ÖZET

**Giriş:** Dünya Sağlık Örgütü, Euro Health Consumer Index (ECHI), Organisation de Coopération et de Développement Économiques (OCDE) ve World Markets Research Center (WMRC) gibi dünyaca tanınmış organizasyonların araştırmalarına göre, Belçika sağlık sistemi, dünya sıralamalarında kimi zaman ilk sırayı almış, kimi zaman 5. ya da 6. sıralara kadar gerilemiş olmasına rağmen en iyi ilk 20. sıradaki yerini korumustur. 2013’de yayınlanan, Federaal Kennis Centrum voor de Gezondheidszorg’un (KCE) Belçika Sağlık Sistemi Performans Analizi’ne göre halkın %90’ıdan fazlası sağlık sisteminden memnun olduklarını söylemektedir. Performans Analizi’ne göre halkın %90’ından fazlası sağlık sisteminden, %95’i ise aile hekimlerinden memnun. 2013’de yayınlanan, Federaal Kennis Centrum voor de Gezondheidszorg’un (KCE) Belçika Sağlık Sistemi Performans Analizi’ne göre halkın %90’ından fazlası sağlık sisteminden, %95’i ise aile hekimlerinden memnun olduklarını söylemektedir. İcerik: Belçika’da halkın %95’inin özgürlüğe seçткиleri bir aile hekim var. Yeni bir şikayet icin, bu oranın %82’si aile hekimine danışırken, bilinen bir şikayeti için ise %68'i önceki aile hekimine danışmaktadır. Şikayetlerin %88'i ilk basamakta tedavi edilirken, sadece %12’i kendi başına sevk edilmektedir. Belçika’da doktorlar belirli sınırlı dahilinde serbest ücretlendirme uygulayabildikleri gibi, devletle danışmaktadır. Şikayet için, bu oranın %82’si aile hekimine danışırken, sadece %12’i kendi başına sevk edilmektedir.

**Anahtar kelimeler:** Sağlık Sistemi, Aile Hekimliği, Aile Hekimi, Belçika

Abstract

**Introduction:** According to research of well-known organizations such as the World Health Organization (WHO), Euro Health Consumer Index (ECHI), Organisation de Coopération et de Développement Économiques (OCDE) and World Markets Research Center (WMRC) the health care system in Belgium has been ranked 1st in some articles, while ranking 5th-6th sometimes in the world. However, at worst, Belgium healthcare ranks in the top 20. According to Federaal Kennis Centrum voor de Gezondheidszorg (KCE)’s Belgium Health System Performance Assessment, 90% of people are satisfied with the health system, and 95% of them are satisfied with the general practitioners (GPs).

**Method:** Literature review

**Content:** 95% of people have GPs, and in which they are free to choose. 82% of patients go to GPs for a new complaint. 68% of patients go to GPs for prior known complaints for their initial visit to that particular GP. 80% of complaints are treated in the primary care setting, and 12% of patients are referred to secondary care. In Belgium, while physicians are free to charge by an independent tariff within certain limitations, they may also choose to be paid over the national payment determined annually, by making a contract with the government. Patients pay the cost of the medical service to their physicians; subsequently, a certain amount of it is reimbursed to patients by the mutual (fr. Mutuelle) they are affiliated with. There are on average 1000-1200 patients per physician throughout the country.

**Conclusion:** Independent health practices, freedom of choice of physicians for patients, out-of-pocket payment and reimbursement are the three main features of Belgium’s health system. This allows for competition between the service providers, and competition increases the sensitivity to patients’ needs. This in turn has brought on mutual satisfaction and pleasure in the patient-physician relationship.

