

Original Research

Educational innovations: Categories of bulletin board postings designed to increase awareness of contemporary pharmaceutical policy issues

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ABSTRACT*

Objective: The goal of this project was to categorize and classify bulletin board postings pertaining to pharmaceutical policy from both the professional and lay press.

Methods: Bulletin board postings were used to supplement in-class discussion to keep students, faculty and staff up-to-date on emerging trends. A bulletin board located in the main classroom area of the College of Pharmacy Building where students would pass by on the way to class and congregate during break periods was used to display articles from various sources concerning topics related to pharmaceutical policy. Information is presented about the primary subject matters addressed in the articles, the types of publications from which they were drawn, and the top ten sources of articles displayed.

Results: This project showed that coverage of issues related to pharmacists is predominantly seen in newspapers and most pertinent issues are business related.

Conclusions: It can be seen from this analysis that the issues facing pharmacists are varied. The pharmaceutical policy field is transforming and many of these changes are very relevant to the general population. This is seen from the coverage of all of these issues in the lay press.

Keywords: Mass Media. Education, Pharmacy. Public Policy. United States.

INNOVACIONES EDUCATIVAS: CATEGORÍAS DE COMUNICACIONES EN UN TABLÓN DE NOTICIAS DISEÑADAS PARA INCREMENTAR EL CONOCIMIENTO DE PROBLEMAS CONTEMPORÁNEOS DE POLÍTICA FARMACÉUTICA

RESUMEN

Objetivo: El objetivo de este proyecto fue clasificar y categorizar las comunicaciones de un tablón de noticias sobre política farmacéutica tanto de la prensa profesional como lega.

Métodos: Se usaron comunicaciones en un tablón de noticias para apoyar la discusión en clase y mantener actualizados a los estudiantes, profesores y personal sobre asuntos emergentes. Para mostrar artículos de varias fuentes relativos a asuntos relacionados con la política farmacéutica, se utilizó un tablón de anuncios colocado en la zona de aulas principal del edificio de la Facultad de Farmacia, donde los alumnos pasan camino a las clases y se congregan durante los tiempos de descanso. Se presenta información sobre los principales materias tratadas en los artículos, tipos de publicaciones donde aparecieron y las 10 principales fuentes de los artículos mostrados.

Resultados: Este proyecto mostró que la cobertura de los asuntos relativos a farmacéuticos aparece principalmente en los periódicos y los asuntos más prevalentes son relativos al negocio.

Conclusiones: Puede verse en el análisis que los temas que encaran los farmacéuticos son variados. El campo de la política farmacéutica se está transformando y muchos de esos cambios son muy relevantes a la población en general. Esto puede verse en la cobertura de todos estos asuntos en la prensa lega.

Palabras clave: Medios de difusión. Educación, Farmacia. Política. Estados Unidos.

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INTRODUCTION

Pharmacy is a very dynamic profession with policies from many sources impacting professional activities.¹⁻³ Government agencies as well as private entities such as insurance companies and certification boards consider and adopt a wide variety of policies that affect pharmacists, pharmacies and pharmaceuticals. Keeping abreast of trends and developments in this broad area can

be challenging, even for those whose professional or academic interest lies in these fields. For pharmacy students, with the many and varied demands on their time, this can be even more challenging. Indeed, for these aspiring pharmacists many of the policy issues may be totally new and a facet of pharmacy to which they had limited exposure prior to starting their professional studies. Academic pharmacy continues to be faced with covering an ever-expanding breadth of material to discuss and explore in the same allocation of curricular time. Perhaps nowhere is this more pronounced than with the dynamic and rapidly evolving field of pharmaceutical policy.

