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## SOCIAL PHARMACOLOGY

# Prescription-free consultation in France and Europe: Rates' evolution, physicians' and patients' perceptions from 2005 to 2019, a systematic review

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## KEYWORDS

Prescription drugs ;  
 General medicine ;  
 Doctor – patient  
 relationship ;  
 Prescription free  
 consultation

## Summary

**Background.** — In 2005, the rate of prescription-free consultations in Europe varied widely: 57% in the Netherlands, 28% in Germany, 17% in Spain and 10% in France.

**Objectives.** — To assess the number of prescription-free consultations in European countries since 2005 and to analyse the perceptions of patients and general practitioners (GPs).

**Methods.** — This was a systematic review of the literature from 2005 to 2019, including both quantitative and qualitative studies on prescription-free consultations.

**Results.** — Of 13,380 studies, 28 were included. The rates of prescription-free consultations were 30% in Belgium, 41% in Slovenia, 47% in the UK and 22% in France, according to the most recent figures. Swedish GPs estimated their prescription-free consultation rate at 70%. The only significant factor that decreased the number of prescription-free consultations was laboratory visits. According to the qualitative data, the main constraint was lack of time; the main facilitating factor was a shared medical decision.

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*Conclusion.* — Medical visits decreased the number of prescription-free consultations. According to qualitative studies, the main barrier was lack of time. The countries with the highest drug consumption levels were those with the lowest number of prescription-free consultations. Achieving prescription-free consultations to combat overmedication and for the quality of care and the environment is a priority. To understand and analyse consultations without prescriptions, a quantitative observational study was launched in France in 2020.

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## Abbreviations

CONSORT	Consolidated Standards of Reporting Trials
COREQ	Consolidated criteria for Reporting Qualitative research
GP	general practitioner
HAS	French National Authority for Health ( <i>Haute Autorité de santé</i> )
OTC	over the counter
STROBE	Strengthening the Reporting of Observational Studies in Epidemiology
WONCA	World Organization of Family Doctors

### Key messages

- Many consultations do not require a prescription.
- France is the largest prescriber of drugs in Europe.
- France has fewer consultations without a prescription than other European countries.
- It is a priority to achieve consultations without a prescription to fight against overmedicalisation and for the quality of care and the environment.

## Introduction

Prescription-free consultations in Europe were studied by the National Health Insurance Fund among 4000 patients and 1000 European general practitioners (GPs) in 2005 [1]. In France, the rate of drug consumption is one of the highest in Europe [2]. Iatrogenesis leads to 130,000 hospitalisations and 10,000 deaths per year [3]. From an environmental, medical (iatrogenic) and economic point of view, it is necessary to reduce the number of drug prescriptions. Combating overmedication is a priority. A feasible objective is to carry out CPD. According to World Organization of Family Doctors (WONCA), many consultations do not require a prescription and only serve to reassure the patient [4]. In 2005, in the Netherlands, consultations without a prescription accounted for 56.8% of all consultations; in Germany, this rate was 27.7%; in Spain, 16.9%; and in France, only 9.8%. This work is transversal to European countries with different cultures,

organisation and reimbursement of care. It seemed relevant to follow the evolution of the rates longitudinally in order to minimise these limitations.

The objective of this study was to evaluate the evolution in the number of prescription-free consultations in France and Europe since 2005. The secondary objective was to analyse patients' and GPs' perceptions of prescription-free consultations to identify barriers and facilitating factors.

## Methods

### Study design

To meet our objective of reviewing the status of over the counter (OTC) consultations, we conducted a systematic review. This study followed the updated guidelines for reporting systematic reviews: the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement [5]. The PRISMA 2020 checklist is available in Appendix 1 [6].

### Data sources and search strategy

The PubMed/Medline, Cochrane and Embase databases were searched from 8 to 11 November 2019 by equations created with the librarians of the Clermont-Ferrand Faculty of Medicine (NPD) and the Paris Descartes Faculty of Medicine (MC and IB) (Appendix 2). The SuDoc, LiSSa and BDSP databases were searched with the terms "prescription" and "general medicine"; the term "nonprescription" referred to drugs with optional medical prescriptions. An additional manual search was performed on Google Scholar, European health agency websites, in European MD databases and in bibliographies of selected studies.

### Study selection

Qualitative, observational studies, such as cross-sectional and cohort studies, as well as (non) randomised trials and surveys were included. Included populations were primary care or general practice populations, and studies had to have been published between 01/01/2005 and 08/11/2019 in English or French. The criteria for non-inclusion were studies published before 2005, studies on a specific drug or disease, on a specific population, on secondary care or

hospital care, studies with a score below 50% on the quality grids, and sociological studies.

