medication.

All the above initiatives are provided without motivation by national policies or guidelines. Therefore, they rely on the willingness of the health professionals to address pharmacotherapy more rationally and prudently. They include, but they do not focus on, polypharmacy management and they are not necessarily representative of what is happening nationwide.

Institutions included in case study

The following institutions, government bodies, societies and associations could contribute to the development, implementation and evaluation of polypharmacy management policies and were, therefore, included in the case study:

- Hellenic Ministry of Health, e.g the Direction of Pharmaceutical Policy and the 1st Regional Healthcare Authority of Attica (1stRHA /1stYPE).
- EOPYY, the National Organization for the Provision of Health Services.
- IDIKA SA, the e-governance in Social Insurance (public body), which is the national competence centre, responsible for providing technical support for the implementation of electronic prescription at national level.
- EOF: the National Drug Organization.
- Healthcare Professionals' Societies and Associations, e.g. the Athens Medical Society, the Panhellenic Association of Pharmacists, the Hellenic Society of Pharmaceutical Practice (HSPP).
- Patients Societies and Associations, e.g. Greek Alliance for Rare Diseases, Hellenic Diabetes Federation, Greek Federation of Kidney Patients, etc.

Managerial and policy highlights of the programme

Moving from importance to urgency

The development and implementation of a polypharmacy management programme in Greece is not just important, it is urgently needed, but faces multiple barriers. At present, there is a lack of a strategic plan for the development, implementation and evaluation of relevant policies. Authorities and/or institutions are not sufficiently interested to support, or participate effectively, in such a programme.

Key barriers to the development, implementation, and scale up of a polypharmacy and adherence programme remain the fragmented and duplicated healthcare system and the "hospital-centred" care as the predominant type of care delivery.

Co-operation between health professionals is practically non-existent and promotion of collaboration encounters substantial resistance. Incentives and opportunities for participation in polypharmacy management and medication adherence programmes are not offered either to health professionals or to patients. Although the problem of polypharmacy has been articulated and often presented, its management is associated with only direct economic indicators, especially since the onset of the fiscal crisis, and the parameters of medication safety are not adequately taken into account.

The nationwide implementation of e-prescription in our clinical practice is potentially a valuable tool in providing integrated and co-ordinated health care (Integrated Care) and a lot of expectations for its use in this direction have been developed (3). But it still remains in the "data recording" stage, without the possibility of establishing "critical and smart" relationships for each patient and thus substantial support for complex treatment options.

A polypharmacy management policy could be implemented in the country with proper mobilization, through both a 'top down' approach from the State and 'bottom up' approach from the society.

Creating teams and strategic vision

Collaboration of all stakeholders in the management of polypharmacy is essential, in order to address communication gaps and counter confusion on procedures regarding medication management in general. Health professionals, academia, governmental institutions, policy makers and patients need to create a coalition, so that decisions in health are inspired and influenced by discussions rather than imposed by professionals on citizens.

Primary healthcare in our country has experienced many reforms during the last decade and groups of healthcare professionals “show the way” to citizen-centred healthcare by taking initiatives to “connect the dots” of a patient’s journey into healthcare services, and by “building bridges” rather than “raising borders”. Since 2013, the Hellenic Society of Pharmaceutical Practice (HSPP) has been supporting pharmacists that wish to improve their daily clinical practice, so that it responds to the needs of the patients, the society and the country. Community and private pharmacies have taken initiatives towards medicines optimization and they still remain a point of reference for medication management, as citizens visit them more often and more easily than making an appointment with a medical doctor. This fact facilitates the implementation of a polypharmacy management programme in the community setting, as an initial step.

Creating practice models

Human healthcare workforce shortages and healthcare infrastructure deficiencies are the main barriers to the development and implementation of healthcare related policies and programmes. Health care policies also encounter multiple barriers in development, implementation and especially evaluation. There is a general feeling of the existence of a “if you cannot convince them, confuse them” (sic, focus group session) attribute, when it comes to implementation. Coordination of institutions and authorities is non-existent and the overlap of their responsibilities usually hinders policy implementation. A programme for polypharmacy management could be useful but is very difficult to develop, implement and evaluate in a country that lacks other fundamentals in healthcare, such as implemented therapeutic and clinical protocols and is characterized by fundamental gaps in the primary health care sector. The lack of established and functional primary health care services fuels polypharmacy in the country.