The bulletin board initiative

Bulletin board postings can be used to supplement in-class time to keep students, faculty and staff up-to-date on emerging trends. Faculty members of the Pharmaceutical Outcomes and Policy graduate program in the Department of Pharmacy Practice and Science at the University of Kentucky College of Pharmacy adopted a bulletin board located in the main classroom area of the College of Pharmacy Building. The bulletin board was used to display articles from various sources concerning topics related to pharmaceutical policy. One of the intentions of this educational initiative was to publicize to those passing by, especially pharmacy students, the wide range of issues appropriate for consideration as part of the new Ph.D. program in Pharmaceutical Outcomes and Policy being implemented at the College of Pharmacy. Another goal was to provide insight to faculty and staff at the College about contemporary issues in pharmacy.

In concept this is somewhat parallel to the monthly column "Hospital Pharmacy Pulse" appearing in the periodical *Hospital Pharmacy*. The subtitle descriptor of that column is "Recent Publications on Medicine and Pharmacy."

Similar approaches to education exist in various healthcare and educational forums. Stein illustrates the use of a similar approach for nursing continuing education where time constraints are similar to those experienced by professional students.⁴ Students and practitioners may also find similarities in this bulletin board process and poster presentations in both aim and approach.⁵

A faculty member (JLF) reviewed electronic newsletter and other electronic source articles on a daily basis. This task had a minimal marginal time commitment (approximately 15 minutes per day) because the sources were already being reviewed on a daily basis to keep abreast to developments. Those of importance and interest were printed off and displayed on the bulletin board for an entire semester, newer entries being placed on top of the older ones. This approach kept the most recent items in view while preserving access to more dated ones. Sources of materials are listed in Table 1.

Challenges existed with some sources. For example, the website for *Forbes* was limited in a way that news articles could not be printed off. Additionally, the *Wall Street Journal* required a subscription to gain access to articles for printing

off. When such impediments were encountered alternative sources of articles on the same topic were identified. This was accomplished by using search engines keyed to the topic and date of the unprintable item. In terms of U.S. copyright law, the fact that firms doing Internet postings include a "print" button with their articles may be viewed as consent to copy.

Articles were posted by punching two holes in the top of the sheet using a two-hole punch. T-pins were used to mount the articles on the board because they protrude out from the bulletin board and, consequently, have a large capacity.

The bulletin board space used for displaying the articles was 2.5 feet wide by 4 feet high. The postings were arranged in a configuration that had four items across each row with three rows.

Initially consideration was given to using black ink exclusively when printing off the items because that would be less expensive but use of color on the posted items enlivens the presentation and beckons passersby to read the items. One other decision made early on was that the display should strive for fair balance – items on topics of interest would be posted irrespective of whether they were positive or negative toward pharmacy and pharmacists. After three semesters of experience with this initiative a review of the various items being posted was deemed appropriate, even interesting.

METHODS

This study examined articles posted from inception of the program, in January 2007, to June 2008. The articles were entered into a custom Microsoft Access database, which divided them according to the following criteria: Source (Professional Literature, Drug Trade, Medical News, Newspaper); Subject Matter (Legal, Clinical, Business, Political, Other) Keywords; Semester Posted; and Impact Radius (International, National, Regional, Local).

In total 1225 articles were examined. A Doctor of Pharmacy candidate performed data collection, which involved qualitative evaluation of each article individually for the abovementioned criteria. Analysis was performed within Microsoft Access and Microsoft Excel to measure the frequency of Keywords, Sources, Subject Matter, and Impact Radii mentioned in the articles.

RESULTS

The numbers of articles and total pages posted on the bulletin board during the three semesters under study here can be seen in Table 2. Analysis of various fields from the database revealed several findings. As seen in Figure 1, Business-related items represented 39% of the articles surveyed versus 24% Political, 18% Legal, 18% Clinical, and 1% Other. This supports Table 4, which shows Industry as the most mentioned keyword throughout the articles. Other keywords supporting this business focus are Generic, Price (typically referring to drug prices), Jobs, Walgreens, Advertising, and Biotechnology. As shown in Figure 2, newspapers