**Key words:** Health care systems, general practice, physicians, Belgium


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I. Preface
According to research of well-known organizations such as the World Health Organization (WHO), Euro Health Consumer Index (ECHI), Organisation de Coopération et de Développement Économiques (OCDE), World Markets Research Center (WMRC), the health care system in Belgium has been ranked 1st in some articles, while ranking 5th-6th sometimes in the world. However, at worst, Belgium healthcare ranks in the top 20. According to KCE’s Belgium Health System Performance Assessment, 90% of people are satisfied with the health system, and 95% of them are satisfied with the general practitioners (GPs). Belgian healthcare system is organized in a liberal way, consistent with many other issues in Belgium. 95% of people have GPs whom they are free to choose. 82% of patients go to GPs for a new complaint. 68% of patients go to GPs for previously known complaints for their initial visit to that particular GP. 80% of complaints are treated in the primary care setting, and 12% of patients are referred to secondary care. 75% of the people reported that they go to their GP at least once per year. The purpose of our study is to answer the following question: how does the established and successful Belgian health system and general medicine work?

II. Material and Methods
The data in this study was obtained from the web sites of organizations and institutes such as the WHO, OCDE, ECHI, and KCE. Additionally, some data was obtained from the web sites of Free University of Brussels (ULB) - Department of General Medicine, the Catholic University of Leuven (UCL) Department of General Medicine, and the University of Liège (ULg) Department of General Medicine. The data of School of Public Health (ESP) - Free University of Brussels was also evaluated. The web sites of ‘Institute of National Assurance Maladie Invalidité’ (INAMI), each one of the six mutual organizations (Christian, socialist, neutral, free, liberal, CAAMI), and ‘Groupement Belge des Omniproacticiens’ (GBO) have also been evaluated. Google Scholar and Science Direct were used as search engines. The key words according to MeSH are health care systems OR general practice, practitioners OR physicians AND Belgium

III. Content
1) Evolution of General Medicine in Belgium
From the 19th to mid-20th century, physicians were thought to be the pioneers of general medicine. Almost all of the physicians were men, and they were polyvalent and humanistic. These early physicians separated their time into clinics, home visits, delivery rooms, minor surgeries, dentistry, and pharmacy. They were available at all times. They were known as scientists-scholars who managed populations in a large geography, were very active in social life, and had close relationships with priests and notaries. In the late-20th to early-21st century faculties and hospitals were founded; there was a significant increase in the number of physicians, an explosion of sub-specialties, and incredible inventions in medicine and technology. There were also more migrations and divorces, and thus the deterioration of the family; there has been a choice of young physicians to work less, and many other facts along these lines that have changed the profile of the paternalist physician-patient relationship.

The developments seen in the last 40 years are the beginning of the group work and networking, the adoption of regulation about the general practitioner education (6+3 years) that is defined in European Directives, general medicine departments which have been established to control these educations, computerization and the revolution of the internet, improvement of information and communication networks, accreditation agreements which evaluate qualifications (see: additional file), and the feminization of the physicians, especially in the realm of general practitioners. In 2013, 75% of the students attending the Belgium Faculty of Medicine were female. Today, >50% of Belgian GP’s are over 50 years of age, and the majority of them are male. 74% of physicians’ aged 25-29 are female. According to a study published by “Le Journal du Médecin” physician gender affects practice in family medicine strongly. It has also been reported that female family physicians spend more time in physical examinations, ask more questions about medical history, develop more empathy, and prescribe approximately 30% less prescriptions. Also, female physicians prefer group works and prefer half day shifts. This last point changes the number of patients per physician strongly.

