

Country report France – February 2016



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Health care | Risk factors | Prevention methods | Prevention activities | Cardiac rehabilitation | Future

I. Structure of Health care in France

France is a western European country with a population of 66.5 million inhabitants, including overseas departments and territories. Life expectancy at birth is 78.7 years for men and 85.2 years for women.

Health care structure and insurance system:

The health care system in France is an integrated network of public and private hospitals, and ambulatory care delivered by private physicians and other health professionals. Universal health insurance coverage (National Health Service or NHI, the so-called "Sécurité Sociale") allows every citizen to be taken care of, irrespective of its age, social status or wealth. This system is mainly funded by mandatory health contributions levied on all salaries and by central government funding. Users only have to pay a small fraction of the cost of most acts of health care they receive (directly or via complementary health insurance), or even nothing at all for 30 chronic ailments. Health care is coordinated regionally by dedicated Regional Health Agencies (under the authority of the Ministry of Health), and locally dispensed by hospitals, clinics, doctors, other health care providers, pharmacies, ambulance companies, etc. As soon as he or she is registered, every citizen receives a health insurance smartcard containing all his health related information. The NHI system is almost entirely computerised.

There are two kinds of hospitals in France. Generally speaking, these are known as hospitals when they are state run and clinics when they are privately run. Most private clinics are state approved, and can therefore work for the National Health Service. Many specialists work in both hospitals and private clinics. Since they are self-employed professionals, they can sell their services to whatever hospital or clinic will pay them. Both general practitioners (GPs) and specialists can refer patients for hospital treatment including cardiac rehabilitation if necessary. Within the framework of the health service, physicians can send patients for treatment in either a state-run hospital or a private clinic, whichever they consider to be the best for the purpose or to provide the fastest service. All large cities have an emergency ambulance service (called "SAMU") with paramedics and medics who are called out for accident or emergency to provide immediate assistance and start treatment before transportation to a specialised unit at

the nearest hospital facility. Primary health care is provided in a network of 102,485 general practitioners (a ratio of 155 GPs per 100 000 inhabitants).

Finances

In 2014 the total cost for CVD care is estimated to be 16.6 billion euros (0.8% of gross domestic product [GDP]). Cardiovascular acute care estimated costs 13.7 billion euros, cardiovascular prevention costs 3.6 billion euros. A more recent analysis from National Health Insurance Information System shows a total of 3.5 million people (mean age: 71 years, women 42%) were reimbursed by the general health scheme for CVD (standardised rate: 6.5%, coronary heart disease: 2.7%, arrhythmias/conduction disorders: 2.1%, stroke: 1.1%, heart failure: 1.1%). The total sum reimbursed by all schemes for CVD was €15.1 billion (hospital: 50%, outpatient care: 43% including drugs: 15% and nurses/physiotherapists: 12%): coronary heart disease: €4 billion, stroke: €3.5 billion, heart failure: €2.5 billion.

II. Risk factor statistics

CVD Mortality

Mortality from CVD has decreased over the past 30 years, being 38 % lower than the OECD average. There are currently 111 800 CV deaths in men and 65 000 in women every year. Hospitalisation for CV cause reaches 894 150 per year, 72 % in public hospitals. Likewise, 61 600 patients are hospitalised for an acute myocardial infarction (AMI) (68.4 % in men); 30-day mortality rate is 6.2 %.

Resources

In 2015, 6 887 cardiologists are listed (24 per 100 000 inhabitants) among which 24 % are women, and 70 % have private or mixed (private and hospital) activity.

Professional organisations have worked together with the National Authority for Health to develop common and shared based clinical practice indicators for AMI to deliver better care and promote better coordination of care. The same goal is planned for heart failure management.

Access and quality of CV care are in line with other OECD countries. There are 454 CV surgeons, among which 283 seniors cardiac surgeons, operating in 86 hospitals (coronary artery bypass grafting [CABG] rate is 34.4 % lower than OECD). There are more than 1000 interventional cardiologists in > 200 centres undergoing 185 000 percutaneous coronary intervention (PCI) (2761/million inhabitants), a rate higher than the OECD average (+ 9.6 %). There are 33 trans-catheter aortic valve implantation (TAVI) centres. The implantable cardioverter-defibrillator (ICD) and cardiac resynchronization therapy device (CRT-D) rate implantation is 82 and 66 by million inhabitants, respectively.