Source Title	Source Type
American Association of Colleges of Pharmacy Policy & Advocacy Update	Official Press
ABC News	General
Advertising Age	Business
American Bar Association Health Law Section Newsletter	Law
American Pharmacists Association Legislative & Regulatory Affairs eNewsletter	Official Press
Baltimore Sun	Newspaper
Biotechnology Industry Association SmartBrief	Medical
Boston Globe	Newspaper
Chicago Tribune	Newspaper
CNN Money	General
Drug Topics eNews	Drug Trade
Food and Drug Law Institute SmartBrief	Drug Trade
Gallup Independent	General
Health & Life Sciences Law Daily	Law
Health Law360	Law
Health Lawyers Weekly	Law
Home Care Wire	Medical
Hospital Compliance Wire	Medical
Houston Chronicle	Newspaper
International Herald Tribune	Newspaper
Long Term Care Wire	Medical
Los Angeles Times	Newspaper
Managed Care eNews	Medical
Managed Care Wire	Medical
Medical NewsWire	Medical
Medscape Pharmacists	Medical
Miami Herald	Newspaper
Milwaukee Journal Sentinel	Newspaper
MSNBC	General
National Association of Chain Drug Stores E-ssential	Official Press
National Association of Chain Drug Stores SmartBrief	Official Press
New York Times	Newspaper
Newsday	General
Part-B Insider Wire	Medical
Pharmacist e-Link	Medical
Pharmacy Times	Drug Trade
Raleigh News & Observer	Newspaper
Reuters	General
San Diego Union-Tribune	Newspaper
The Oregonian	Newspaper
Tulsa World	Newspaper
Washington Post	Newspaper
Yahoo! News	General

are the most cited sources, making up 37% of all articles surveyed. This number is actually deflated, as newspapers originally posted many of the articles classified as Pharmacist eLink or Regional Web. Looking at the Table 3, three of the top ten are newspapers and one is a regional website affiliated with a newspaper.

Semester	Articles	Sheets
Spring 2007 (Jan-Jun)	533	969
Fall 2007 (Jul-Dec)	283	545
Spring 2008 (Jan-Jun)	409	823

Table 4 provides the best pulse for what issues are affecting pharmacists in the realm of pharmaceutical policy. Not surprisingly, keywords representative of the most important pharmaceutical stakeholders are prominent (Industry, FDA, Generic, Research, Independent). Other important tags represent important insurance issues our nation is facing (Medicare, Part D, Medicaid, Reimbursement, Insurance). Safety issues are also very important

(Safety, Children, Abuse, Medication Error, OxyContin, Cold Medications). A few companies made the list (Walgreens, CVS, Wal-Mart). Finally some miscellaneous issues pertinent to the pharmacy community were included (Research, Information, Importation, Patent, Contraception, Education, Retail Clinics, e-Prescribing).

DISCUSSION

Using electronic sources had the advantage that if one does not have an opportunity to view an email newsletter one day to seek relevant items of interest it will still be there the next day for review. That may lead to the question - Why not forward the item in electronic form to the students? There are several reasons that approach was considered but eschewed. There would be too much volume of material coming into a student's email in-box and those materials would be too easily deleted. Also, not all would be of interest to everyone, whereas a person standing in front of the bulletin board display

can quickly scan all items to select those of interest. Finally, students can be referred to flip back to earlier items if all remain posted for a semester.

