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RESEARCH ARTICLE

FASHIONABLE MEDICINE: 1ST MOROCCAN EVALUATION OF MEDICAL KNOWLEDGE ON PHYTOTHERAPY AMONG UROLOGISTS!

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Abstract

The green light is on for herbal medicine! As a result of the selection of plants with proven medicinal properties, herbal medicine is considered a full-fledged medicine. Urinary tract infections, benign prostatic hyperplasia, urinary stones. Herbal medicine can help with many urological diseases, but not all pathologies.

Objective: Our study aims to evaluate the knowledge and to make an inventory of the use of herbal medicine by urologists.

Materials and methods: This is a quantitative, descriptive study, using an anonymous questionnaire, which was launched in March 2023. All urologists working in the public sector were included in this study.

Results: Out of the 105 physicians asked to answer the online questionnaire, 64 complete responses were obtained, for a response rate of 60.95%. All urologists were male. 62.5% of the physicians were residents, 18.8% were professors, and the same percentage was found for specialists. Among the 64 respondents, 96.87% had never received any training in herbal therapy. Thinking that it could be useful, 26 physicians were willing to receive training in herbal therapy. Although 100% of our physicians were aware of drug interactions when medicinal plants are taken concomitantly with conventional treatments, 48 urologists were unaware of the plants used in urinary tract pathology. 93.75% of the respondents said that their patients mentioned the use of medicinal plants during consultations. Only 8 practitioners used herbal medicine in their urological practice and advised its use with conventional drugs.

Conclusion: In order to guarantee greater patient safety and to avoid the anarchic use of medicinal plants, continuous training for our urologists is essential.

Introduction:-

For centuries, even millennia, our ancestors have used plants to relieve pain, cure diseases and heal wounds. They strove, as much as possible, to transmit their knowledge and simple experiences in writing, from generation to generation.

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Herbal medicine, defined as the use of plants for therapeutic or preventive purposes, is part of the large family of Alternative and Complementary Medicines [1]. It is still the primary source of medicine in many developing countries [2].

Currently, there is a remarkable resurgence of interest in herbal medicine, and thanks to scientific research and new experiments based on analytical methods, the medical community is increasingly recognizing the benefits of the empirical prescription of medicinal plants.

Due to the richness and diversity of the origin of its flora, Morocco is a real treasure trove of plant genetics, with about 4500 species and subspecies of vascular plants, which gives it a privileged position among Mediterranean countries with a long medical tradition and also a know-how of medicinal plants [3, 4].

This ethnomedical tradition is still alive in all regions of Morocco, and no one can deny the richness of the ethnomedical knowledge accumulated over the centuries [5].

Despite the development of chemical drugs to fight urinary tract diseases, they occupy an advanced place in the epidemiological profile of several countries and sometimes constitute major public health problems.

To this end, we often see a return to plants as a source of active ingredients. In addition, a significant proportion of the rural population uses medicinal plants obtained from herbalists. These plant drugs, used in different forms, are easily accessible due to the lack of legislation. They can help to heal as they can be toxic to the user.

The main objective of this study was to evaluate the knowledge of urologists regarding herbal medicine. The secondary objectives were to explore the doctor-patient communication related to the plants used and to report on how urologists perceive medicinal plants and their patients' use of them.

Materials and Methods:-

This is a prospective, descriptive study, using an anonymous questionnaire, which was launched in March 2023.

Target Population

The target population of this study was urologists practicing in public health facilities. Inclusion criteria included a minimum of two years of experience in urology and current activity in the public sector.

Questionnaire

A structured questionnaire was developed to assess the knowledge of urologists on the use of herbal medicine. The questionnaire consisted of 17 questions divided into three distinct themes, namely:

1. Theme 1: Physician profiles
2. Theme 2: Knowledge of urologists on plants used in the treatment of urinary tract pathologies
3. Theme 3: Attitudes and perceptions of physicians towards the integration of herbal medicine in urological management.

