

## Single Line Stories

- Fall semester starts Wednesday Jan 23rd, Are you ready?
- Rho Chi Induction Ceremony is on Jan 24th, Did you confirm your attendance?
- Enjoy editing? Email us for leadership opportunities!

VOL 2 | ISSUE 4 | 2013

JANUARY 1

# RHO CHI *post*

A STUDENT-OPERATED NEWSLETTER BY THE  
ST. JOHN'S UNIVERSITY COLLEGE OF PHARMACY AND HEALTH SCIENCES'  
RHO CHI BETA DELTA CHAPTER

[www.rhochistj.org](http://www.rhochistj.org)

## VOLUNTEER OPPORTUNITIES: URBAN HUMANITARIAN PROJECTS

BY: SIBYL CHERIAN, PHARM.D CANDIDATE C/O 2013

Last year's piece on "Carrying the Vincentian Torch" featured the endeavors of the Urban Humanitarian Project (UHP) in order to raise money for their multiple annual charity projects. Since then, the organization has grown and strived to new heights to reach the community around them. You can read the original Rho Chi Post article published on April 2012 in Rho Chi Post Volume 1, Issue 7, page 16.

### 2012 Urban Santa Project

Over the past 3 years, Urban Santa project has hand-delivered toys to over 1,300 underprivileged children. This year, in an effort to promote literacy in urban communities, the project is moving in a new direction. "Santa and his elves" will be delivering age-appropriate books to children living in various local charity organizations. During each delivery, Santa will read a



## Inside This Issue

Operation Santa	1
Quote of the Month	2
Opioid Debate	3
Eliquis® Approved	5
TakeCharge® Program	7
January Graduates	8
Rho Chi Induction	9
Word Search Puzzle	10
Crossword Puzzle	11
Alert Fatigue	12
2013 Recruitment	14
White House Petition	15
Word Search Solution	16
VariZiG™ Approved	17
Pain Management	18
Plan B Debate	19
Crossword Answers	21
Letter From the Editors	22
Editorial Team Bios	24
Upcoming Events	25
About Us	25

story to the children and encourage them to continue to read throughout the year.

Each book a child receives will include a stamped postcard on which the child can write about the book he or she reads and send it back to the "North Pole." The Urban Santa team will monitor the postcards they receive and upon receiving these postcards, the Urban Santa team will send another book to the child. As long as the children continue to read and write about what they read, they can continue to receive books throughout the year.

Urban Santa has decided to form teams in or-

der to make sure they can reach the multiple organizations in various locations. Team Dasher, Dancer, Prancer, Vixen, Comet, Cupid, Donner, Blitzen, and Rudolph will be promoting literacy during the holidays throughout New York, New Jersey, Florida, Canada, and even Haiti.

For a complete list of the teams and locations, please visit [www.urbansantaproject.org](http://www.urbansantaproject.org). Get into the holiday spirit by joining a team!

If you are interested in organizing a book drive or donating old or new books, please contact [sibyl.cherian@gmail.com](mailto:sibyl.cherian@gmail.com).

### QUOTE OF THE MONTH

BY: ALEENA CHERIAN, PHARMD CANDIDATE C/O 2014

"EVEN IF I KNEW THAT TOMORROW  
THE WORLD WOULD GO TO PIECES,  
I WOULD STILL PLANT MY APPLE TREE."  
— MARTIN LUTHER KING JR.

INSPIRATIONAL WORDS  
RHO CHI POST

## THE OPIOID DEBATE: PROP AND PROMP BATTLE AWAY

BY: TAMARA YUNUSOVA, ASSISTANT STUDENT EDITOR

On Wednesday, July 25<sup>th</sup> a petition signed by the reform group Physicians for Responsible Opioid Prescribing (PROP) called on the FDA to implement opioid label changes that would restrict Chronic Non-Cancer (CNCP) opioid treatment for patients with severe pain only. It wasn't too long before another petition signed by PROP's adversary, Professionals for Rational Opioid Monitoring & Pharmacotherapeutics (PROMPT), made its way that would initiate the great opioid debate. This would have been an ordinary debate concerning another policy readjustment request, except that it raised one of the ultimate questions of healthcare, namely: In the face of high overdosage and addiction rates, how can chronic non-cancer pain be treated safely and effectively?

With zealous efforts designed to restrict opioids to severe pain patients only, the 37 physicians, public health workers, psychiatrists and other specialist members of PROP sought to address one of the growing problems of the decade: substantial overdose death rates and rising addiction to opioids. More so, PROP proposed a maximum of 90 days of no more than 100 mg of morphine daily for patients with severe chronic noncancer pain.<sup>2</sup> The petition stated, "Unfortunately, many clinicians are under the false impression that chronic opioid therapy is an evidence-based treatment for chronic non-cancer pain and that dose-related toxicities can be avoided by slow upward titration. These misperceptions lead to overprescribing and high dose prescribing."

Indeed, pain is cast as a public health problem and though this may appear to be an overstatement

at first glance, there is good reason to view it as such. The issue of pain is beset with misconceptions about pain, limited access to physicians who are knowledgeable about acute and chronic pain, and insufficient research. Decisions about selecting the optimal treatment for patients are not solely based on health outcomes, but they are influenced by other factors such as insurance coverage along with local/state regulations.<sup>3</sup> Often, treatments are chosen based upon the insurance coverage's preference rather than methods of treatment that may benefit the patient more.<sup>3</sup> Despite the major U.S. expenditures (estimated to be \$560 to \$635 billion annually according to a recent report from the Institute of Medicine), the painstaking efforts taken to cover pain treatments are not reflected by the health outcomes; the treatment itself does not ensure complete alleviation of pain.<sup>3</sup>

**"The issue of pain is beset with misconceptions about pain, limited access to physicians who are knowledgeable about acute and chronic pain, and insufficient research."**

According to Andrew Kolodny, MD, the president of PROP, the increases in overprescribing were prompted by effective marketing giving the notion that physicians were underutilizing opioids. In response, physicians began to prescribe opioids extensively, leading to unnecessary use. Far more surprising than the cause was the aftermath. Many physicians made a major omission; they neglected

