

A Pharmacist view of the impact/management of medicines shortages in the pharmaceutical supply chain (Spain)

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INTRODUCTION

To treat and maintain the safety of patients, medicines should be available in adequate amounts, in appropriate dosage forms, and be affordable [1] yet studies show that this is not always the case and medicines shortages (MedS) are frequently experienced [2-5]. Whilst the impact of medicines shortages is noted on a European level [6], there is less evidence of the impact of these shortages on Spain as a nation. Notifications about medicines supply issues in Spain increased from 700 in 2015 to 1650 in 2019 [7] and needs to be addressed [8]. Medicines shortages as a phenomenon appears to be a growing issue in Spain.

AIM

To analyse the impact of medicines shortages on the pharmaceutical supply chain (PSC) as reported by pharmacists in Spain and to examine current management strategies.

METHOD

The methodology involved in the study was as follows:

- A detailed narrative literature review was undertaken by the research team.
- This informed the design of a structured questionnaire.
- Ethical approval was granted by the Chair of the Biomedical, Natural, Physical and Health Sciences Research Ethics Panel at the University of Bradford.
- The questionnaire was piloted by pharmacists to ensure fitness for purpose for this study.
- Revisions and amendments were made to the questionnaire as deemed necessary.
- The final survey was circulated in August/September 2019 via an online link - a multi-channel approach channel approach was adopted for this.
- Data was collated and analysed using thematic analysis.

RESULTS

A total of 271 pharmacists responded to this survey, 79% of which defined themselves as community pharmacists. 73% of the respondents had 15 years of more experience in the profession.

A number of pertinent questions were posed to the pharmacists in this survey, the responses to a select number are provided in Table 1 and developed further in Figures 1 and 2.

A range of drugs were affected by MedS which led to patients not receiving treatment or in rare cases patient safety being compromised (Figure 1).

MedS caused extra work (1-2 hours/day as reported by 63% of the sample). 79% confirmed that they had suffered adverse financial repercussions, the impact of which was rated as medium by 60% and high by 24% of the group.

Respondents said that they were aware of the MedS reporting systems (85%) but some were unsure of this. Those who were aware of it felt that it did not work effectively (see Table 1).

Where policies/procedures existed (only 34%) guidance on how best to manage MedS appeared to be internally driven. There was also evidence of external guidance from other parties.

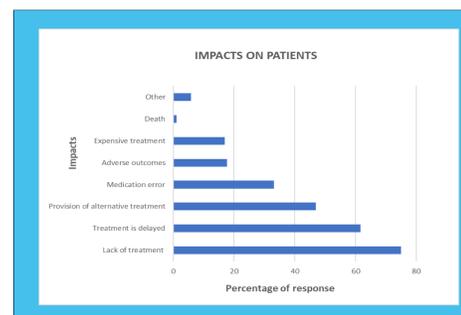


Figure 1: Impact of Med(S) on patients

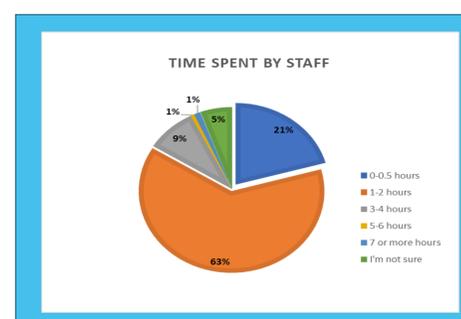


Figure 2: Time spent by staff per working day managing Med(S)

Question posed	Table 1. Selected responses from respondent sample			
Frequency of Medicines shortages (MedS)	All pharmacists agreed that MedS were problematic	85% of shortages occur on a daily basis	7% of shortages occur on a weekly basis	4% of shortages occur on a monthly basis
How are MedS managed in the Pharmacy?	Managed mainly by pharmacists	Pharmacy managers, technicians and assistants have an active role in this.	No specific training provided for this	Can manage situation due to professional and academic knowledge/expertise
What factors affect the effectiveness of the MedS reporting system?	Lack of updating system on a regular basis	Lack of transparency of data	No penalties awarded [to suppliers] for not reporting	Not user friendly
Do you have policies to guide MedS activity?	34% said yes whilst the remaining respondents were unsure	Policies/procedures created internally	Additional support from Head Office	Guided by Ministry of Health, College of Pharmacists, Bot Plus, Spanish Society of Hospital Pharmacists (SEFH).

CONCLUSIONS

Medicines shortages are a global phenomenon which we (both professional and academic communities) have struggled to resolve. There is evidence to suggest that medicines shortages are on the increase in Spain as per recent reports by AEMPS in early 2020.

This study reports on data that was collected in late 2019, within the same timeframe as the AEMPS shortages evaluation. The findings of this study reflect views of 271 members of the pharmacy profession in Spain. They do not attempt to generalise on the MedS situation or professional opinion but do provide insight into perceptions surrounding the magnitude, impact and management of MedS at this time.

Our findings show that pharmacists can be better supported to manage shortages through: advanced supply chain/inventory management training; peer support mechanisms; pharmacist formal and informal communication systems; and MedS reduction through more effective prevention of shortage occurrence.

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