Anonymity and Confidentiality

In order to guarantee the anonymity of the participants, no personally identifiable information was collected. Each participant was assigned a unique code for the traceability of the questionnaires. The data was stored securely and accessible only to members of the research team.

Distribution and Collection of the Questionnaire

The questionnaire was distributed by email to urologists, accompanied by an invitation letter explaining the objectives of the study. Participants were encouraged to return the completed questionnaires electronically via a secure online platform.

Data Analysis

The data collected was analyzed using appropriate statistical software. The results were presented in the form of descriptive statistics, tables and graphs to facilitate understanding and interpretation.

Results:-

For the period of our study, the results obtained, classified according to the themes of the questionnaire were as follows:

Theme 1: Physician profiles

Of the 105 urologists approached to take part in the study, a total of 64 completed the questionnaire, representing a response rate of 60.95%. 100% of urologists were male. Of the urologists who responded to our questionnaire, 62.5% were residents, while 37.5% were divided between specialists and professors respectively (Figure 1).

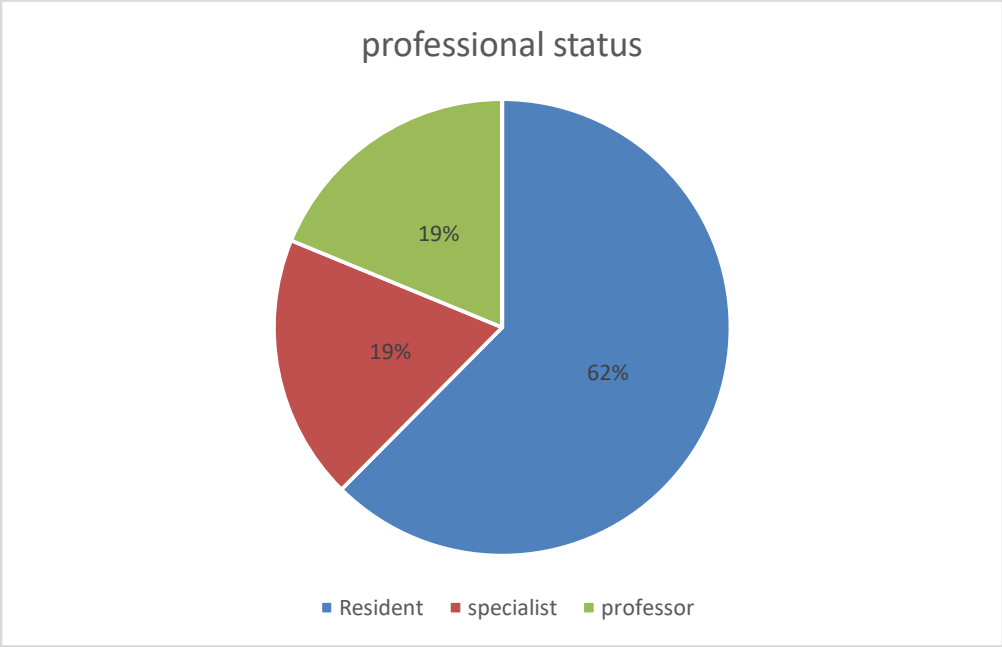

Figure 1:- Distribution of urologists by professional status.

Most of the participants had professional experience: 24 urologists (40%) had been practising for between 5 and 10 years, 24 urologists (40%) had less than 5 years' experience, and 16 (20%) doctors had been practising for between 10 and 20 years (figure2).

Figure 2:- Distribution of urologists by professional experience.

Theme 2: Knowledge of urologists on plants used in the treatment of urinary tract pathologies
Of our 64 urologists, 96.87% had never received training in herbal therapy. Thinking it could be useful, 86.7% of the doctors were keen to have training in herbal medicine, while 13.3% showed no interest in training.

Despite the fact that 100% of our doctors were aware of drug interactions when taking herbal remedies in conjunction with conventional treatments, 48urologists were unaware of which herbs were used in urinary pathology, and above all (100%) were unaware of which herbs were contraindicated in these pathologies.