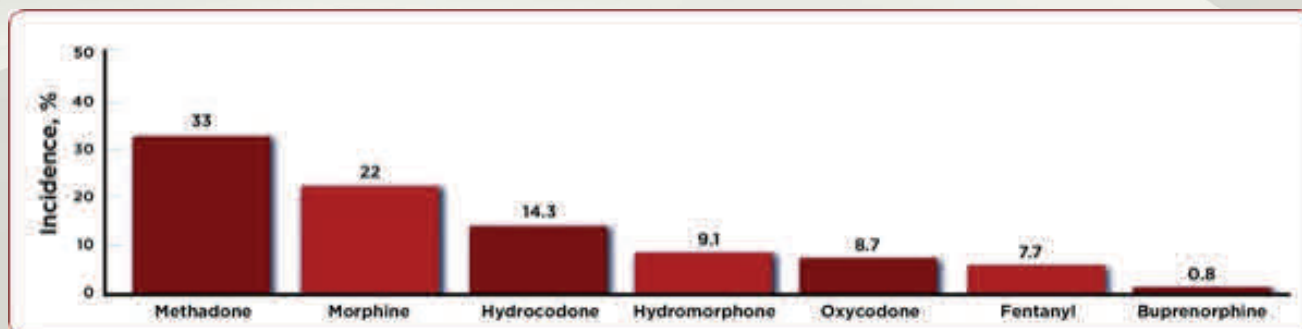


Figure: Drug-related deaths involving opioids by drug type



to consider issues such as patient addiction or question the safety of the drugs prior to prescribing.<sup>2</sup>

The issues of opioid effectiveness and safety are at the forefront of the PROP platform. “We think it’s now time for the FDA to communicate clearly to the medical community that long-term use of opioids for chronic non-cancer pain has not proven safe and effective” stated Dr. Kolodny. According to a large study conducted in Denmark, people who are on long-term opioids for chronic pain were doing very poorly compared to those who were treated with non-opioid analgesics.<sup>2</sup> In addition, the results of similar studies replicated in the United States have cast doubt upon the effectiveness of opioids and suggest that by overprescribing opioids, pain is being undertreated.

Despite the support this measure has garnered, the opioid restriction strategy has received a scathing attack in the face of its critics who view the strategy as anything other than a tenable solution. “If the current call for more information leads our colleagues to deprive our patients of much needed relief, we will have done even a greater travesty,” contend Edward et al in their letter to the editor of the *Journal of Pain*.<sup>4</sup> The letter was written in response to an article published in the September issue of the journal entitled “Is Lack of Evidence the Problem?” in which the author of the article, Ballantyne, attributes over prescription to regulatory failure and pharmaceutical marketing efforts.<sup>4</sup>

**“Most opioid deaths result from incorrect medication use, mainly the abuse of multiple drugs or taking opioids in conjunction with sedative medications or alcohol.”**

In their letter to the editor, Edwards et al argue that Ballantyne’s standpoint is short-sighted in its portrayal of the issue solely within the bounds of the pharmaceutical marketing failing to consider factors such as increases in the aging population, the changing expectations of patients, and regulatory pressures to improve pain management. Also, in com-

menting about opioid over prescription, the letter addressed opioid safety and effectiveness, a PROP standpoint. While PROP contends that limited knowledge exists about opioid effectiveness and safety, no mention is made about the significant toxicities of analgesic alternatives such as non-steroidal anti-inflammatory drugs (NSAIDS). Such limitations of knowledge pose a great barrier for physicians who need substantial knowledge about opioids and alternative analgesics in order to formulate informed decisions. In this light, PROP’s efforts to restrict opioid therapy to severe CNCP patients are misdirected. The increase in over prescription of opioids may be no more than a red flag for the need of comparative effective research.

Jeffrey Fundin, Pharm D, FCCP, a diplomate of the American Academy of Pain Management and chairman of PROMPT states that limiting dosages to 100mg morphine per day fails to account for the variability in conversion calculations that exist among different opioid products. According to a study of accepted conversion charts, variations in calculations spanned from -50% to +245%.<sup>2</sup> As far as the safety of opioids is concerned, Fundin notes that the adverse effects targeted by PROP (ie: bleeding disorders and kidney dysfunction) are mainly linked to NSAIDS rather than to opioids. Most opioid deaths result from incorrect medication use, mainly the abuse of multiple drugs or taking opioids in conjunction with sedative medications or alcohol.<sup>2</sup>

These deaths could be prevented and are unlikely in patients if they take their medication correctly and are treated by physicians who are aware of the risks. Embedded in the great opioid debate are a range of strategies that can be used to address the problem. In a recent report by the Centers of Disease Control and Prevention, the report stated that the largest contributor to opioid deaths was methodone, with a death-rate of 33% (see figure).<sup>2</sup> Fundin believes that regulations should make education necessary for all prescribers. This will promote greater knowledge of risk stratification and train physicians to interpret urine drug screening and serum analysis. In addition, to encouraging clinician education, the IOM Committee

places particular emphasis on patient education in order to them to play an active role in managing their pain.

Whether a label change for long-term use is an overarching measure or the first step in addressing the problem, the opioid debate fine tunes the problem of pain, encouraging us to question whether CNCP is adequately and safely treated. By taking into consideration the long-term effects and placing more efforts toward physician and patient education, healthcare professionals can make a difference.

## SOURCES:

1. Boyer, E. W. Management of opioid analgesic overdose. *New England Journal of Medicine*, 2012. 367: 146-155.
2. Buckley B. The great opioid debate: PROP, PROMPT square off. *Pharmacy Practice News*, 2012. 39(11).
3. Clark, N. M.& Pizzo, P. A. Alleviating suffering 101- pain relief in the united states. *New England Journal of Medicine*, 2012. 366: 197-199.
4. Edwards R, Jamison, R. & Ross, E. The opioid debate-missing the point. *Journal of Pain*, 2012 12(4),508.