Medication surveillance and pharmacovigilance are not effective and reliable reporting (alert) systems as these have not yet been sufficiently developed and implemented. Moreover, there is the emerging danger of dispensing OTC medication through enterprises other than pharmacies, conforming to recently voted legislation, which was enacted under the pressure of the fiscal crisis and the stewardship of Greece by foreign institutions.

The development and implementation of the Electronic Patient Health Record is essential to build on the success of the e-prescription project. E-prescription is a useful tool, but, so far, it has been limited to data collection rather than data analysis and reporting.

Cultural barriers are important as people can appear uncooperative in implementing rules and regulations and seek ways to bypass them, as they usually feel that they are imposed on them.

Collaboration of all stakeholders in the management of polypharmacy can be difficult in Greece because “everybody and nobody” (sic, focus group session) are responsible for effective prevention, treatment and management of diseases. It is not clear who is the “case/care manager” for each citizen/patient that receives health care services. In addition, health professionals’ communication and collaboration is optional rather than culturally and professionally supported.

Patient education on adherence and inappropriate polypharmacy management is essential as patients usually exert pressure on health professionals to have medication prescribed and dispensed. However, the lack of coordination (who, how, where, what type) to provide such education is evident. Furthermore, issues of uniformity of patient education are raised, mainly due to health professionals holding different views and perceptions of evidenced-based care which is usually provided through improvisation rather than SOPs (standard operational procedures).

Building sustainability

Sustainability of a polypharmacy management programme could be achieved. A polypharmacy management programme would decrease the cost of medication and the burden of disease, leading to improvements in the health of the population and the healthcare infrastructure and personnel availability. Consequently, an acceleration and establishment of change in polypharmacy management could be observed, if all the above could be sufficiently demonstrated to all stakeholders. However, whether these short-term and long-term wins would be evaluated by polls, surveys, questionnaires or other means, is still identified.

Conclusions

As it has become apparent, currently, there is neither a polypharmacy nor an adherence to medication management programme, in Greece. Clear policies regarding inappropriate polypharmacy and adherence do not exist.

Development, implementation and evaluation of such programmes require collaboration and partnerships among all stakeholders, which are still difficult to accomplish. The Hellenic Society of Pharmaceutical Practice (HSPP), whose activities are described as an example of a good practice, fills gaps in the continuity of care, mainly at primary healthcare level. However, these activities are local, are restricted to health professionals and patients that wish to participate, are not reimbursed and are not scaled up.

Decisions regarding healthcare policy and management of resources are “top down” and are mainly influenced by the current fiscal crisis. Seamless healthcare is not provided through coordination among involved institutions, but through isolated initiatives of healthcare professionals wishing as their primary motive to improve their practice for their patients.

Health information technology infrastructure to support implementation and monitoring of a programme exists, but it is limited to collecting data rather than transforming the data into valuable information regarding medication management and improved healthcare services.

Policy makers, health system administrators and managers have no role in facilitating (or hindering) the development and implementation of a polypharmacy and adherence programme, as they are engaged in other activities, like budget management and efforts on health expenditure reduction.

Although legislation is abundant regarding healthcare, coordination of provided services and effective deployment of human resources is in shortage. Health professionals are trained in disease management focusing on their specific scientific fields, but have limited interaction with each other. Medication management is restricted to management of over-prescription in order to reduce medication reimbursement by the state. Healthcare societies and associations may offer suggestions and develop plans for cost-effective pharmacotherapy that respect the patients’ right to quality health services, but often counsellors and state or/and EU appointed committees influence the government in making decisions based only and predominantly on financial outcomes

and indicators. Adherence to treatment or/and appropriate polypharmacy seems to be a “luxury” to decision makers, in such a context.

References

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