Theme 3: Attitudes and perceptions of physicians towards the integration of herbal medicine in urological management.
Under this heading, the results showed that 66.7% of our urologists thought that the use of herbs could be beneficial in their patients (Table I), and 93.75% said that their patients mentioned the use of medicinal plants during consultations

Table I:- Main points covered in the second theme: Knowledge of plants of the urinary tract.

About	Answers	Percentages
Training on plant therapy	never had training	**96,87 %**
Desire to have training on plant therapy?	Yes, that could be helpful	**86,7 %**
knowledge of plants used to treat urinary tract infections	No knowledge	**75 %**
Use of medicinal plants in patients	can be beneficial	**66,7%**
Drug-plant interactions	possible	**100 %**
Plants contraindicated in various pathologies of the urinary tract	No knowledge	**100 %**
Taking into account the risk of co-administration of plants and medicines during prescription	yes	**57,1%**

Only 08 practitioners used herbal medicine in their urology practice and advised its use with conventional medicines, compared with 70% who stressed the need for further scientific evidence to support the efficacy of herbal medicine in urology. 86% of doctors indicated that they would be open to greater integration of herbal medicine in urological management, subject to appropriate training.

Discussion:-

For thousands of years, herbal medicine has played an important role in traditional medicine throughout the world. However, over the last hundred years or so, the advent of chemical synthesis has supplanted the use of medicinal plants, although these have often served as an example for the synthesis of molecules.

Today, there is renewed interest in phytotherapy. This revival is driven by a growing ecological awareness and a search for well-being and natural alternatives to conventional medicines. Patients aspire to treat themselves in a gentler, more body-friendly way, while minimizing side effects.

Phytotherapy, which is based on exploiting the curative properties of plants in urology, is gaining recognition and arousing growing interest among healthcare professionals and patients alike. The heritage of the phytotherapeutic tradition in Germany and Austria is reflected in the use of phytotherapy in over 90% of first-line treatments for uncomplicated benign prostatic hyperplasia in mild to moderate stages, with a high reimbursement rate[6, 7].

Although the use of MACs in urology has been the subject of much research, studies specific to the practice of phytotherapy by urologists remain rare.

-Physicians

Our findings are in line with those of other studies looking at general practitionersknowledge and practice of herbal medicine. Indeed, B. Adamo (2012) revealed that 43% of French GPs practice at least one non-conventional medicine, 20% of which is herbal medicine. What's more, 84.5% of the doctors surveyed recognize the usefulness of these alternative and complementary medicines [8].

This result is similar to that of our study, in which the proportion of urologists who considered the use of herbal medicines to be beneficial exceeded 66.7%.

In Germany, where herbal medicine is an integral part of medical training, a national study found that 60% of GPs surveyed claimed to use CAM in their practice [9].Similarly, a Scottish study carried out in 2004 showed that a third of GPs surveyed prescribed herbal medicine [10].

Our survey of 64 urologists revealed an alarming finding: only 8% of them integrate herbal medicine into their daily practice and recommend it to their patients. This figure highlights a crucial problem: the lack of specific training in herbal medicine within the urology community. This knowledge deficit can have a direct impact on doctor-patient communication, as doctors may not be in a position to discuss the benefits and limitations of herbal medicine in depth.

It's crucial to dispel misconceptions and point out that the plants used in herbal medicine are not risk-free. Their natural origin in no way guarantees their safety, and their status as medicinal plants recognized by tradition or scientific research does not mean they can be used without precaution.

The use of phytotherapy, like that of conventional medicines, requires compliance with precise rules of use. These rules are designed to maximize the benefit/risk ratio and minimize potential side effects.

Indeed, each medicinal plant has a primary activity and one or more secondary activities. Take heather, for example, which acts primarily as a urinary antiseptic and secondarily as a diuretic.

In some cases, a plant's secondary activity can counteract a treatment. Borage, for example, is a diuretic thanks to its potassium nitrate content. However, it cannot be prescribed to increase diuresis in a patient suffering from renal failure, as the potassium it provides can become toxic to the heart in a person who does not eliminate it properly.