## FDA APPROVES APIXABAN FOR NONVALVULAR ATRIAL FIBRILLATION

BY: ALEXANDRA ALLEVA, PHARM.D CANDIDATE C/O 2013

As of December 28th, Bristol-Myers Squibb and Pfizer's brand name oral anticoagulant, Eliquis® (apixaban), attained FDA approval.<sup>1</sup> This occurred one month after its approval in Europe and Canada, following longer-than-expected waits in the US due to further investigation requests by the FDA.<sup>2</sup>

The much-anticipated anticoagulant is indicated to reduce the risk of stroke and blood clots only in patients with nonvalvular atrial fibrillation, excluding

those with prosthetic heart valves or valve associated disorders.<sup>1</sup> These patient populations were not studied in apixaban's clinical trials and therefore could not provide the data required to procure the expanded indications.<sup>3,4</sup> In related news, the FDA recently issued a warning about Pradaxa® (dabigatran etexilate) failing to show safety in mechanical heart valve patients, exemplifying the importance of proper anticoagulant drug choice for such individuals.<sup>5</sup>



Eliquis (apixaban) packaging marketed in UK

Source: <http://www.pharmafile.com/news/176399/eliquis-uk-af>

As the most common form of arrhythmia, atrial fibrillation afflicts nearly 3 million individuals in the United States, the number of which is only expected to rise in the coming years.<sup>6</sup> A key component to treatment is the prevention of thrombosis and stroke with longstanding anticoagulation therapies, in cases where the benefit of medication outweighs the risk. The disorder is more prevalent and severe in those with factors such as older age, cardiovascular disease, hypertension, diabetes, previous stroke or DVT history, and hyperthyroidism.<sup>6</sup>

Apixaban's mechanism of action works in the body's coagulation cascade to inhibit the activated form of clotting factor X, the enzymatic precursor to thrombin. Thrombin, in turn, is the protein responsible for fibrinogen conversion to insoluble fibrin and, ultimately, clot formation. Eliquis® will be available in 2.5 mg and 5 mg tablet strengths with a recommended twice daily dose. It is the second anti-Xa inhibitor to be released to the market.<sup>7</sup>

The introduction of Pradaxa®, as a direct thrombin inhibitor in 2010, and Xarelto® (rivaroxaban), the first of the factor Xa inhibitors in 2011, provided worthy alternatives to those patients with difficulty maintaining standard warfarin therapy. However, despite their advantages over warfarin, like dietary and monitoring freedoms, there have been increased concern over bleeding events and lack of antidotes.<sup>8</sup> In addition, the known drawback of these drugs is brand name pricing and affordability. Therefore, neither have been able to overtake the prescription stronghold and market volume that warfarin continues to dominate.

Being a highly selective factor Xa inhibitor, studies have shown apixaban to be a very promising new generation oral anticoagulant. The Phase III ARISTOTLE trial substantiated apixaban as a contender through demonstrated reductions in outcomes for stroke or systemic embolism and major bleeding events compared to warfarin. These findings translated to a significant reduction in mortality.<sup>4</sup> In the AVERROES trial, apixaban compared favorably to aspirin in terms of stroke and systemic embolism reduction in patients diagnosed with atrial fibrilla-

tion.<sup>3</sup> Several other clinical trials have also displayed favorable comparison to enoxaparin in hip and knee replacement surgeries for the prophylaxis of venous thromboembolism, although further study is needed for this to be conclusive.<sup>9,10</sup>

As with all anticoagulants, the major risks associated with the use of apixaban are serious and life-threatening bleeding events, for which there is not yet a remedy in the new classes of anticoagulants. Potential antidotes and reversal treatments for the novel anticoagulants are currently being researched.

Once a medication like Eliquis® is released to the public from a previously controlled clinical trial period, post-marketing reports and review usually will reveal both adverse and beneficial characteristics of the drug that were not originally established. Such analyses prove helpful towards future developments, especially as targeted therapies become increasingly specific. As a result, this will hopefully sustain the trend for discovering safer, more practical options to conventional treatment and optimize patient management in the field of anticoagulation.

## **SOURCES:**

1. News Release: FDA approves Eliquis to reduce the risk of stroke, blood clots in patients with non-valvular atrial fibrillation. FDA Web site. Available at: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm333634>. Accessed December 28, 2012.
2. O'Riordan, Michael. FDA Approves Apixaban to Prevent Stroke in Nonvalvular AF. Medscape Pharmacists News web site. Available at: <http://www.medscape.com/viewarticle/776846>. Accessed December 28, 2012.
3. Connolly SJ, Eikelboom J, Joyner C, et al. Apixaban in patients with atrial fibrillation. *N Engl J Med*. 2011;364(9):806-17.
4. Granger CB, Alexander JH, McMurray JJ, et al. Apixaban versus warfarin in patients with atrial



- fibrillation. N Engl J Med. 2011;365(11):981-92.
5. MedWatch: Pradaxa (dabigatran etexilate mesylate): Drug Safety Communication - Should Not Be Used in Patients with Mechanical Prosthetic Heart Valves. FDA web site. Available at: <http://www.fda.gov/Safety/MedWatch/SafetyAlertsforHumanMedicalProducts/ucm332949>. Accessed December 28, 2012.
  6. Division for Heart Disease and Stroke Prevention: Atrial Fibrillation Fact Sheet. CDC web site. Available at: [http://www.cdc.gov/dhds/data\\_statistics/fact\\_sheets/fs\\_atrial\\_fibrillation.htm](http://www.cdc.gov/dhds/data_statistics/fact_sheets/fs_atrial_fibrillation.htm). Accessed December 28, 2012.
  7. Package insert. Eliquis (apixaban). Princeton, NJ: Bristol-Myers Squibb Company, New York, NY: Pfizer Inc; December 2012.
  8. Drug Safety and Availability: FDA Drug Safety Communication: Update on the risk for serious bleeding events with the anticoagulant Pradaxa (dabigatran). FDA web site. Available at: <http://www.fda.gov/Drugs/DrugSafety/ucm326580>. Accessed December 28, 2012.
  9. Lassen MR, Gallus A, Raskob GE, et al. Apixaban versus enoxaparin for thromboprophylaxis after hip replacement. N Engl J Med. 2010;363(26):2487-98.
  10. Lassen MR, Raskob GE, Gallus A, et al. Apixaban versus enoxaparin for thromboprophylaxis after knee replacement (ADVANCE-2): a randomised double-blind trial. Lancet. 2010;375(9717):807-15.