Main CVD risk factors

Some indicators of prevention and lifestyle in France are better than the OECD average but there are some worrying signs. According to a national survey conducted in 2006, more than 3/4 of men and 2/3 of women have at least one modifiable risk factor, especially in deprivation conditions.

Smoking: Despite a strong increase in prices between 2002- 2004 and the prohibition of smoking in public areas since 2006, smoking rate remains high (28 %). In 2014 the smoking national plan has been issued with 3 axes:

1. to protect the young from starting smoking
2. to help smokers to stop
3. to act on the tobacco economy with a aim of reducing smoking prevalence by 10 % in 5 years

In 2014 the tobacco sales were 5 % less than in 2013. However social inequalities remain constant. The use of substitution treatments and non-medical counselling by phone are decreasing whereas the electronic cigarette and tobacco counselling through website is growing.

Physical activity: In 2014, a national survey showed that 75 % of people didn't reach the recommended physical activity (10 000 steps/day). Between 2012 and 2014, sedentary has increased from 22 to 29%, and the proportion of very active people has decreased from 17 to 14 %. However, 49 % of the French people reported to practice a physical or sports activity: walking, footing, cycling or fitness. Indeed, the main barriers are lack of time, equipment and lack of motivation whereas the main motivations for a physical activity are well-being, health and pleasure. More alarming is the reduced activity from adolescents and young adults, with an increasing time spent in front of screens (81 % of 14-24 years spend more than 2 hours in front of screens).

Overweight and obesity: Although the rate of obesity has been slightly decreasing in children, reaching 10 %, overweight and obesity have increased among adults in recent years. Abdominal obesity concerns 64.6 % of women and 51.2 % of men according to the IDF threshold. In 2012, a national survey showed that the mean body mass index (BMI) was 25.4 kg/m², representing an increase of 1.1 kg/m² in 15 years.

Diabetes: The diabetes related crude-rate mortality in France is estimated to be 0.5 /1000 inhabitants and represents 6.1 % of the global mortality. The prevalence of treated diabetes is estimated to be 4.4 % of the population (type 1: 6 % and type 2: 92%), higher in men than in women, and in overseas departments. The mean age of diabetics is 65.1 years. Screening for diabetes is recommended in France: and 71 % of subjects > 45 years have had a measure of glycaemia. However, over last 10 years prevalence has slightly increased by 6 % in 10 years but with great disparities between areas, socio-cultural status, and association with other risk factors.

Hypertension: Hypertension is still prevalent in France, particularly in the 55-74 age groups, in men, in low education subjects, in the north, east and overseas departments: 31 % of the 18-74 years of patients have high blood pressure > 140/90 mmHg. In these patients 82 % receive a treatment but 50 % are controlled. Overall, 22% of French population has an antihypertensive treatment.

Dyslipidaemia: The French national nutrition and health cross sectional survey showed that nearly 30 % of population has measured or treated LDL hypercholesterolemia (> 1.6 g/l). In the population without cardiovascular disease, hypercholesterolemia represents 30 %, isolated low HDL 12 %, hypertriglyceridemia 4 % and 15 % of patients receives lipid-lowering agents. On the contrary, in coronary patients the prevalence of low HDLc is 27 % and 97.1 % of patients receive statin treatment.

Psychosocial factors: The proportion of psychological factors is estimated as 20 % for working stress, and 18 % for depression. In France, and despite universal complementary health coverage, social deprivation is associated with an excess in coronary mortality, onset of diabetes, central obesity, lipids disorders. These results pinpoint that facilitated consultations and treatments are probably not yet sufficient or effective for CV prevention in this sensitive population.

III. Main actors and Prevention methods

Who delivers?

In France, numerous actors are involved in CV prevention: institutional agencies (National Institute for Prevention and Education on Health, Ministries of Health and Sports, National Health Authority, etc.) or organisations (French Federation of Cardiology, French Society of Cardiology, patient association called "Alliance du Coeur", etc.). The main stakeholders are GPs, private or public cardiologists and specialists working in preventive institutions.