## Assessment of study quality

Observational studies were assessed according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines [7], randomised controlled trials were assessed according to the Consolidated Standards of Reporting Trials (CONSORT) [8], and qualitative studies were assessed according to the Consolidated Criteria for Reporting Qualitative research (COREQ) [9], with results expressed as percentages.

## Data extraction

Two researchers (BM and AR) independently reviewed the titles, abstracts and full texts of the studies and then the quality grids. In case of discrepancies, an investigator (HVR) provided feedback.

## Data analysis and synthesis

Information extracted from the selected studies included study type, study design, outcome type, authors, funding, conflicts of interest, country, year of publication, population type and quality assessment.

## Results

The search found 13,378 references; 2 studies were added by an additional manual search, 61 had their full texts read, of which 29 were retained, and one study with less than 50% on the COREQ grid was excluded [10]. The flowchart is presented in Fig. 1. The 28 included studies from 10 European countries comprised 8 published studies (5 quantitative and 3 qualitative studies, Appendix 3) and 20 theses (6 quantitative and 14 qualitative studies, Appendix 4). The 10 European countries were the UK [11], Belgium [12], Slovenia [13], France [14] and Sweden, Malta, Greece, Cyprus, Turkey and the Czech Republic in the OTC SOCIOMED project.

## Four quantitative studies on prescription-free consultation rates

In the UK in 2007, the rate of prescription-free consultations was 46.7% in the control group of a randomised controlled trial on the usefulness of a preconsultation patient form [11]. In Belgium in 2009, in a cross-sectional study, the relationship between prescription-free consultations and patients' expression of 3 components (expectations, concerns, opinions) was statistically analysed. The rate of prescription-free consultations was 30.2%, with all reasons combined (36.1% during consultations for acute reasons and 26.2% during follow-up consultations). When patients expressed their concerns and opinions, there were more consultations without a prescription but not when they expressed their expectations [12]. In Slovenia in 2014, a multicentre cross-sectional study found 41.5% of consultations did not include a prescription. Factors associated with more consultations without a prescription were female GPs,

GPs under 44 years of age, male patients and patients with higher levels of education [13]. In France in 2014, out of 20,600 consultations, 19.3% did not include a prescription [14,15] (Table 1).

## Two qualitative studies (France)

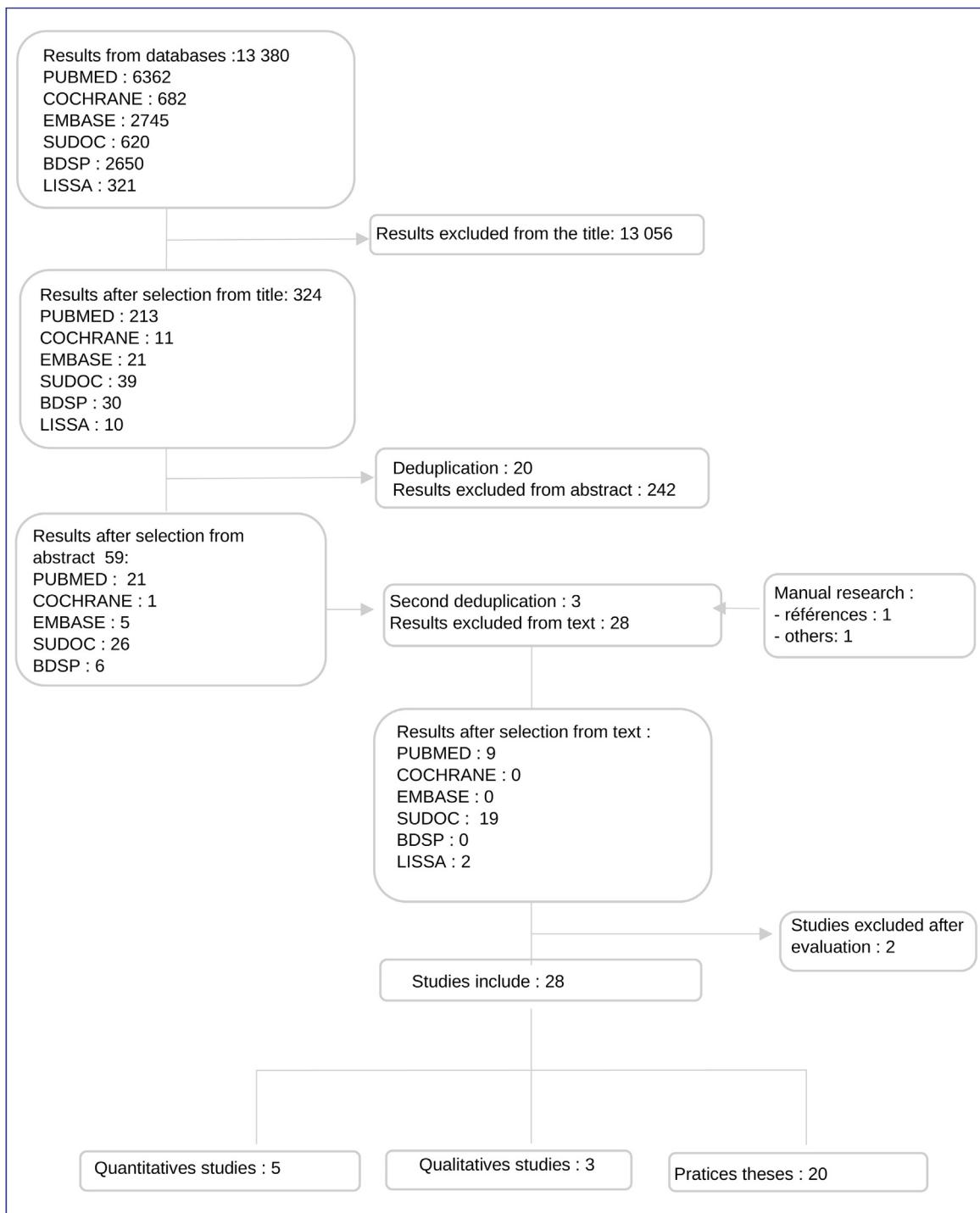
Studies by Duffaud et al. in 2014 [16] and Deleplanque et al. in 2015 [17] concluded that consultations without prescriptions were possible if explanations were integrated into a good doctor – patient relationship. The priority expectations of patients and GPs were the same. Patients wanted more advice (Table 2). The facilitating factors for GPs were the quality of information, patient education, GP experience, explanation of iatrogenic risk, comparison between colleagues, certain tools (complementary examinations, work stoppages), evaluation of expectations and time (Table 3).