## TAKECHARGE® PROGRAM BY CHEROKEE PHARMACY

BY: STEVE SOMAN, CO-EDITOR-IN-CHIEF

TakeCharge® Program at Cherokee Pharmacy is a program created by D. Terry Forshee, DPh, PD, CDE, that addresses the issue of obesity and weight management at the community level. Patients are seen by the pharmacists and evaluated based on their health history, BMI, body weight, medication history, and other factors before they are given medication therapy management, diabetes education, and healthy lifestyle strategies. The program follows the patient for 13 weeks on a regimen of exercise and nutrition while recording their progress.

At the end of the 13 week program, the pharmacist reviews each patients progress and works with them to establish a plan for continuing or maintaining their success. TakeCharge® is truly a revolutionary program that is designed to enhance the status of a pharmacist as a health care professional, enabling them to transition the pharmacy into the health care arena in addition to dispensing medications.



For more information , visit: <http://www.takechargerx.com/>



 *Apply Now for*  
**Your Diploma**

*January*  
**Graduates**

Scan here or visit  
**[www.stjohns.edu/mydiploma](http://www.stjohns.edu/mydiploma)**  
to apply for your diploma today!



001-7982-000



# THE RHO CHI SOCIETY

Beta Delta Chapter  
St. John's University



## *Induction Ceremony*

January 24th, 2013  
Verdi's of Whitestone

## WORD SEARCH PUZZLE

BY: MARIE HUANG, ASSOCIATE STUDENT EDITOR

E	C	U	A	L	L	E	N	O	M	L	A	S
I	R	E	U	S	N	S	A	E	C	L	A	O
V	E	L	N	M	O	P	E	A	L	N	M	H
B	O	O	E	M	M	T	I	E	O	E	E	B
I	O	I	N	A	R	N	I	M	S	I	N	S
A	O	R	H	S	A	S	O	D	T	S	O	M
L	M	B	D	O	B	D	I	O	R	S	P	R
M	T	I	L	E	U	R	A	S	I	E	E	M
A	A	V	L	E	T	E	O	C	D	R	R	E
A	T	K	S	D	I	E	A	A	I	I	T	E
I	C	P	A	C	P	B	L	I	U	A	I	O
M	A	I	R	E	T	S	I	L	M	O	A	C
L	C	H	L	A	M	Y	D	I	A	D	Y	Y

FIND THE FOLLOWING WORDS:

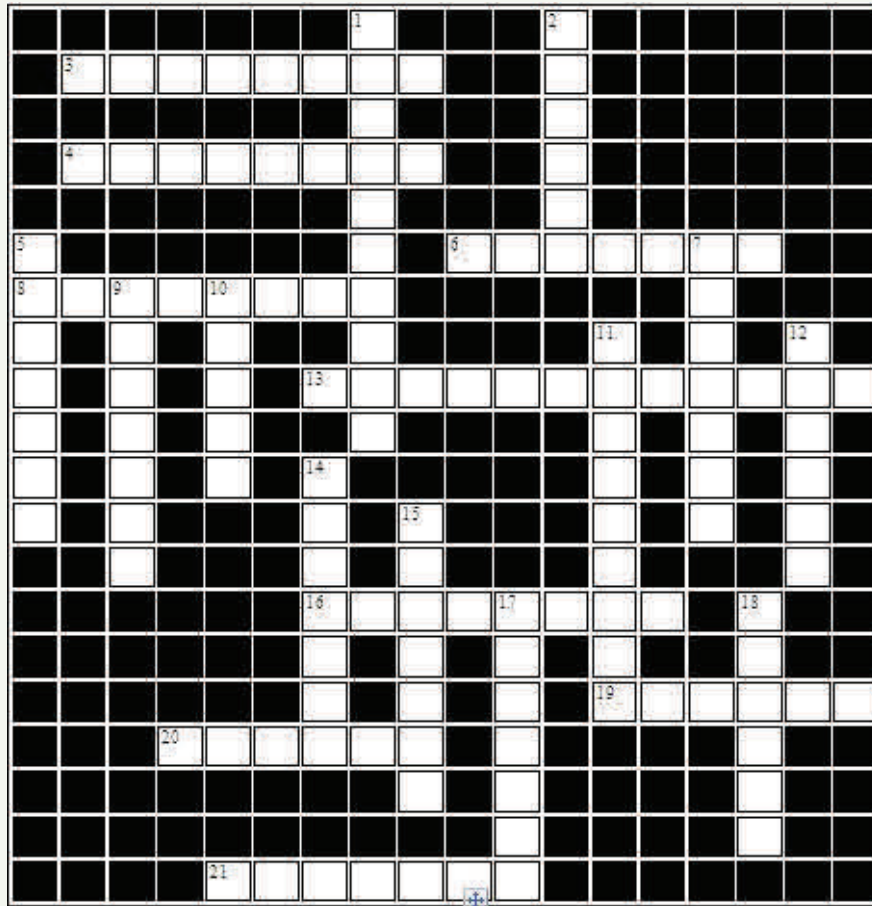
**LISTERIA**  
**PSEUDOMONAS**  
**TREPONEMA**  
**VIBRIO**  
**KLEBSIELLA**  
**SALMONELLA**  
**CHLAMYDIA**  
**CLOSTRIDIUM**  
**BORDETELLA**  
**NEISSERIA**

**TRIVIA:** Which of these following genera of bacteria is atypical?

View the answer on Page 16

## CROSSWORD PUZZLE

BY: MAHDIEH DANESH YAZDI, ASSOCIATE STUDENT EDITOR



### Across

3. Finasteride; Male pattern hair loss in men
4. Celecoxib; Signs and symptoms of osteoarthritis
6. Niacin; Dyslipidemia
8. Imiglucerase; Gaucher's disease
13. Alendronate & Cholecalciferol; Osteoporosis in post-menopausal women
16. Duloxetine; Depression, anxiety, and fibromyalgia
19. Esomeprazole; Gastroesophageal reflux disease (GERD)
20. Zoledronic Acid; Hypercalcemia of malignancy
21. Oxymorphone; Moderate-severe pain