National programs initiated by the Ministry of Health include various action plans: nutrition and health, quality of life in chronic diseases, obesity, addiction and tobacco plans. The National Institute for Prevention and Education on Health, with a budget > 26 M euros, and other government agencies (OFDT) develop campaigns of communication by media (TV, press, etc.), information documentation and guidelines for stakeholders (cities, schools, sport associations to promote physical activity). As an example, the obesity plan from the Ministry of Health (2010-2013) was conducted in 37 specialised and 5 integral multidisciplinary centres (including research, teaching, innovation and possibility to make very specialised treatments (genetics, etc.)).

The mission of the French Federation of Cardiology (FFC) is implementation of CV prevention. FFC together with the patients associations ("Alliance du Coeur") regularly initiate primary and secondary prevention campaigns, documents to promote CV health, and help financing phase III rehabilitation.

Among health professionals, GPs are in front line for CV primary prevention: screening, management and treatment. Cardiologists endorse CV secondary prevention. Others specialists also take part, such as in diabetes, tobacco care, oncology, gynaecology, etc. In Cardiac Rehabilitation (CR), structured patient education is delivered by multidisciplinary teams including nurses, dieticians, physiotherapists and cardiologists.

Where?

Primary care is mainly delivered from GPs. However, some primary care centres also participate to screening and management of risk factors. In some hospitals, there are providers of prevention dedicated to high risk patients.

Secondary prevention after a cardiovascular event is delivered by CR programs (public and private) in addition to cardiologists in private practice.

Guidance

National and European guidelines endorsed by the French national society of cardiology is used to enhance the promotion of CV prevention. However, the current emphasis on acute CV care as opposed to CV rehabilitation and prevention remains a major flaw of current training of the young doctors.

Quality control

Audits on prevention are regularly performed through CV risk assessments, national surveys, and for some specific diseases through periodic quality controls according to evidence-based care that are conducted by various national health agencies or scientific institutions.

IV. Main Prevention activities

A large number of initiatives for promoting CV health are developed in France, initiated by a vast array of institutions, organisations, private insurances and groups. Coordination is somehow lacking.

Campaigns

Important health promotion projects are implemented at the national and/or regional level. These projects are conducted and coordinated by numerous stakeholders.

Among campaigns on health protection and promotion, one should mention:

- Campaigns and initiatives from the French Federation of Cardiology: Initiation for cardiac resuscitation ("1 life-3 actions"), annually Heart course (a national day dedicated for CV information and actions with diverse activities), CV prevention for women, website platform dedicated to primary or secondary prevention, and lobbying at the political level to obtain a CVD national plan, etc. [1, 4]
- Since 2007, through national regulation, all commercials for food and certain drinks (alcohol and sodas) on television, cinema and/or written press should include a fixed or scrolling banner with health injunctions like "For your health, eat at least five fruits and vegetables a day", "For your health, practice a regular physical activity", "For your health, avoid eating too fat, too much sweetened, too much salted" and "For your health, avoid nibbling between the meals" [2,7]
- Screening of CV risk in pharmacies [3]
- Interventions on the workplace with occupational physicians delivered by regional associations of cardiology or heart and work associations. [1, 4, 8]
- European Guidelines on CVD Prevention in clinical practice have been successively endorsed by French Society of Cardiology, French-translated and distributed as pocket versions during national congresses or events.
- To fight overweight and obesity, France has introduced a tax on soft drinks in 2012 [5,6]

Education

A low level of training in primary and secondary prevention is currently proposed in medical education programs, whereas educational training for CV prevention and rehabilitation, or for smoking cessation are organised by universities, CV societies or foundations, but on a volunteer basis. Better education in these crucial issues is needed.