## The OTC SOCIOMED project: combining qualitative and quantitative studies (7 countries)

The OTC SOCIOMED project was funded by the European Community to promote better drug use. An educational intervention based on the theory of planned behaviour targeting the drug-prescribing intentions of general practitioners in Mediterranean Europe was conducted. The first qualitative component in 2013 [18] was used to create the questionnaire by interviewing Greek general practitioners [19]. Their perceptions were similar to those of French GPs. They emphasised the negative influences of industry, pharmacists and specialists. In 2015, the second quantitative component estimated the rates of prescription-free consultations in 7 European countries. Swedish GPs estimated the rate at 70%, Maltese GPs at 40%, Greek, Czech and Turkish GPs at 20% and French and Cypriot GPs at 10% (Table 1) [19]. Irrational prescribing behaviour (prescribing to a patient's representative, prescribing medicines already purchased at the pharmacy, repeat prescriptions for chronic diseases without patient examination, and prescribing in the absence of a definitive diagnosis) was more prevalent in Greece, France, Turkey and Cyprus.

## Approximately 20 theses from France

Among the 6 quantitative theses, 2 theses included rates of consultations without prescriptions: 23% in 2009 [20] and 24.11% in 2016 [21]. In 2007, the main barriers to prescription-free consultations were as follows: the patient was waiting for a drug, the GP found it difficult to "say no" and lack of time [22] (Table 2). Patients' and GPs' perceptions were similar, and they felt that the number of prescription-free consultations had increased. Two qualitative focus group and semistructured interview theses [23,24] in 2012 formed the basis of an article [25]. Consultations without a prescription were difficult because of the representations of GPs and patients in France. The tools proposed to overcome these representations were the adoption of a "patient-centred approach" and the encouragement of patient autonomy, the demedicalisation of certain health

**Figure 1.** Flow chart.

problems and honesty in recognising the absence of effective treatment.

## Discussion

### Main results

The rates of prescription-free consultations were 30.2% in Belgium (2009) [12], 41.5% in Slovenia (2014) [13], 46.7%

in the UK (2007) [11] and 19.3% in France (2014) [14]. In 2015, in Sweden, GPs estimated the rate of prescription-free consultations to be 70%; GP estimates were 40% in Malta, 20% in Greece, the Czech Republic and Turkey and 10% in France and Cyprus [19]. Regarding the French and Greek qualitative studies, consultations without a drug prescription were difficult because of the representations of GPs and patients. The tools proposed to overcome these representations are the adoption of a “patient-centred approach” and the encouragement of patient autonomy, the

**Table 1** Percentage of prescription-free consultations by country and year.

Country	Measured rates 2007/2008/2009	Estimated rates <sup>a</sup> 2014/2015	Estimated rates <sup>a</sup>	
			2016	2015
France	23	19,3	24	10
Slovenia		41,5		
Belgium	30,2			
United Kingdom	46,7			
Cyprus			10	
Greece			20	
Czech Republic			20	
Turkey			20	
Malta			40	
Sweden			70	

<sup>a</sup> Prescription-free consultation rate estimated by general practitioners.

