
DRUG INFORMATION BULLETIN

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ABSTRACT

OBJECTIVE To develop and implement an online bulletin intended to provide information on locally available medicinal products undergoing variation in their Summary of Product Characteristics (SmPC) and inclusions of medicinal products in the Government Formulary List (GFL) and to evaluate the usefulness of the bulletin among healthcare professionals and students.

METHOD Lists of locally available medicines that had undergone variations and medicinal products added to the GFL during a 6-month time frame were compiled. Additional information was obtained from regulatory authorities and local agents. A concise article was written on each drug, reviewed by a panel of experts and subsequently published in the online bulletin. Following completion of the contents and layout, the material was uploaded on the website of the Department of Pharmacy, University of Malta. A pilot study was carried out to identify shortcomings in the online bulletin design. The launch of the online bulletin started the promotional process which was mainly focused on electronic mail marketing. The data obtained from the validated questionnaire was coded and analysed using SPSS® v.20 and Microsoft® Excel Vista®.

KEY FINDINGS Sixty seven per cent (n=223) of the respondents returned the questionnaire. The online bulletin was evaluated by 27 medical practitioners, 34 pharmacists, 37 medical students and 51 pharmacy students; of which 35% (n=52) were male and 65% (n=97) were female. The respondents agreed that the bulletin was up-to-date, clear and concise (91%, n=136), user-friendly (97%, n=144), useful (95%, n=142), well-designed (91%, n=136) and easy to access (87%, n=130). Ninety seven per cent (n=145) of the respondents stated that the information present in the bulletin was new to them, whilst 97% (n=144) agreed that the bulletin helped to keep them informed.

CONCLUSION The online bulletin provided an accessible means to deliver unbiased information about the introduction of recent medicinal products on the GFL and variations in SmPCs of products available on the local market. It was positively received by both healthcare professionals and students.

KEYWORDS Drug bulletin, drug information, government formulary list, variations in Summary of Product Characteristics.

INTRODUCTION

The medical and pharmaceutical fields are continuously bombarded with innovative medicinal products, technologies and new information about products present on the market.¹ Rational use of medicines involves the right treatment for a particular condition, at the right dose, right time and for the right duration.^{2,3} Improvements in drug therapy require healthcare professionals to filter and assimilate information to keep informed in their practice. This denotes the need of impartial, updated and high quality material for healthcare professionals to keep abreast with these scientific advances.^{3,4} Continuing professional development must be a lifelong commitment for every practising health care professional.⁵

Drug bulletins were developed with the aim to provide reliable information about medicines in a summarised form. Since the production of a drug bulletin involves many challenges, initiating and sustaining a publication is essential. The design, production and distribution of issues are crucial to a bulletin's success.³

The aims of this study were to develop and implement an online bulletin intended to provide information on locally available medicinal products undergoing variation in their Summary of Product Characteristics (SmPC) and inclusions of medicinal products in the Government Formulary List (GFL) and to evaluate the usefulness of the bulletin among healthcare professionals and students.

METHOD

Lists of locally available medicines that had undergone variations via the centralised procedure and inclusions of medicinal products in the GFL within a 6-month time frame were compiled. Additional information was obtained from regulatory authorities, local pharmaceutical agents and the website of the 'Ministry of Health, Elderly and Community Care'. A concise article on each drug was written. A schematic overview of the website design and the articles were reviewed by a panel of 5 experts prior to publication.

Following completion of the contents and layout, the material was uploaded on the website. A web counter was installed on the homepage to automatically record the number of visitors who access the website. The online bulletin was hosted in the research section within the website of the Department of Pharmacy, University of Malta.



Ninety seven percent (n=144) of the pharmacists agreed that the bulletin helped them to keep informed about medicines available locally.

Prior to online availability of the bulletin to all the participants, a pilot study was conducted to identify shortcomings in the online bulletin design. The pilot study involved 10 healthcare professionals from the medical and pharmaceutical fields.

The launch of the online bulletin initiated the promotional process which was mainly based on electronic mail marketing. Various pharmaceutical, medical and student associations and the Registrar's office of the University of Malta were contacted. A business card was also created and distributed to physicians and pharmacists to increase promotion of the online bulletin.

A questionnaire, created by KwikSurveys®, was adapted from the validated questionnaires used in the research projects 'Developing a Drug Information Bulletin' and 'Methods for Dissemination of Protocols on the Management of the Common Cold'.⁷ The questionnaire acted as a tool to collate information regarding the impact of the online bulletin on the readers. The data was coded and analysed using SPSS® Statistics v.20 and Microsoft® Excel Vista®.

RESULTS

The online bulletin, 'Drug Information Bulletin' was launched online in December 2011. It included 37 medicinal products that had undergone a variation in the SmPC between January and June 2011 and 20 medicinal products which were introduced in the GFL between January and November 2011.

One hundred and forty-nine participants (N=223, response rate of 67%) completed the evaluation questionnaire of the online bulletin. These included 27 medical practitioners, 34 pharmacists, 37 medical students and 51 pharmacy students. Fifty two participants (35%) were male and 97 (65%) were female. Most of the respondents were between 18 and 24 years (63%, n=93).