**Challenge: Which one of the words do not belong?**

**Tip: May be more than one answer**

### Down

1. Estradiol; Moderate-severe vasomotor symptoms associated with menopause
2. Capecitabine; Metastatic colorectal cancer
3. Rabeprazole; Gastroesophageal reflux disease
4. Aripiprazole; Schizophrenia
5. Riluzole; Amyotrophic lateral sclerosis
7. Zolmitriptan; Migraine
9. Oxycodone; Moderate-severe pain
10. Mesalamine; Mild-moderate ulcerative colitis
11. Valganciclovir; Cytomegalovirus (CMV) retinitis in patients with autoimmune deficiency syndrome (AIDS)
12. Temozolomide; Glioblastoma multiforme
14. Niacin & Lovastatin; Dyslipidemia
15. Fenofibrate; Hyperlipidemia



## LIQUEFYING WORKFLOW: CLINICAL DECISION SUPPORT AND ALERT FATIGUE

BY: SAGAR DEMBLA, PHARM.D CANDIDATE C/O 2013

As an increasing number of healthcare institutions make their transition to a Computerized Physician Order Entry System (CPOE), the integrated clinical decision support systems (CDS) become more valuable to healthcare professionals. The CDS are tied with drug information databases provided by the software vendor to help the user implement clinically appropriate therapies for each patient. The software crosschecks a patient's profile for dose, allergy, drug-drug interactions, and duplicate drug therapy. When a physician enters or a pharmacist verifies a medication order, the system can alert them to a potential problem in therapy in a form of a "pop-up" window. However, physicians override these alerts 49-96% of the time, and this is a major problem.<sup>1,3,5</sup>

Alert fatigue describes an excessive and overburdening amount of alerts that occur in both CPOE and pharmacy information systems. Physicians have been disinclined to adopt drug decision support due to this growing problem.<sup>3</sup> A six-month study on e-prescribing demonstrated that more than 2,000 Massachusetts clinicians overrode 91.9% of encountered DDI alerts, and 17% of these alerts were deemed to be of limited use to patient safety.<sup>2</sup> Understandably, the most commonly cited barrier to effective use of drug decision support is alert fatigue.<sup>3</sup> CDS is supposed to boost the number one goal of a healthcare organization: PATIENT SAFETY. However this deluge of alerts interrupts workflow and hampers productivity.<sup>3-5</sup> Of over 700 annual ADE reports at a children's medical center, 14 events had a missed alert.<sup>1</sup> When patient safety is jeopardized, the implications are monumental, and the healthcare institution moves one ignored alert closer to a lawsuit.

**"Alert fatigue describes an excessive and overburdening amount of alerts that occur in both CPOE and pharmacy information systems."**

As drug information experts, pharmacists have a great responsibility of improving drug decision support, and an even greater opportunity of making a big impact on healthcare institutions by paving this rocky workflow. Drug decision support can reduce ADEs by up to 88 percent, preventing three million serious medication errors in the United States.<sup>3</sup> For example, 402 adverse drug events, including 49 serious or life-threatening ones, were prevented by electronic alerts in an e-prescribing CDS system. This translates to 39 fewer hospitalizations, 24 fewer emergency department visits, 267 fewer office visits, and 60 fewer phone calls to clinicians. A financial analysis resulted in an annual savings of over \$400,000.<sup>2</sup>

So how do we resolve alert fatigue? There is no clear answer as it all revolves around institution-specific practices. While the vendor-supplied clinical knowledge repository provides the framework for the CPOE system, the clinical information needs to be customized in accordance to institution's needs.<sup>5</sup> These site-specific requirements include type of patient population, common prescribing practices, medication order sets, and treatment protocols.<sup>1,6</sup> Additionally, analyzing the nature of overridden alerts can help in reducing the number of false positive and false negative alerts triggered. Evidently, this will require a collaborative effort from a team of healthcare professionals that includes physicians, nurses, pharmacists, and IT specialists.<sup>5</sup> Let's look at a few examples of successful strategies to reduce alert fatigue:

- A complete and accurate allergy profile. In a 1-month period, allergy alerts represented 1.3% of total alerts of a 319 bed hospital, with 97% of them being overridden. Less than 50% of patients had a complete allergy profile<sup>6</sup>
- Reclassification of the severity of DDIs. Pharmacists in a 900-bed hospital evaluated approximately 8000 unique pairs of drugs classified as "major" to determine if the classification should be changed. Only 34.3% of DDIs retained their "major" classification.<sup>4</sup> Tiered alerting by sever-

ity is associated with higher compliance rates of DDI alerts, while lack of tiering is associated with a high override rate of more severe alerts<sup>7</sup>

- Smarter alerts for specific clinical scenarios. A vendor DDI program fired 2336 annual alerts each time two drugs were ordered in the ARB, ACEi, spironolactone, or potassium salt classes. A more specific alert was created that triggered only when a medication with hyperkalemia potential was ordered and the patient's most recent serum potassium was greater than 6 mg/dL. This resulted in an 80% decrease in firing<sup>8</sup>
- Establish acceptable "duplicate therapy" alerts. Commonly used medications with different routes such as acetaminophen (oral or rectal) and diphenhydramine (oral or i.v.) can be tagged as acceptable<sup>1</sup>

**"...analyzing the nature of overridden alerts can help in reducing the number of false positive and false negative alerts triggered..."**

Various other strategies can be executed to overcome alert fatigue; however, we must take caution when modifying clinical parameters so that we do not exclude a certain patient demographic. There is a growing concern about vendors not offering a customizable interface for CDS knowledge bases due to liability issues, making it a barrier that needs to be overcome by healthcare organizations.<sup>9</sup> Drug decision support is the mainstay of protecting patient safety, and the future of an intelligent CPOE/CDS system rests on a better collaborative effort among CPOE and CDS base vendors, pharmacists, physicians, and healthcare organizations.