**Table 2** Patients' perceptions.

Themes	Main ideas	Number of attendees
General	Prescription free consultation rate	5/7
Negative feelings	Non-recognition of patient status	7/7
	Guilt for consulting/embarrassment/uncomfortable	6/7
	Refusal/disagreement	5/7
	Distrust/concern	3/7
	Anger	3/7
Positive feelings	Reassuring/confident	7/7
	Acceptance/satisfaction	6/7
Brakes	Waiting for medication	7/7
	Habit	6/7
	French culture/symbol of the drug	6/7
	Demand for effectiveness/rapidity of recovery	6/7
	Lack of time/overload of the doctor	5/7
	Influence of laboratories on the doctor	4/7
Enablers	Doctor/patient relationship	7/7
	Explanations/dialogue/shared decision (other expectations from the consultation)	7/7
	Mistrust of the drug	5/7
	Availability (can be seen again)/time	4/7
	Clinical examination and diagnostic approach	3/7
	Sick person who accepts his or her condition and the natural progression	2/7
	Alternative/paramedical medicine	2/7
	Deferred prescription	2/7
Ambivalent factors	Reasons for consultation	7/7
Solutions to be developed	External factor (friends, media, Internet)	4/7
	Written advice	7/7
	Education/prevention	5/7
	Discontinuing drugs	4/7
	Dietary hygiene rules	4/7
	Public health campaign	3/7
	Reference websites/teaching aids	3/7
	Initial training for doctors	2/7
Evolution	Towards a recent decrease (fewer GPs + fewer applications)	6/7

GP: general practitioner.

**Table 3** GPs' perception.

Themes	Main ideas	Number of attendees
General	Rare/infrequent prescription free consultation	9/11
Negative feelings	Guilt/embarrassment/uncomfortable	10/11
	Devaluation of the patient/consultation	9/11
	Feeling of ineffectiveness/inaction	9/11
Feelings positive	Satisfaction	7/11
	Valuation	7/11
Brakes	Lack of time/overload	11/11
	Patient expectation/difficulty in saying no	11/11
	Habit/reflex	11/11
	Fee for service	10/11
	Problem of consensus	9/11
	Diagnostic doubt/fear of medical error	8/11
	French model/culture	8/11
	External influence (medical visitors, laboratories)	8/11
	Fear of nomadism	6/11
	Additional requests	5/11
Enablers	Explanation/education	11/11
	Experience	11/11
	Iatrogenic risk	10/11
	Diagnostic tools, complementary examinations, discontinuation, deferred prescription, specialist's opinion	9/11
	Availability/time	9/11
	Assessing the patient's expectations	9/11
	Supportive clinical examination	7/11
	Low competition	4/11
Ambivalent factors	Doctor/patient relationship	11/11
	Reasons for consultation/type of patient	11/11
	Initial/continuing education	10/11
	Replacement/installed	6/11
	Personal history	4/11
Solutions to be developed	Discontinuation	10/11
	Recommendations	9/11
	Public health campaign	8/11
	Advice sheets, what to do	8/11
	Remuneration, upgrading of other roles	8/11
	Rembursement/validation of non-drug alternatives	5/11
Evolution	Towards a recent decrease (fewer GPs + fewer applications)	10/11

GP: general practitioner.

demedicalisation of certain health problems and honesty in the recognition of the absence of effective treatment.

### Strengths and limitations

Most of the qualitative studies were French (16 of 17). It is possible that the fact that prescription-free consultations are rare in France encourages exploratory studies with qualitative methods. The comparison of figures between countries is not adjusted for many organisational and cultural elements, but trends are researched longitudinally. Qualitative studies could also be limited by social desirability bias in patient responses.

The studies were assessed using quality grids, and only those with a quality score above 50% were retained. This selection ensured the quality of the data on which this work was based. One of the strengths of our work was

the inclusion of both quantitative and qualitative studies to contextualise the rate of GP prescription-free consultations and patients' perceptions. The broad search equation in the absence of a MeSH keyword for prescription-free consultations limited the risk of selection bias. The additional manual search and analysis of the bibliographies of included studies also limited this risk. The keyword "prescription-free consultation" was proposed to PubMed via its website support. PubMed sent a thank you email, so time will tell if this keyword is adopted.