Links:

1. <http://www.fedecardio.org> (in French only)
2. <http://www.inpes.sante.fr> (in French only)
3. <http://www.depistage-officine.com/>
4. <http://www.alliancecoeur.fr/> (in French only)

5. <http://www.fondation-recherche-cardio-vasculaire.org/>
6. <http://www.preventionsante.eu/> (*in French only*)
7. <http://www.mangerbouger.fr/> (*in French only*)
8. <http://coeur-et-travail.com> (*in French only*)

V. Cardiac rehabilitation

For whom

Cardiac rehabilitation services are proposed in France according to the class I or II, level A or B national guidelines: in coronary patients after acute coronary syndrome (ACS), CABG, PCI; in post-operative patients (aorta, congenital heart diseases, vascular diseases); in heart failure patients (reduced or preserved ejection fraction) with or without devices (CRT, LVAD, ICD), after heart transplantation, in peripheral vascular patients and in high CV risk patients, etc. These guidelines are published and downloadable in full text and in pocket versions. No aging limits are specified, but obviously, indication depends on the autonomy and possibility to perform a complete program that includes exercise training, CV risk assessment, prevention and patient education.

By whom and how

Cardiac rehabilitation in France is performed in public or private centres, in residential (in general after surgery and very high risk patients) or ambulatory settings, for a mean of 20 sessions (number of sessions may be increased according to severity of the cardiac disease). Referral process uses national automatised software connecting acute care and cardiac rehabilitation centres (<https://trajectoire.sante-ra.fr/trajectoire>). The usual delay for referral and inclusion is around 5 to 15 days after an ACS and 15-20 days after cardiac surgery. All patients have an initial complete CV evaluation that at least includes evaluation of exercise capacities (exercise test: cycling > treadmill, CPET and or 6-min walk test), cardiac function and arrhythmias. Patient then enter a 3 to 5 days/week program which includes exercise training, patient education, psychological and social counselling and treatment optimisation. This multicomponent strategy requires involvement of a medical and paramedical staff (at least a cardiologist, nurses, physiotherapists and a dietician are mandatory). Premises, equipment and emergency carts are also submitted to regulations by a national law. All programs are conducted under a cardiologist supervision and responsibility. An exercise-based only program is not considered as a CR program. Exercise training programs are personalised and usually conducted according to a target heart rate. At the end of the program, patients undergo a new assessment of CV status, and a complete report is addressed to the private GP, cardiologist and patient.

The current referral rates are 36% after acute myocardial infarction (AMI), 60-70 % after surgery (mostly CABG and valve surgery), 9 % after a first hospitalisation for heart failure. Growing populations referred for CR are patients with a left ventricular assist device, a total artificial heart or an ICD and elderly patients.

In general, compliance is good (more than 80 % of scheduled sessions for patients who start the programs).

Phase III, long term maintenance is available in non-supervised settings, mainly 2 sessions per week into patient's clubs, supervised by the FFC.

Audit and costs

CR referral after AMI is one of the criteria of good clinical practice for the National Health Authority. Quality of CR services and their agreement with the guidelines are regularly (every 4 years) supervised by the Regional Agencies of Health. There are periodic national surveys (coordinated by the CR working group) on outcomes data, such as improvement on physical capacities, treatment optimisation and behavioural changes.

Participation in Phase II programs is fully covered by the NHI. Whereas phase III programs are charged to patients.

Links

- <http://sfcardio.fr/GERS> (*in French only*)

VI. The Future

Needs

CV prevention in France should be primarily focused now on those risk factors associated with health behaviour: smoking, sedentary and diet; and take into account the growing aging population who needs specifically targeted prevention actions.

Moreover, CR referral should be more largely promoted, and number of centres increased.

Possibilities

Success might only be expected through a more effective collaboration and coordination between the main actors and stakeholders. CV risk assessment and prevention could be included as quality standards of health care.

The growing interest in cardiac rehabilitation of the young cardiologists should be encouraged, since there are many possibilities of careers.

Obstacles

The economic burden of CVD is strong, with great impact on social and health costs. However, up to now, the investment of the authorities of health on prevention has been limited by allocation of precious resources towards acute care and other medical priorities.

Plans

For the next 5 years we should:

- significantly reduce smoking rate,
- increase actions to improve nutrition and physical activity behaviours,
- increase the percentage of patients with controlled hypertension,
- improve cardiovascular prevention in social deprivation populations,
- increase the proportion of relevant patients who could benefit from a cardiac rehabilitation and secondary prevention,
- develop prevention education during medical studies and for GPs.