**SOURCES:**

1. Cash J. Alert fatigue. *Am J Health Syst Pharm D*. 2009. 66:2098-101
2. Weingart SN, Simchowitz B, et al. An empirical model to estimate the potential impact of medication safety alerts on patient safety, health care utilization, and cost in ambulatory care. *Arch Intern Med*. 2009. 169(16):1465-73.
3. ElSevier/GoldStandard. Clearing the way for effective drug decision support.
4. Horn JR, Hansten PD, Osborn JD, et al. Customizing clinical decision support to prevent excessive drug-drug interaction alerts. *Am J Health Syst Pharm*. 2011. 68:662-4
5. Chaffee BW, Christopher Zimmerman R. Developing and implementing clinical decision support for use in a computerized prescriber-order-entry system. *Am J Health Syst Pharm*. 2010. 67:391-400
6. Huntman L, Ward L. Analysis of allergy alerts within a computerized prescriber-order-entry system. *Am J Health Syst Pharm*. 2009. 66:373-7
7. Paterno MD, MBI, Maviglia SM, MD, MS, et al. Tiering Drug-Drug Interaction Alerts by Severity Increases Compliance Rates. *J Am Med Inform Assoc*. 2009. 16(1): 40-6.
8. McNatty D, Stoffer B. Use of Targeted Computerized Alerts to Address Potential Adverse Drug Events at a Large Community Health System
9. Kesselheim AS, Cresswell K, et al. Clinical decision support systems could be modified to reduce 'alert fatigue' while still minimizing the risk of litigation. *Health Aff (Millwood)*. 2011. 30(12):2310-7

**LEAD THE  
EVOLUTION**

Source: <http://healthinformaticsdegree.uic.edu/>





# FRATERNITY & SORORITY SPRING 2013 RECRUITMENT



**INTERFRATERNITY COUNCIL  
RECRUITMENT NIGHT**  
FRIDAY, FEB 1ST

**PANHELLENIC  
FORMAL RECRUITMENT**  
FRIDAY - SUNDAY, FEB 8TH, 9TH, & 10TH  
\*PARTICIPATION IN ALL EVENTS REQUIRED

\*REGISTRATION FOR ABOVE EVENTS IS REQUIRED.

**ALFSA - BLACK GREEK 101**  
TUESDAY, FEB 5TH  
7PM  
DAC BALLROOM

REGISTER AT [WWW.STJGREEKLIFE.ORGSYNC.COM](http://WWW.STJGREEKLIFE.ORGSYNC.COM)



FOR MORE INFORMATION VISIT  
[HTTP://STJOHNS.ORGSYNC.COM/ORG/STJGREEKLIFE](http://STJOHNS.ORGSYNC.COM/ORG/STJGREEKLIFE)  
[HTTPS://WWW.FACEBOOK.COM/STJGREEKLIFE](https://WWW.FACEBOOK.COM/STJGREEKLIFE)  
[HTTPS://TWITTER.COM/STJGREEKLIFE](https://TWITTER.COM/STJGREEKLIFE)

CLICK  
HOW TO JOIN!



## WHITE HOUSE PETITION TO RECOGNIZE PHARMACISTS AS HEALTH CARE PROVIDERS

BY: MOHAMED DUNGERSI, ASSOCIATE STUDENT EDITOR

A recent We the People petition on the White House official website has reached the 25,000 signature threshold needed to trigger an official response. The petition titled "Recognize pharmacists as health care providers", was initiated by the current editor in chief of the *Rho Chi Post*, Steve Soman.<sup>1</sup> Currently the petition has well over 30,000 signatures.

Started on December 27<sup>th</sup>, 2012, the petition quickly gathered support and within twelve days, the 25,000 signatures were secured. The petition was inspired by a similar petition on the change.org website started by Sandra Leal, PharmD, CDE, who Steve interviewed last year for the *Rho Chi Post*. (The interview can be accessed via the following [Scribd](#).)

He said in regards to the petition, "I put it on my Facebook account as well as sent it to a few classmates at St. John's. It was a chain reaction. Every individual that I shared it with, they sent it to their friends, their coworkers, their bosses."<sup>2</sup>

The petition aims to raise awareness for the fact that pharmacists are not listed as healthcare providers under the Social Security Act. This plays a vital role in the compensation structure allowed under Medicare. The petition states, "By changing the compensation structure allowed under Medicare, we can ensure that patients have access to the medication expertise of pharmacists." It further states, "Studies have shown that when a pharmacist is directly involved in patient care, patients have fewer adverse drug reactions, experience improved outcomes, and health care costs are reduced."<sup>1</sup>

The petition has led to wide-spread support from pharmacists around the country and pharmacy organizations such as ASHP, APhA, and ACCP were quick to throw their support behind the grassroots movement.

ASHP CEO Paul Abramowitz, PharmD, FASHP, applauded the initiative behind the petition effort and encouraged ASHP members to sign the petition, and also to watch for calls to action by the Society and a pharmacy-wide coalition in the coming months. "Our advocacy efforts will focus on multiple

fronts, including influencing elected members of the U. S. Congress to pass legislation that will amend the Social Security Act to recognize pharmacists as providers," he said. "We encourage every ASHP member to reach out to their member of Congress to set the groundwork for this effort." He further stated in a column on ASHP's intersections, "The data are conclusive: Pharmacists improve medication-use outcomes for patients when they are included on the patient-care team."<sup>3,4</sup>

**"Studies have shown that when a pharmacist is directly involved in patient care, patients have fewer adverse drug reactions, experience improved outcomes, and health care costs are reduced."**

"This quick response by the profession represents an interest in pursuing recognition for the value of pharmacists' clinical services. The petition vehicle is one activity that pharmacists and student pharmacists can contribute to the initiative," said Jenelle L. Sobotka, PharmD, FAPhA, APhA President. "We fully recognize the importance of getting pharmacists 'on the list' and recognized as providers of patient care services. I believe the response to this petition shows a united profession. APhA is pursuing provider status as its top priority," said Steven T. Simenson, BSPHarm, FAPhA, FACA, FACVP, APhA President-elect and Chair of APhA's Provider Status Task Force.<sup>2</sup>

Speaking to the APhA official website, Steve discussed the impact he expects the petition to have, "The petition will be a public awareness-raising tool... It is not going to have a legislative impact. However, it will highlight the issue that pharmacists are underutilized in the health care system, as well as gain official recognition of this from the [Obama] administration."<sup>2</sup>

On behalf of the Editorial team of the *Rho Chi Post*, we would like to congratulate Steve Soman for his positive contribution to the pharmacy community.