CONTENTS OF THE BULLETIN

The online bulletin was well designed according to 91% (n=136) and easily accessible for 87% (n=130) of the participants. Ninety seven per cent (n=144) remarked that the bulletin was user-friendly. Moreover, 95% (n=142) of the participants agreed that it was useful. According to 91% (n=136) of the respondents, the information presented in the bulletin was up-to-date, clear and concise (Table 1).

BULLETIN AS A MEANS TO KEEP INFORMED AND ITS NEED LOCALLY

Ninety seven percent (n=144) of the pharmacists agreed that the bulletin helped them to keep informed about medicines available locally. Moreover, 98% (n=146) of participants were in favour of the need of a similar bulletin locally (Figure 1).

AVAILABILITY OF NEW INFORMATION

Ninety seven percent (n=145) of the respondents agreed that they found new information in the online bulletin. Seventy four per cent (n=20) of medical practitioners and 59% (n=19) of pharmacists claimed that new information was found in the section regarding variations. Forty percent (n=14) of medical students and 43% (n=22) of pharmacy students stated that they learnt about the inclusions of certain medications in the GFL through the bulletin.

CHARACTERISTIC OF ONLINE BULLETIN	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Easy to access	35	52	8	3	1
Well-designed	34	58	7	1	0.7
User-friendly	38	59	2	1	0
Useful	46	50	3	0.7	0.7
Up-to-date, clear and concise	41	50	7	1	0.7

Table 1: Percentage satisfaction with bulletin characteristics (n=149)

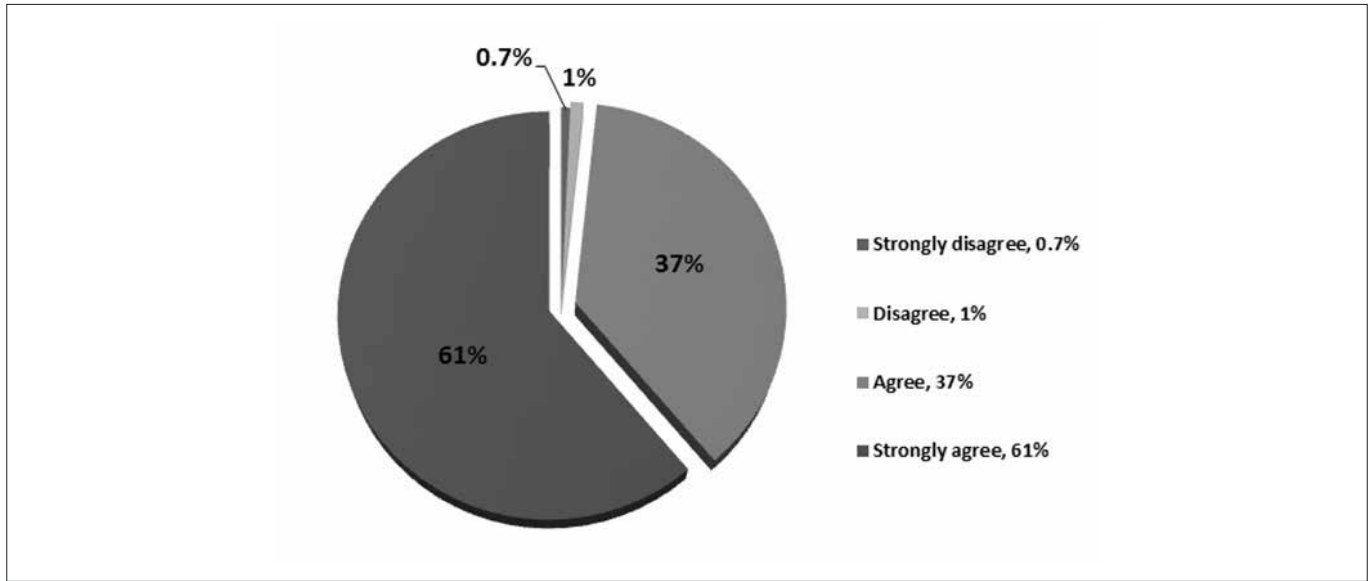


Figure 1: Opinion of respondents about the need of a similar bulletin (n=149)

ASSESSMENT OF METHOD OF DISSEMINATION OF INFORMATION

According to 93% (n=139) of all the participants, the website is a better method of disseminating information about recent changes in the SmPC to both healthcare professionals and students. Forty percent (n=60) of participants strongly agreed that the online bulletin provided more updated information whilst 97% (n=145) of respondents claimed that the online version is more widely accessible compared to a printed version. The required information can be easily accessed as perceived by 93% (n=138) of the participants. Moreover, 77% (n=115) of the participants claimed that an online bulletin is more practical and user-friendly compared to a hard copy. The mean rating scores for all the statements about the online bulletin in comparison with the hard copy

version were above 4.0. The highest mean rating score of 4.48 was achieved for the statement that 'the online version makes the bulletin more widely accessible' (Figure 2).