### Implications

#### Patient expectations

According to Spanish cohort studies that explored patient expectations, the main expectation of patients was not the prescription of medications but listening [26,27]. In these

Spanish studies, GPs overestimated patients' expectations regarding drug prescriptions. The shared medical decision, in its only dimension of collecting the patient's expectations, did not seem to favour nonprescription. The shared medical decision, in its dimension of investment of the "doctor effect" by its competences, could be more effective. The GP becomes a therapeutic tool to promote patient autonomy and demedicalise certain health problems. The GP transmits his knowledge, explains it and manages uncertainty: "The most used medicine in general medicine is the doctor himself" (Balint) [28].

## European sociological differences

Northern European GPs had more consultations without prescriptions [19]. In the logic of "restraint" mentioned by sociologist S. Rosman, prescribing drugs is not a central tool, and education and reassurance are important therapeutic means [29]. GPs in the Netherlands, for example, have stated goals of controlling expenditures, complying with recommendations and empowering the patient. GPs in southern Europe (France, Greece, Spain), on the other hand, tend to talk about constraints: building patient loyalty, legitimising themselves and managing fatigue [17]. They practice in a logic of "immediate repair" or "aetiological-therapeutics", with the prescription of drugs as their main tool [25].

## The pharmaceutical industry

GPs who receive a medical visit from a member of the pharmaceutical industry have fewer consultations without a prescription, which is the only statistically significant criterion [14,30]. GPs could be supported in rational drug prescribing [30]. The Swedish Wise List contains 200 essential medicines for primary care, prescribers and the public [31,32]. In France, there is no list of essential medicines, and the public database of medicines that allows the general public and health professionals to access data and reference documents on marketed medicines (government website) is underused [33]. In 2011, the French National Authority for Health (HAS) mentioned the poor information provided to general practitioners on recommended nondrug therapies [33]. It cited measures to be implemented similar to the solutions presented in the articles in our review (preventive consultations, advice sheets).

## Care organisations

Fee-for-service payment is the main method of remuneration in France. In Germany, the Netherlands and the UK, capitation or lump sum payments dominate [34]. Fee-for-service payment may encourage drug prescribing, which contributes to the closure of the consultation [29]. Patient education and explanations are time-consuming in a consultation and may be limited by fee-for-service payment. However, in the long term, education could reduce the number of consultations for each patient and free up medical time. According to our review, French patients have a high demand for preventive consultations, which would be facilitated by the absence of payment [29]. The organisational system could explain the varying rates of prescription-free consultations from one country to another. For example, in

the UK, nurses have long had the right to prescribe, and other European countries have followed this trend. Consultations in France are however long compared to the rest of Europe with 17 minutes; French consultations are in 8th position out of 67 countries with the UK, the countries and Germany between 7 and 10 minutes [35,36].

## Elective prescriptions and advice cards

Elective prescription medicines (which can be dispensed directly from a pharmacy) account for 15.4% of the market in France, 33% in Germany and the Netherlands and 57.8% in the UK [17]. When countries have more over-the-counter (OTC) medicines, their total consumption of medicines decreases. The Nederlands Huisartsen Genootschap produces advice sheets by topic and disease [26]. The availability of advice sheets is leading to an increase in the number of prescription-free consultations in France [25]. Few good-quality patient information documents have been developed in France, yet advice changes patient behaviour [37]. This situation is changing, as the HAS is starting to develop advice sheets, the general public should also be informed about non-drug therapies, an aid to consultations without a prescription [38].

## Conclusion

The rates of prescription-free consultations were 30% in Belgium, 41% in Slovenia, 47% in the UK and 22% in France, according to the most recent figures. Swedish GPs estimated their prescription-free consultation rate to be 70%. The only significant factor that decreased the number of prescription-free consultations was laboratory visits. The main constraint, felt by French GPs, was lack of time; the main facilitating factor was a shared medical decision. However, the duration of consultations is high in France compared to other countries, so perhaps the GPs were wrong about this brake. The countries that consumed the most drugs were those that performed the fewest consultations without a prescription. Achieving prescription-free consultations to combat overmedication and for the quality of care and the environment is a priority. Given the scarcity of quantitative studies, following this work, a quantitative observational study on prescription-free consultations and their characteristics was launched in France in 2020.

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## Ethics

This article has not been registered.

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## Disclosure of interest

The authors declare that they have no competing interest.

## Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.therap.2023.02.011.

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