**“Our advocacy efforts will focus on multiple fronts, including influencing elected members of the U. S. Congress to pass legislation that will amend the Social Security Act to recognize pharmacists as providers...”**

**SOURCES:**

1. Soman, Steve. We the People. White House petition to Recognize pharmacists as health care providers! <https://petitions.whitehouse.gov/petition/recognize-pharmacists-health-care-providers/3lkFWfw> Accessed January 13, 2013.
2. Yed, D. American Pharmacists Association. Provider status: White House petition hits 25,000 signatures and growing. [www.pharmacist.com/provider-status-white-house-petition-hits-25000-signatures-and-growing](http://www.pharmacist.com/provider-status-white-house-petition-hits-25000-signatures-and-growing) Accessed January 13, 2013.
3. Weiss, D. Pharmacy Times. The Push for Pharmacist Provider Status. <http://www.pharmacytimes.com/news/The-Push-for-Provider-Status>. Accessed January 13, 2013.
4. Provider Status Petition Posted to White House Website. American Society of Health System Pharmacists. <http://www.ashp.org/menu/News/NewsCapsules/Article.aspx?id=460>. Accessed January 13, 2013.



The petition can be signed at: <http://wh.gov/Q7lq>

**WORD SEARCH TRIVIA SOLUTION**

BY: MARIE HUANG, ASSOCIATE STUDENT EDITOR

The Word Search trivia answer is **CHLAMYDIA**  
Go back to Puzzle on Page 10?

## VARIZIG™ APPROVAL FOR CHICKENPOX SYMPTOMS

BY: STEVE SOMAN, CO-EDITOR-IN-CHIEF

Varicella Zoster Immune Globulin (Varizig™) was approved by the FDA on December 21, 2012. The Canadian pharmaceutical company Cangene Corporation, which is owned in-part by Apotex Inc., markets the new product. The drug was approved by the Food and Drug Administration (FDA) to reduce “the severity of chicken pox (varicella zoster virus) infections in high risk individuals when given within four days of exposure.”<sup>1</sup>

The Varicella Zoster immune globulin is prepared from harvested plasma of healthy donors who exhibited high levels of anti-varicella zoster virus antibodies. The donated plasma was collected via FDA-licensed collection facilities around The United States and Canada and purified by the anion-exchange column chromatography method. According to the manufacturer, the manufacturing process includes both a Planova 20 nm virus filter that effectively removes lipid-enveloped and non-enveloped viruses based on size and a solvent/detergent treatment step (using tri-n-butyl phosphate and Triton X-1007) that effectively inactivates lipid-enveloped viruses.<sup>2</sup> Despite these precautions, this product can still potentially transmit disease diseases such as human immunodeficiency virus (HIV), hepatitis B, and hepatitis C.

The product is available as a powder for injection 125 IU/vial with no preservatives. The route of administration will determine how the product should be reconstituted. For Intravenous administration, 2.5 mL of a sterile diluent should be added to the 6 mL Varizig™ vial to get a drug concentration of 50 IU/mL. For Intramuscular administration, 1.25 mL of a sterile diluent should be added to the 6 mL Varizig™ vial to get a drug concentration of 100 IU/mL.<sup>2</sup> To insure proper dilution of the powder, you can gently tilt and rotate the vial or gently swirl the vial upright until the powder is dissolved. When reconstituting the product, it is important to remember that you should not shake the vial. Reconstituted product can be stored for up to 12 hours at 2-8°C prior to use.<sup>2</sup>

There are no geriatric or specific pediatric clinical data for Varizig™. Varizig™ is approved for

immunocompromised children and adults, newborns, pregnant women, premature infants, children younger than 1 year, and adults with no immunity to VZV®.<sup>3</sup> The drug is contraindicated in patients with known immunity to varicella zoster virus such as previous varicella infections or varicella vaccination. Individuals who are deficient in IgA may have the potential to develop IgA antibodies and have an anaphylactoid reaction. Patients who had such reactions in the past to other immunoglobulin products should refrain from using Varizig™. The most common adverse reactions to the Varizig™ are injection site reactions (17%), headache (7%), and rash (5%).<sup>2</sup>

### SOURCES:

1. U.S. Food and Drug Administration press release. Available at: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm333233.htm>. Accessed December 26, 2012
2. Varizig® Package Insert. Cangene Corporation, Winnipeg, Canada. Available at: [http://www.cangene.com/\\_uploads/documents/Varizig\\_approved\\_PM\\_Jan\\_2008\\_English](http://www.cangene.com/_uploads/documents/Varizig_approved_PM_Jan_2008_English). Accessed December 26, 2012.
3. Medscape Pharmacists News. FDA Approves Varizig to Reduce Chickenpox Symptoms. Available at: <http://www.medscape.com/viewarticle/776569>. Accessed December 26, 2012.



Image Source: [FFF Enterprises](#)



## PAIN MANAGEMENT AND PALLIATIVE CARE ROTATION EXPERIENCE

BY: MONICA CORREIA, PHARM.D CANDIDATE C/O 2013

This past year of advanced pharmacy rotations, has been a tremendous learning experience for me; I was exposed to the day-to-day functions and roles of pharmacists in a multitude of environments. While each experience allowed me to focus on a different aspect of pharmacy, the rotation which left the biggest impact on my perspective of the role of pharmacists and patient care was in Pain Management and Palliative Care with Dr. Ahmed at Beth Israel Medical Center. It was during this rotation that I became aware of the importance of working as a team member with other medical professionals to tailor care to individual patients.

One of the most vital concepts which I learned during my rotation was the necessity of creating goals of care for each patient. The majority of patients in the Pain Management and Palliative Care Unit were elderly, terminally ill cancer patients suffering from multiple co-morbidities, such as, Alzheimer's disease. They were patients who were unlikely to receive any benefits from cancer treatments aimed at delaying progression of their disease. While these patients were in the Pain Management and Palliative Care Unit for end of life care, the medical team would establish attainable goals of care for each individual patient. For many patients, a major goal of care was to ensure the patient's comfort. Therefore, before starting a medication, an assessment had to be made as to the benefits, risks, and side effects associated with treatment. Each member of the medical team was able to provide input as to whether the medication and its dosing would be appropriate for the patient. The role of pharmacists and interns in this assessment was substantial.

By reviewing literature as to the efficacy and safety of medications, pharmacy members were able to contribute as to whether a medication's benefits would outweigh the risks associated with therapy. The medical team would also determine whether a medication with little benefit in a particular patient, should be used when the potential side effects imposed could cumbersome and compromise patient

comfort. One example would be determining whether the use of Exelon® patches in an elderly patient suffering for Alzheimer's would be appropriate. As part of the pharmacy team, we would review the literature concerning Exelon to determine its cost-effectiveness.