2) Belgian Healthcare System
There have been two different social insurance concepts in European countries after 1945. These
include the Bismarck model which is defined as workers' solidarity, and the Beveridge model which depends on taxes. Even though no country recognizes Bismarck or Beveridge models 100%, one model is always more dominant in a country. In this sense, 66% of compulsory social security insurance of Belgium (ONSS) is financed by workers and employers (Bismarck), while 33% of ONSS is financed by the Beveridge model. Today, ONSS covers 99% of the population, and is shared among a few insurance areas such as unemployment, retirement, child benefit, vacation with pay, and health insurance. National Health Insurance (INAMI - Institut National Assurance Maladie Invalidité) distributes these funds between mutual (fr. Mutuelle) associations, which include six insurances that differ in regard to politics and/or religion. Inspection negotiations occur between mutual and physician and appoint nomenclatures. While physicians in Belgium can charge a fee by independent tariff within certain limitations, they can also charge a fee by signing a contract with the government that is defined every year. In this context, the ratio of physicians that signed the contract was 83%. The examination fee charged by family medicine physicians was 24.50 euros for the year 2013. This fee can reach up to 50 euros for physicians without a contract. Patients pay the fee out of pocket and get compensated from the mutual they are affiliated with (between 18 and 23 euros, according to the status of patients). Because the ratio of compensation is fixed, the deductible paid by the patient for physicians without a contract is high. Patients who are not able to pay the whole fee may pay only the deductible. In this case, mutuals pay the deductible to physicians instead of patients.

Admission to hospital, medical examinations, and medications are paid by mutuals, patients only pay the deductible. Purpose of deductible is to prevent wastage in health system as well as to stimulate sensible use of health care. The salary of patients who can't work due to accidents and pregnancy are paid by mutuals. While these mutuals are not profit-oriented, profit-oriented insurance business is rare in Belgium.

Health expenditures of social insurance system comprise 80% of all health expenditures. Also 78% of Belgium citizens use a complementary health insurance. This additional insurance offers wide advantages such as alternative medicine, psychological therapies, family planning, non-mandatory vaccinations, materials like glasses or prostheses, birth contribution, child care, home health care, house cleaning, sports, obesity clinics, smoking cessation clinics, cultural trips, etc.

3) Work environment
Family physicians that work with independent status can choose a workplace as a family medicine unit. Country-wide, an average GP is responsible for approximately 1000-1200 patients and physicians can schedule their work hours according to need of their patients and offer services with appointments.

There is no obligation or supervision on their work environment, tasks (vaccination, obstetrics...) and work hours. Family physicians identify their needs for equipment, and provide themselves.

70% of physicians work single handedly, while 30% work in a group atmosphere. The latter group is categorized into two subgroups as health centers and health houses. Health houses offer free treatment to their patients under foundations such as municipality and include family physicians, nurses, kinesitherapists and dentists. The health houses are provided incomes from the insurance of each patient. Health centers are founded by the union of few family physicians and specialists.

Other departments where family doctors work:
Hospital shifts
Family planning
School Medicine
Birth and child office (“ONE” – Office de la Naissance et de l’Enfance)
Sports medicine
Occupational physician
Alternative medicine
Administrative unit

4) Family medicine and communication network
One of the strongest points of family medicine in Belgium is the developed communication network that keeps the family physician in a central role, optimizes coordination, and encourages continuity. Communication with specialists
Family physicians refer their patients to specialists with a report, and in return get informed by specialists and hospitals the regarding the course of the treatment. Patients may choose to go to a specialist directly, but patients referred by a family physician are prioritized.

Specialists are supposed to inform family physicians via a letter or computer system. Communication and hospitals
Every patient referred to the emergency service or to hospital should be reported back to the family physician.
During admission, severe changes in the health of the patient should be notified by phone and discharge of the patient should be notified via a report to the patient’s family physician. The family physician may visit his/her patients in the hospital, and may participate in an operation at will. A weekly visit is paid by the mutual whilst in hospital.

Communication with paramedical departments
Family physicians are always in touch with nurses, psychologists, pharmacists, physical therapists, and nursing homes.

5) Centers on duty
There are centers on duty among family physicians network to provide continuance and lighten emergency workload. Centers on duty cover one or few municipalities and grant out of work home visits, night and weekend shifts. This is the route for patients who want to reach their physicians. During out of work hours they are directed to centers on duty. According to the agreement criteria, every family physician must pay his or her center on duty on a yearly basis. (For 2013, the price fluctuates between 120 and 300 euros for physicians between who stay on call and who doesn’t stay on call) For 2013, on duty fares ranged between 55-85 euros for weekday-weekend shifts and day-night shifts. During these on duty shifts, every 30,000 citizens get one family physician. Even though on duty work is obligatory for each family physician, shifts are covered by assistant physicians or physicians in need of money. These centers provide service in certain places or by sending a physician to home service.

