

## Research Article

# Survey of General Practitioners in Prescribing Physical Activity: Case of Khouribga Province

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## Abstract

**Objective:** Evaluate the knowledge of general practitioners Khouribga, in terms of prescription of Adapted Physical Activity (APA), as well as their opinion, experiences, personal feelings and obstacles to prescription of Physical Activity (PA).

**Materials and methods:** An exhaustive descriptive study of general practitioners. The survey took place from April to June 2021.

**Results:** The results showed that 92% of general practitioners recommended APAs to patients. Only 6.41% of the doctors gave quantified objectives to be achieved (duration and frequency of physical activity) and none of them declared giving a detailed program including the type of physical activity, the intensity, the frequency and the duration of sessions. APA prescriptions were essentially oral (100%). The written prescription was the least used method, and 30.58% provided an information brochure on PA. The proposed APAs aim to maintain autonomy and preserve quality of life. The prescription was hampered mainly by the lack of time, the lack of motivation of the patients and the lack of knowledge on the subject.

Better information on APA prescription methods and on the structures that offer collaboration with sports medicine services and sports medicine educators would undoubtedly improve the number and efficiency of medical prescriptions for APA.

**Keywords:** Adapted physical activities; Prescription; General practitioners; Regular physical activity

## Introduction

Physical inactivity is a major public health problem. The practice of regular physical activity contributes to the prevention of the main chronic diseases (diabetes, cardiovascular diseases, certain cancers, etc.) and to the maintenance or even improvement of the state of health of patients affected [1]. The promotion of physical activity by health professionals could be a privileged field of action in terms of health with the support of public authorities.

The general practitioner is the key player; beyond their place in the healthcare system and because of the impact of their discourse on patients, they are one of the levers of awareness and have an important role to play in terms of prevention and above all action: they should be the first prescriber of physical activity. The objective of our work is to make an inventory of the implementation of the prescription of physical activities by doctors in Morocco in the province of Khouribga in particular while describing the obstacles to the medical prescription of APA.

## Materials and Methods

This is a descriptive prospective study, conducted at the level of the province of Khouribga, with a questionnaire survey aimed at evaluating the experience and personal feelings of doctors in terms of APA on prescription as well as the obstacles hindering the

prescription. From AP, the survey took place between March and April 2021 among doctors present at the hospital. We completed an anonymous questionnaire.

This questionnaire includes a preamble explaining the interest of the study to make health personnel aware of answering the various questions carefully. Each caregiver included in the study was informed of the study objectives and provided informed consent. All precautions aimed at respecting the anonymity and confidentiality of information was rigorously respected and the data were made accessible only to study personnel. Explanations are given about the interest of the study.

A total of 39 questions were asked, including 24 single-choice and 15 multiple-choice, the data collected related to socio-professional characteristics (age, sex, qualification, place and mode of medical practice), knowledge of the prescription of physical activity, the practice of physical activity by doctors and their patients, the obstacles to the prescription of physical activity and the methods of this prescription. Data entry was carried out by Microsoft Office Excel and the analysis of the variables by the R analysis software. After a descriptive analysis of the data, the Chi<sup>2</sup> tests were carried out in order to study the links between the different variables.

## Results

85 questionnaires completed out of 97, i.e., a response rate of 87.62%. Regarding the characteristics of the doctors who responded, there was a male predominance, 58% were men and 42% women with a sex ratio of 1.4. The most common age group was between 30 and 39 years (39%). 80% participating doctors practiced physical activity compared to 20%. 69.44% had no training in sports medicine, compared to 30.56%. Regarding the advice of APR to patients, 85% of doctors advised APR to patients, 34% said always, 51% often, 6% rarely and 9% never. The majority of participating doctors use PA as a therapeutic means with their patients suffering from chronic

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pathologies, 76% recommend it in cases of cardiovascular pathologies. 100% in case of type II diabetes, 100% in case of obesity, 94% in case of neurodegenerative diseases. Cancers, cardiovascular diseases and other conditions, namely asthma, COPD, osteoporosis, etc. were cited, respectively 40%, 76% and 91%.

For the dosage of physical activity to be prescribed, the average duration of weekly APA prescribed or recommended by the participating doctors was 120 minutes. The average rate was 3 times per week. Regarding the recommendations of the APR practice to patients, 93.58% gave oral advice, 5 (6.41%) gave numerical objectives to achieve (duration and frequency of physical activity) and none of them did not report giving a detailed program including the type of physical activity, intensity, frequency and duration of sessions. Concerning the methods of prescribing physical activity, the form of prescription used by 100% of doctors was oral prescription. Only 30.58% of doctors also provided an information brochure on physical activity.