On the other hand, even natural herbal remedies can be dangerous, even fatal, if taken in excessive doses. Scilla is a striking example of a plant whose inappropriate use can have fatal consequences.These examples illustrate the importance of knowing an individual's state of health and medical history before prescribing herbal remedies. Judicious, personalized use is essential to ensure the safety and efficacy of phytotherapy.

In the field of urinary tract diseases, notably cystitis, kidney stones and urinary retention, phytotherapy plays an important role. However, it is regrettable that its use is often relegated to the background, or considered only when chemotherapy fails.

- Patient perspective

In order to broaden our understanding, it is crucial to examine the patient perspective, absent from our study, towards complementary and alternative medicine. Research in this field is mainly based on international studies, or focuses on the field of oncology. In France, a study carried out in an oncology department revealed that a third of cancer patients use complementary medicines during and after their treatment. Among these medicines, phytotherapy ranks second in terms of popularity [11].Studies of primary care patients in Croatia and the USA show that 46% and 52% respectively use complementary and alternative medicine (CAM) [12,13]. In Croatia, phytotherapy stands out as the most widely adopted traditional medicine.

F. Thiriat's study, focusing on the rural population, reveals that 53.7% of participants use complementary and alternative medicine (CAM), with osteopathy and homeopathy being the most popular, while phytotherapy ranks fourth [14].

Although these studies confirm the widespread use of herbal medicine by patients, it is important to highlight certain limitations to be taken into consideration, including the challenges associated with the use of herbal medicine, which include:

Risks of drug interactions

The survey of our urologists reveals a significant awareness of the risk of drug interactions between herbal remedies and conventional treatments. In fact, all practitioners surveyed (100%) acknowledge the presence of this risk. The active substances contained in medicinal plants can interact with other drugs, altering their excretion and increasing or decreasing their bioavailability, with potentially serious consequences. The mechanisms underlying drug interactions involving medicinal plants are often poorly understood. Knowledge of this risk is based mainly on documented cases. A publication in a Swiss medical journal provides an inventory of the main drug interactions associated with medicinal plants [15]. In the event of adverse effects or a sudden decrease in the efficacy of a drug, the practitioner should ask the patient about possible changes in his or her conventional treatment, but also about his or her consumption of medicinal plants.

Lack of communication

A number of studies on herbal medicine point to the same conclusion: patients do not always mention their use of herbal remedies to their doctors, and the subject is rarely raised during consultations [16, 17]. More often than not, patients use herbal products without consulting their doctor first.

Numerous studies have highlighted the lack of communication between patients and doctors regarding the use of medicinal plants. A thesis from Martinique illustrates this phenomenon: 60.8% of patients surveyed said they did not inform their doctor of their use of medicinal plants [18].

Overall, the strength of our study lies in the fact that it deals with a little-explored subject from the point of view of urology physicians. Existing studies in the field of herbal medicine tend to focus on patient consumption. Moroccan urologists had never been questioned on this subject in recent years. In addition to highlighting the interest of a proportion of urologists in herbal medicine, this study now reveals the main limitations encountered by this category. In addition, it could be interesting to develop simple, concise herbal medicine teaching adapted to the practice of physicians in general, and urologists in particular, during health studies or continuing education. The aim would be for them to be able to advise their patients more effectively, to be made aware of their patient's potential use of medicinal plants, and to open discussions on this subject during consultations, with the aim of guaranteeing greater patient safety.

Conclusion:-

This study shows that some urologists are interested in herbal medicine. For certain benign urinary tract infections, the use of phytotherapy could expand the therapeutic arsenal. However, with the risk of drug interactions, the lack of training in herbal medicine among doctors, the lack of standardization and harmonization of products, and the complexity of regulations in the field of herbal medicine, make it tricky for urologists in particular to use medicinal plants in practice. Educating patients about their health and encouraging them to be more critical of the "natural" products they consume will ensure their safety.

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