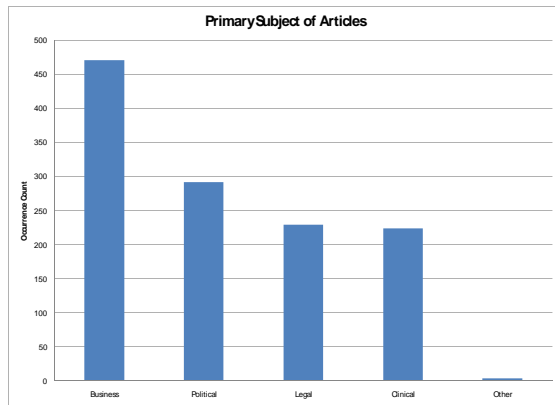


Figure 1. Primary Subject of Articles

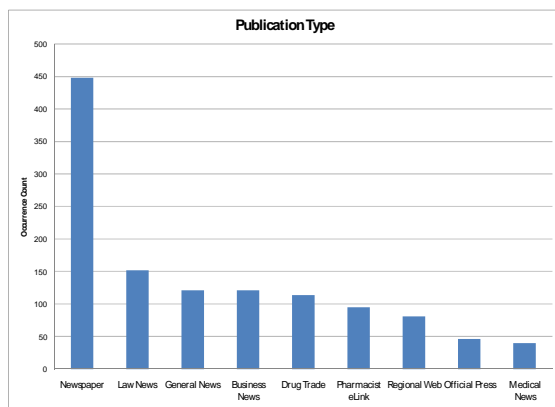


Figure 2. Publication Type

Rank	Source	Count
1	Health & Life Sciences Law Daily	115
2	Drug Topics	82
3	The New York Times	67
4	Washington Post	66
5	USA Today	35
6	United Press International	32
7	Reuters	32
8	Drug Store News	29
9	Boston.com	26
10	American Health Lawyers Association	24
11	New York Times	24
12	Yahoo News	23
13	The Wall Street Journal	22
14	Associated Press	20
15	CNN Money	20
16	Bloomberg	17
17	Los Angeles Times	14
18	Chicago Tribune	11
19	Minneapolis Star-Tribune	11
20	Financial Times	11

Rank	Tag	Count
1	Industry	175
2	FDA	162
3	Medicare	108
4	Generic	84
5	Lawsuit	82
6	Research	79
7	Cost	69
8	Price	68
9	Safety	64
10	Part D	57
11	Jobs	55
12	Medicaid	52
13	Reimbursement	51
14	Insurance	48
15	Walgreens	45
16	Advertising	44
17	Information	43
18	Children	41
19	Biotechnology	37
20	Abuse	35
21	Importation	35
22	Patent	35
23	Contraception	34
24	Independent	34
25	Sales	34
26	Education	33
27	Retail Clinics	33
28	Trials	33
29	Approval	32
30	CVS	30
31	Online	29
32	OTC	29
33	Access	28
34	Discount	28
35	Disclosure	25
36	Medication Error	25
37	e-Prescribing	24
38	Healthcare	24
39	Counterfeit	23
40	Fraud	23
41	PBM	23
42	OxyContin	22
43	Wal-Mart	21
44	DTC	20
45	Pain	20
46	Cancer	19
47	Plan B	19
48	Cold Medications	18
49	Drug Reps	18
50	Merger	18

An additional advantage of adopting this approach to disseminating contemporary information is that it forces the faculty member to keep abreast of developments as part of screening items for posting on a daily basis. This daily approach is important; posting something new every day means a reader will likely see a new item and that entices the reader to return frequently.

Faculty members have to deal with information overload. How can a balance be struck between the historical or traditional information students need to know with information about highly contemporary trends? How can we get to the students everything they need to know, especially in the fast-paced realm of pharmaceutical policy where important developments occur daily? The challenge of having insufficient time for discussion in the classroom

setting of the nuances of evolving trends and their implications for the profession led to exploration of alternative approaches. The use of bulletin board postings to increase students' awareness of contemporary pharmaceutical policy issues is one approach.

CONCLUSIONS

It can be seen from this analysis that the issues facing pharmacists are varied. As seen from the coverage of these varied issues in the lay media, the pharmaceutical policy field is transforming, and many of these changes are very relevant to the general population. The bulletin board project is an important learning tool for pharmacy students as it highlights the importance of staying abreast with

important issues about which any pharmacist could be questioned.

CONFLICT OF INTEREST

Authors of this manuscript have no conflicts of interest to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this manuscript.

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