Compared to the type of physical activity recommended, domestic activities came first with 100%, then walking at least 30 minutes per day (90.58%), flexibility and maintaining joint range of motion (82.35%), activities aimed at maintaining balance (40%) and finally muscle strengthening (14.11%). The follow-up consultation and systematic evaluation of the evolution of the disease after the prescription of AP is carried out by 92%. All of the doctors interviewed said they were unaware of the existence of a sports-health center in their region, and 89% said they were unaware of the existence of a national protocol for prescribing APA. As for the obstacles to prescribing APR related to doctors, the lack of time in consultation was reported by 96.47% doctors, followed by the lack of knowledge about prescribing APR and the lack of information on the type physical activity adapted to be prescribed in relation to the patient's pathology by 27%.

As for tools that can help doctors prescribe APR, 82% of doctors would like to follow specific training in prescribing APA. 100% of doctors cited the production of sheets to give to the patient, 95% practical sheets for doctors, 96% the organization of training on prescribing APR, 65% a pre-filled APR Type prescription would facilitate their prescription and other responses, in free text, were the collaboration between doctors, physiotherapists and sports medicine educators and the collaboration with sports medicine services.

## Discussion

This study carried out among doctors in the province of Khoribga aimed to evaluate the knowledge of general practitioners in terms of prescribing APR and to describe the obstacles which hinder the realization of the prescription of APR. The participation rates (90.91%) are high, which suggests the interest shown by doctors in prescribing APR as a therapy in its own right. The results of this study are encouraging, but it is important to consider their limitations the sample size was not large enough, the characteristics of the doctors seemed similar to the work carried out in France by the CHU sports medicine team of Rennes [2].

As for doctors' knowledge in terms of APR recommendations, we note that 90.58% of doctors recommended walking (at least 30 min per day) Then flexibility and maintaining joint range of motion (82.35%), covering the recommendations proposed by the expert report from the National Institute of Health and Medical Research [3] and by the National Plan for Prevention through Physical or Sports Activity [4].

Concerning the dosage of the activity, we note that the doctors prescribing physical activity to their patients in this study do not specify in almost all the times (73/85) a type of activity, a duration of practice, weekly frequency and intensity of effort.

Concerning the type of AP prescribed, resistance activity is almost neglected by our responding doctors. With twelve exceptions, doctors only prescribed endurance physical activity and gymnastic activity in the study. The message of working on a resistance activity (also called "weight training") two to three times a week therefore remains to be disseminated more widely to doctors who may or may not prescribe physical activity for these patients. Certain physical activities combine two or even three of these qualities and it would be useful to inform doctors about the qualities of the different physical activities to be offered.

Our work showed that doctors are poorly aware of the current recommendations in terms of duration, frequency and intensity of PA, only 6.41% gave numerical objectives to achieve (duration and frequency of physical activity), This comes from confirm previous work by Mohler which also showed, through a qualitative study among hospital doctors aware of the management of cardiovascular pathologies, a lack of knowledge of AP recommendations [5]. However, the advice given is mainly in agreement with the recommendations, focused on moderate endurance activity. Common sense therefore seems to guide doctors in their practice, more than their knowledge of recommendations.

In the study by Petrella et al. in 2007, 85% of doctors surveyed stated that they looked for the level of physical activity but only 26.2% precisely quantified the physical activity of their patients [6]. Concerning the prescription of APR, for all doctors, the most used method to encourage physical activity was oral advice (100%) followed by the provision of information documents to the patient (30.58%). These results are consistent with other studies carried out in other French regions, on the methods of prescribing physical activity in the general population [7].

However, certain international studies have shown the superiority of written prescriptions combined with advice to increase the practice of physical activity in sedentary patients [8]. However, a Swedish study [9], followed over 6 months 481 patients (all ages and sexes combined) who had received a written prescription for PA for prevention and found significant progress in the level of self-reported physical activity and the quality of life In 2009, this same team showed that patient adherence to AP prescription is as good as that of other treatments for chronic diseases [10].

Our study reported that the lack of time in consultation was reported by 96.47% doctors, followed by the lack of knowledge on the prescription of APR and the lack of information on the type of physical activity adapted to be prescribed by in relation to the patient's pathology by 27%. In a systematic review by Hebert et al. [11] published in 2011, including 19 studies conducted in the United States, Canada, Europe and Australia, the obstacles identified were lack of time, lack of knowledge or experience and lack of proven results. Lack of time is mentioned as a major obstacle to prescribing in our study. This argument was already put forward as an obstacle to prescribing PA at the global level [2,12]. This shows that doctors are aware that this type of prescription requires more time than the usual consultations which usually last 15 minutes. Some doctors consider it less important to ask the question of physical activity to their patients when faced

with other health problems for which they initially consult. It is also sometimes considered that it is a less effective therapy compared to drug therapies.