DISCUSSION

The internet is a major communication channel for the transfer of information. Online publications reach greater audiences from all over the world in a fast circulation method.^{8,9,10} Two hundred and twenty three healthcare professionals, medical and pharmacy students have visited the website with 149 respondents completing its evaluation. The presentation of the bulletin was greatly accepted by the participants as observed by their positive response.

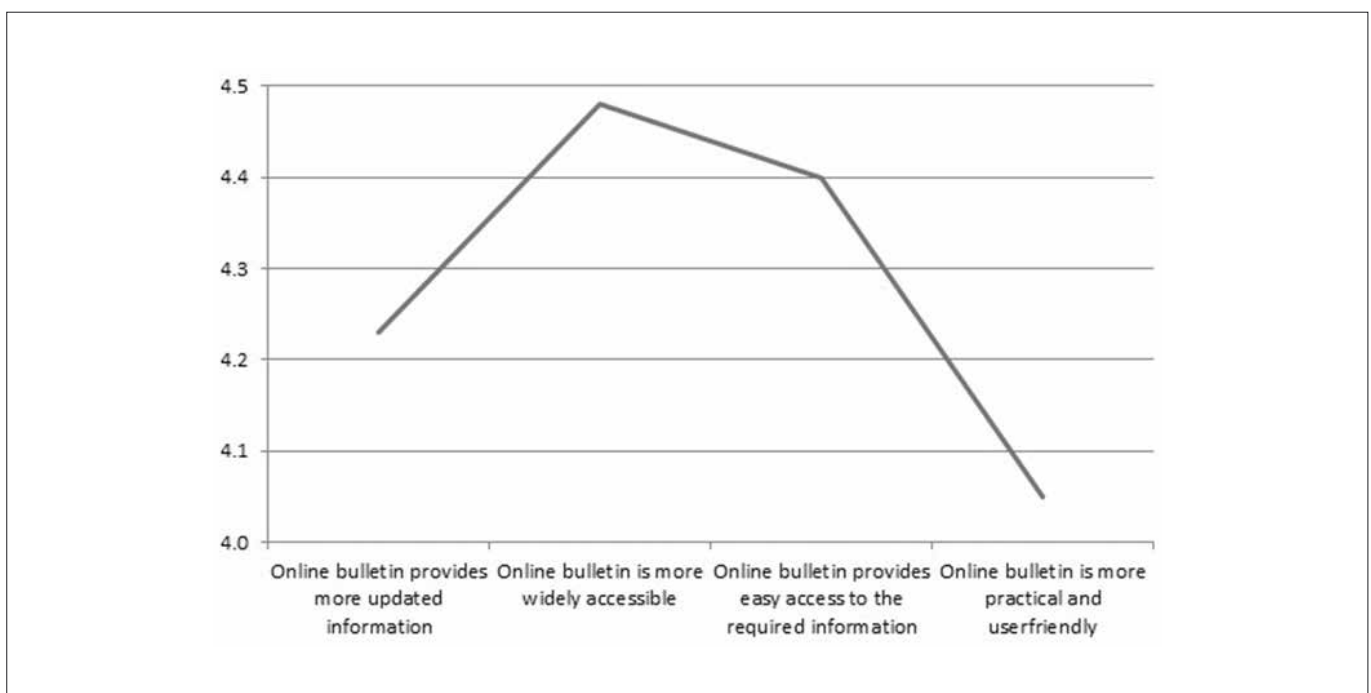


Figure 2: Comparison between different statements about online bulletin compared to hard copy (n=149)



Ninety seven percent of the respondents stated that the information presented in the online bulletin was new to them. Out of these, 61% of the respondents remarked that new information was present in the section discussing variations.

The aspect of user-friendliness of the online bulletin increased by 3% compared to the hard copy bulletin.⁶ A comparable result was also obtained in all the other characteristics of the bulletin with the previous two hardcopy issues of 'Drug Information Bulletin'.⁶ In this study the bulletin provided an accessible means to deliver unbiased information about the variations of medicinal products available locally. Additionally it raised awareness on additions of medicinal products in the GFL.

Ninety seven percent of the respondents stated that the information presented in the online bulletin was new to them. Out of these, 61% of the respondents remarked that new information was present in the section discussing variations. This compares favourably with the hard copy bulletin issues with 97% and 96% of respondents respectively.⁶ Gituma *et al* (2009) found that 22% of the final year medical students consulted books and internet to identify new medical material.¹²

The study carried out by Portelli (1992) showed that 84.53% of pharmacists found a bulletin on recent medicinal products placed on the local market useful.¹¹ In this study, ninety eight percent of the pharmacists agreed that there is a need for a similar bulletin to 'Drug Information Bulletin' locally. Its need is further stressed by Wirth (2007) who demonstrated that 38% of pharmacists showed interest in a continued education programme to be conducted via journals.¹³ Lifelong learning is a continuous process extending from the undergraduate course and throughout the working life as a healthcare professional.^{14,15}

CONCLUSION

The bulletin was positively received by the participants and was reported to be useful, informative and well presented. The bulletin reached its aim to inform the healthcare professionals and students about recent information on medicinal products available on the local market. Furthermore, such bulletins are required by current and future pharmacists and medical practitioners to provide practical and reliable information about medicines in Malta to promote more rational and informed decision about their use.

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