6) Home care services
Home care services in France and Belgium are higher compared to other neighboring countries (Holland: 5%; Germany: 10%, England: 16%, Italy: 19%, France and Belgium 30%), however these rates decline every year. There are several reasons for this decline including the increase in number of physicians, easier transports, increased number of on duty centers, and the preference on emergency services. Also, declines in home care services are due to the fact that they are 50% more expensive than the normal fee.

7) Financial supports by INAMI
- Government created a “Global Medicine File” system to centralize patient information and to provide communication between physicians and pay a yearly fee to every family physician using this system. Mutuals make higher payments to patients who take part in this system.
- Every family physician matching the criteria of agreement and accreditation gets a yearly bonus. Also, every contracted physician who matches this criterion can ask for higher fees and patients get better payments from their mutuals.
- Yearly bonus is paid to physicians who take part in informatics file system.
- Physicians who attend to local medical evaluation meetings such as Groupement Local d’Evaluation Medical (GLEM) (+8 FD) and dodecagrup (+12 FD + 2 specialists) get a bonus per attendance, at a limit of 4 meetings in a one year period.
- On condition that working in a municipality that is short on family physicians, each physician is paid an extra 20,000 euros, and this money is not paid back to INAMI.
- Physicians who employ a secretary get a yearly bonus.

All in all, the income of family physicians is provided from 3 different resources. First, a fee is taken for every patient. Secondly, a bonus is taken from mutuals per patient seen (DMG). Finally, yearly bonuses are derived from INAMI.

8) Family physician education in Belgium
Family physician education will be 7+2 years until 2018, and then will change to a 6+3years system. Family medicine is a private sector in Belgium and education is provided out of hospital. Students take 12 hours of theory lessons in the fifth year and are also sent to tutors in private clinics for 2 weeks. Additionally, they join 3 hours of family medicine seminars.

In the sixth year, they go for one month of internship. In seventh year, students who choose family medicine must go for 12 months of overall clerkship, and 6 month of this internship must be in family medicine. Also, 200 hours of family medicine-specific courses are required. Residency program lasts 2 years, and one year during this program must be in a private family medicine unit. According to preference of resident, they can go for a rotation in a hospital for 3 or 6 months.

Also, they are obligated to join seminars during the year for 40 hours. These seminars are carried out by two tutors and include answers to problems
students run into, case discussions, and psychological supports.

To be on duty for 120 hours in a year and in the last year of residency to defend family medicine thesis before an inter-university jury are among conditions to be a family physician.

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<th>Agreement and accreditation criteria</th>
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<td>5 requirement of certificate so called agreement</td>
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<td>-To treat at least 1200 patients in a year</td>
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<td>-To grant continuity in treatment</td>
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<td>-Home visits</td>
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<td>-To own a clinic with a team</td>
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<td>-To keep patient charts up to date by contacting other specialists</td>
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Accreditation has 13 criteria and includes the condition to own 20 CP in a year. (1 CP = 2 hours, 2 CP= half day, 3 CP= whole day) Among these, 3 CP requires attendance to “ethics and economy”, 2 CP requires attendance to local doctor alignment meetings called GLEM (Groupe Local d’Evaluation Medical).

IV. Conclusion

The healthcare system in Belgium offers mutual satisfaction and reassurance to both physicians and patients because of an extensive and developed social health insurance, inter-society organizational cooperation, accessibility and equality. Also, independent medical application, freedom of choice for patients, patients’ paying service fee out of pocket, free and independent work environment for physicians allow for a highly functioning environment.

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References:
2. KCE (Federaal Kennis Centrum voor Gezondheidszorg), La performance du système de santé Belge rapport ; 2012-2013.