In second place, doctors cite the lack of knowledge about prescribing APR and the lack of information on the type of physical activity appropriate to prescribe in relation to the patient's pathology. Ballay and Ravachol pointed out the lack of awareness of the benefits of PA and how to prescribe it among these GPs in practice or in initial training [13,14]. The conclusions of the report of the High Authority of Health justify this perception by pointing out the insufficient volume for an appropriation of solid knowledge, lessons on non-drug therapies in initial medical training [15].

To support our doctors in prescribing, among the tools that can help them prescribe the APR, the sheets on physical activity to be given to patients come first, then second comes the training on prescribing physical activity. Our results agree with those of a survey conducted in 2014-2015 among a panel of 437 general practitioners from Pays de la Loire, 40% offered "training focused on communication with the patient". 70% believed that the provision of information brochures or assessment tools would also improve their practice [16]. In the work of Gérin [2], the majority of doctors requested the creation of sheets to deliver to patients and prescribe training.

However, the training of doctors in this area should therefore be strengthened with prescribing support tools and clear information on the structures to which they can refer their patients and on APA professionals and their skills.

## Conclusion

Our results deserve to be confirmed by larger studies. Nevertheless, this study showed that doctors' knowledge was not satisfactory enough, which could be a cause. Thus, doctors are generally in favor of prescribing APA and deplore the lack of reliable and easily accessible information on this thematic. It is necessary to introduce a law which stipulates the prescription of a PA and which would be explicit giving the right to doctors to include it in their prescriptions. Continuing training in the workplace can be beneficial. It is essential to promote continuing medical training for doctors in prescribing an APA, who are on the first line of contact with patients, with a view to raising awareness among the population.

## References

- Warburton DE, Nicol CW, Bredin SSD. Health benefits of physical activity: the evidence. *CMAJ*. 2006;174(6):801-9.
- Gérin C, Guillemot P, Bayat M, André AM, Daniel V, Rochcongar P. Enquête auprès des médecins généralistes sur leur expérience et leur avis en matière de prescription d'activité physique. *Sci Sports*. 2015;30(2):66-73.
- Inserm. *Activité physique: contextes et effets sur la santé*. 2008.
- Toussaint JF. Retrouver sa liberté de mouvement. *Plannational de prévention par l'activité physique ou sportive*. 2008.
- Mohler L. Perception et réalité par des professionnels de santé de leur propre activité physique [Thèse d'exercice]. France: Université Pierre et Marie Curie (Paris). UFR de médecine Pierre et Marie Curie; 2012.
- Petrella RJ, Lattanzio CN, Overend TJ. Physical activity counseling and prescription among canadian primary care physicians. *Arch Intern Med*. 2007;167(16):1774-81.
- ORS den Pays de la Loire, URML Pays de la Loire. Promotion et prescription de l'activité physique : attitudes et pratiques des médecins généralistes: dans les Pays de la Loire. Panel d'observation des pratiques et des conditions d'exercice en médecine Générale; 2016.
- Little P, Dorward M, Gralton S, Hammerton L, Pillinger J, White P, et al. A randomised controlled trial of three pragmatic approaches to initiate increased physical activity in sedentary patients with risk factors for cardiovascular disease. *Br J Gen Pract*. 2004;54(500):189-95.
- Kallings L, Leijon M, Hellénus ML, Stahle A. Physical activity on prescription in primary health care: a follow-up of physical activity level and quality of life. *Scand J Med Sci Sports*. 2008;18(2):154-61.
- Kallings L, Leijon M, Hellénus M, Stahle A, Kowalski J. Self-reported adherence: a method for evaluating prescribed physical activity in primary health care patients. *J Phys Act Health* 2009;6(4):483-92.
- Hébert ET, Caughy MO, Shuval K. Primary care providers' perceptions of physical activity counselling in a clinical setting: a systematic review. *Br J Sports Med*. 2012;46(9):625-31.
- Pellegrin N. Aide à la prescription d'activité physique: enquête auprès des médecins généralistes de la zone Lens-Hénin. *Faculte De Médecine. Université Lille 2 - Droit et Santé*. 2014.
- O'Halloran PD, Blackstock F, Shields N, Holland A, Iles R, Kingsley M, et al. Motivational interviewing to increase physical activity in people with chronic health conditions: a systematic review and meta-analysis. *Clin Rehabil*. 2014;28(12):1159-71.
- Hardcastle SJ, Taylor AH, Bailey MP, Harley RA, Hagger MS. Effectiveness of a motivational interviewing intervention on weight loss, physical activity and 17 cardiovascular disease risk factors: a randomised controlled trial with a 12-month postintervention follow-up. *Int J Behav Nutr Phys Act*. 2013;10:40.
- Anis J. Analyse des freins à la prescription des activités physiques chez les MG picards. Thèse de médecine générale, Université de Picardie Jules Verne. 2015; p32.
- Panel d'observation des pratiques et des conditions d'exercice. Promotion et prescription de l'activité physique: attitudes et pratiques des médecins généralistes dans les Pays de la Loire. 2015.