

INTRODUCTION

- Limited exposure of pharmacy students to evidence about the role and impact of pharmacists do not contribute to stimulate prospective evaluation and participation of pharmacy students to such research.

OBJECTIVE

- Assess the exposure of pharmacy students about the literature on the role and impact of pharmacists.
- Assess the perception of students on evidence pharmacy practice.
- Assess opinion of students about the website Impact-Pharmacie, an international platform about such evidence developed by our research team.

METHOD

- We exposed a cohort of pharmacy students during a workshop at the Annual Congress of the International Pharmaceutical Students' Federation, held in Portugal 5th August 2014, to the literature on the role and impact of pharmacists.
- The website Impact-Pharmacie was used as support for the presentation. (<http://impactpharmacie.org>)
- We developed and pre-tested a questionnaire of 29 questions designed to explore students' exposure and perceptions about the literature on the role and impact of pharmacists.
- We administered the questionnaire on a voluntary basis and descriptive statistics were performed.

IPSF World Congress 2014 - August 5th - IMPACT PHARMACIE3 - Pharmacy a good option!

Under the 60th IPSF world congress, we take advantage of your presence to better understand your perception about the data on the impact of pharmacists in health care. If you agree to participate in our survey, please answer the following questions IMMEDIATELY. Your answers will help us better understand your perception on the evidence in the field of health. A scientific article will be drafted from your anonymous data. Thank you for your participation.

Aurélié Guérin, Mylène Tisseyre, Jean-François Bussièrès - 5 August 2014

Country of study	
Demographics	() Man () Woman
Age	years
In which year of pharmacy you study? (i.e. community pharmacy, hospital pharmacy, industry)	
During your studies in pharmacy, how many scientific articles related to pharmacotherapy (i.e. all sources) have you read?	() Aucun () 1-5 () 16-10 () 10-20 () Plus de 20
Have you ever read articles demonstrating the positive impact of pharmacists?	() Non () Oui
During your studies in pharmacy, how many scientific articles related to the impact of the pharmacist (i.e. all sources) have you read?	() 1-5 () 16-10 () 10-20 () Plus de 20

Indicate your level of agreement with the following statements by circling the appropriate number for EACH statement



Table 1. Demographic data of respondents

Demographic data	n (%)
Sex	
Female	23 (77%)
Male	7 (23%)
Year of pharmacy	
First	1
Second	2
Third	5
Fourth	12
Fifth	6
Graduated	4

30 students participated in the survey

15 different countries: Armenia, Austria, Canada, Egypt, France, Germany, Portugal, Romania, Slovenia, South Korea, Spain, Taiwan, Thailand, Tunisia and United Kingdom

Median age 22 years old

Literature exposure

Table 2. Exposure of pharmacy students about the literature on the role and impact of pharmacists

Number of articles read since the beginning of their education in pharmacy	Number (%) of respondents who had read articles describing the role and impact of pharmacists	Number (%) of respondents who had read articles on drug therapy
No	12 (40)	2 (7)
1 à 5	13 (44)	3 (13)
6 à 10	3 (13)	10 (30)
11 à 20	2 (3)	3 (10)
More than 20	0 (0)	12 (40)

Exposure to literature on the role and impact of pharmacists was much more limited than on drug therapy

Perception on evidence pharmacy practice

Table 3. Perception of students participating in the workshop on evidence pharmacy practice.

Statements	Average level of agreement among pharmacy students (n=30)
I think the exposure of a patient to scientific evidence (e.g. rate of lung cancer associated with smoking) causes changes in attitude .	6.3
I think the exposure of a pharmacist to scientific evidence on the drug (e.g., a new article on the effectiveness of a statin) causes changes in practice.	7.8
I think the exposure of a pharmacist to scientific evidence on professional practice (e.g. a new article demonstrating the ability of pharmacists to significantly improve the HDL / LDL ratio) causes changes in practice.	7.3
I think the scientific evidence on the benefits of the practice of pharmacy are useful for the decision of the legislature to expand the practice of pharmacy.	7.3
I think the scientific evidence on the benefits of the practice of pharmacy are useful for managers to finance pharmaceuticals activities.	7.2
I think the scientific evidence on the benefits of the practice of pharmacy are useful for reimbursement decisions of pharmaceutical services.	7.1
I think the scientific evidence on the benefits of the practice of pharmacy are useful for reviewing the practices of pharmacists.	7.6
I think the scientific evidence on the benefits of the practice of pharmacy are useful to positively influence the perception of other professionals on pharmacists.	8.0
I think the scientific evidence on the benefits of the practice of pharmacy are useful to positively influence patients' perceptions of the role and scope of practice of pharmacy.	7.1
During my university training (including training), my teachings on pharmacotherapy systematically included evidence.	6.8
During my university training (including training), my teachings relating to the evaluation of professional practices systematically included scientific evidence.	6.4
I am able to find relevant scientific evidence to meet my practical issues.	6.8
I am able to achieve critical readings of articles (e.g. identify the objective to analyze the methodology, analyze the results, evaluate applicability) to meet my practical issues.	6.3

Scale: 0: completely disagree and 10: fully agree

Perception about the website Impact Pharmacie

Impact Pharmacy

Welcome Data Syntheses

The pharmacist is essential

Pharmacy practice has evolved considerably in recent decades. The pharmacist did more than receiving and validating medication orders; he participated in the initiation, adjustment and prescription drugs. If the pharmacist buys, dispenses and still selling drugs, it monitors drug therapy and treating patients. If the pharmacist continues to practice pharmacy from a centralized location, we find the bedside, home and more present than ever in society. In our opinion, the pharmacist must.

First website collecting data and evidence about the role and impact of pharmacists

<http://impactpharmacie.org/>

Table 4. Perception of students participating in the workshop on the website Impact Pharmacie after the presentation

Statements	Average level of agreement among pharmacy students (n=30)
The content of the website Impact Pharmacie is clear	6.6
The content of the website Impact Pharmacie is relevant	6.8
The content of the website Impact Pharmacie should be integrated into the pharmacy curriculum	5.9

Scale: 0: completely disagree and 10: fully agree

CONCLUSION

- Pharmacy students have limited exposure to the literature on the role and impact of the pharmacist.
- Students' found the website Impact Pharmacie useful for the integration of this literature.