Another component of the rotation was providing in-services on drug therapy in the Pain Management and Palliative Care Unit. These in-services were tailored for the needs of the medical members to which they were presented. For instance, the interns were responsible for creating an in-service handout for the nursing staff on non-steroidal anti-inflammatory drugs. Since the information was for nursing staff, we focused on the administration of these medications and the monitoring parameters associated with them. It was by performing in-services that we, as pharmacy interns, were able to share our knowledge pertaining to drug therapy with other members of the medical team.

All of the members of the Pain Management and Palliative Care Unit greatly welcomed the input of the pharmacy team, including the input of the students. All of the attending physicians would ensure our involvement during patient rounds by asking us questions which would force us to delve into new medical literature concerning drug therapy. It truly was a very hands-on experience that allowed me to apply knowledge from my course work and encourage me to continuously research for new information regarding patient therapy. It served as a crucial experience for me; it taught me that pharmacists have the potential to greatly impact patient care using their drug information skills. They are able to constantly provide input regarding appropriate drug therapy and monitoring, as part of the medical team. Not only did this rotation help me to recognize that pharmacy has a very influential role in patient care, but it also helped me realize my potential to contribute to providing appropriate care.

## NEW HEALTH CARE LAW CONCERNING BIRTH CONTROL CAUSES DEBATE

BY: KATIE CIMMINO, CO-COPY EDITOR

With the start of the New Year, the French government is enacting a new law concerning contraceptives. Now girls between the ages of 15 to 18 will be able to obtain free birth control. Not only will they have access to it, but the French government will provide the drugs free of parental notification. The new laws are an attempt to reduce pregnancy in this age group. In addition the new regulations will hopefully reduce any ignorance and stigma around the topic. With the old laws, teenagers did not have absolute anonymity and if they wanted to have the privacy to obtain birth control, the young women would have to pay for the visit in cash and not submit a claim to their insurance company. Now the French government is promising to pay for all birth control, it will give their female citizens equal access to these types of drugs.<sup>2</sup>

France is not the only country to make new laws effecting women's healthcare. In the United States beginning in August 2012, most new and renewing health insurance plans must offer an assortment of women's preventative services at no cost.<sup>1,7</sup> While many different services for women are now offered and covered, the only controversial topic is the issue of contraceptives.<sup>7</sup> Although the government is mandating that insurance companies pay for birth control, they are taking into consideration religious views by allowing any religious organization that provides health insurance to refrain from offering contraceptive coverage only if these drugs are inconsistent with the organization's original beliefs.<sup>1,5</sup> However, the government accommodates people in that situation so that women who have those insurances still have access to care.<sup>1</sup>

Now that insurance companies are directed to cover birth control, many individuals want to change how much access and autonomy people have with obtaining different contraceptives. Currently the morning-after-pills, also known as Plan B, can be obtained without a prescription. However, there are some restrictions; only people over the age of 17 can obtain Plan B without a prescription after they provide identification to a pharmacist. The American Congress of Obstetricians and Gynecologists (ACOG) is recommending that all birth controls be

sold completely over the counter, while the American Academy of Pediatrics has recommended that teen girls should obtain routine advanced prescription of the morning- after pill.<sup>6</sup> The Food and Drug Administration (FDA) is looking for ways to increase access of many medications, including oral contraceptives, to the general public. For contraceptives, some ideas being thrown around are obtaining a one-time-prescription or even allowing the drug to be in an electronic kiosk that will be able to screen the patient through automated prompts.<sup>4</sup>

**“Although the government is mandating that insurance companies pay for birth control, they are taking into consideration religious views by allowing any religious organization that provides health insurance to refrain from offering contraceptive coverage...”**

All these new ideas and recommendations are being made to allow easier access to contraceptives. Since Plan B is most effective when it is taken 24 hours after intercourse, these restrictions may provide some issues to those trying to obtain them. Much like the reasoning behind the new law in France, supporters of moving the pill to OTC want to do so to avoid any unwanted questions or arguments that patients may receive while trying to purchase the product. For instance, there are many cases where pharmacists refuse to sell the product to people. Personal beliefs aside, Plan B is suppose to be available without a prescription to any male or female over the age of 17.<sup>6</sup>

Even though many people are supportive of allowing more open access to contraceptives, the task of completely moving these drugs OTC should not be considered lightly. While contraceptives are relatively safe, there are still some risks attached to these drugs. It has been shown that oral contraceptives can lead to an increased risk for blood clots and venous thromboembolism (VTE), a condition

where a clot can travel to the lungs and cause serious complications including death. According to the FDA, the newer birth control pills that contain the hormone drospirenone as oppose to estrogen and progestin have an ever greater risk for clots. The ACOG acknowledges these risks but still recommend to having easier access because the risk of VTE is lower compared to those who are pregnant or just had a child. Approximately three to ten out of every 10,000 women will experience a VTE while on birth control.<sup>3</sup> Given the possible serious side effects, concern should be raised about the accessibility to different contraceptives.

### **“The reality is if it's easier to obtain, then it becomes not 'Plan B' but 'Plan A'”**

Besides the possible side effects profile being an issue, moving contraceptives to an OTC status would mean that women would not need a doctor to get a prescription. Although people can self-screen for contraindications, many people are concerned with the potential serious risks if a physician is not consulted. In addition, since women will no longer need to see a doctor, this raises concerns that women will miss out on other important health services including screening for sexual transmitted diseases and cancer. While the ACOG recommends that women receive an annual check-up, the fact is a prescription ensures that a person will come in for the visit.<sup>3</sup> Another concern is that the status of drugs like Plan B will change. Wendy Wright, the Vice President of the Catholic Family and Human Rights Institute states, “The reality is if it's easier to obtain, then it becomes not 'Plan B' but 'Plan A.’”<sup>6</sup>

There are many different opinions on how contraceptives should be accessed and used in the United States. While both sides make valid points, currently there appears to be no move to change anything other than having insurance companies cover the cost of contraceptives. Over a year ago Health and Human Services Secretary Kathleen Sebelius decided to leave the age restrictions on Plan B. It has been a year since that decision and even with the recommendations from ACOG the Obama administration has made no comment on if they plan to revisit the issue.<sup>6</sup>

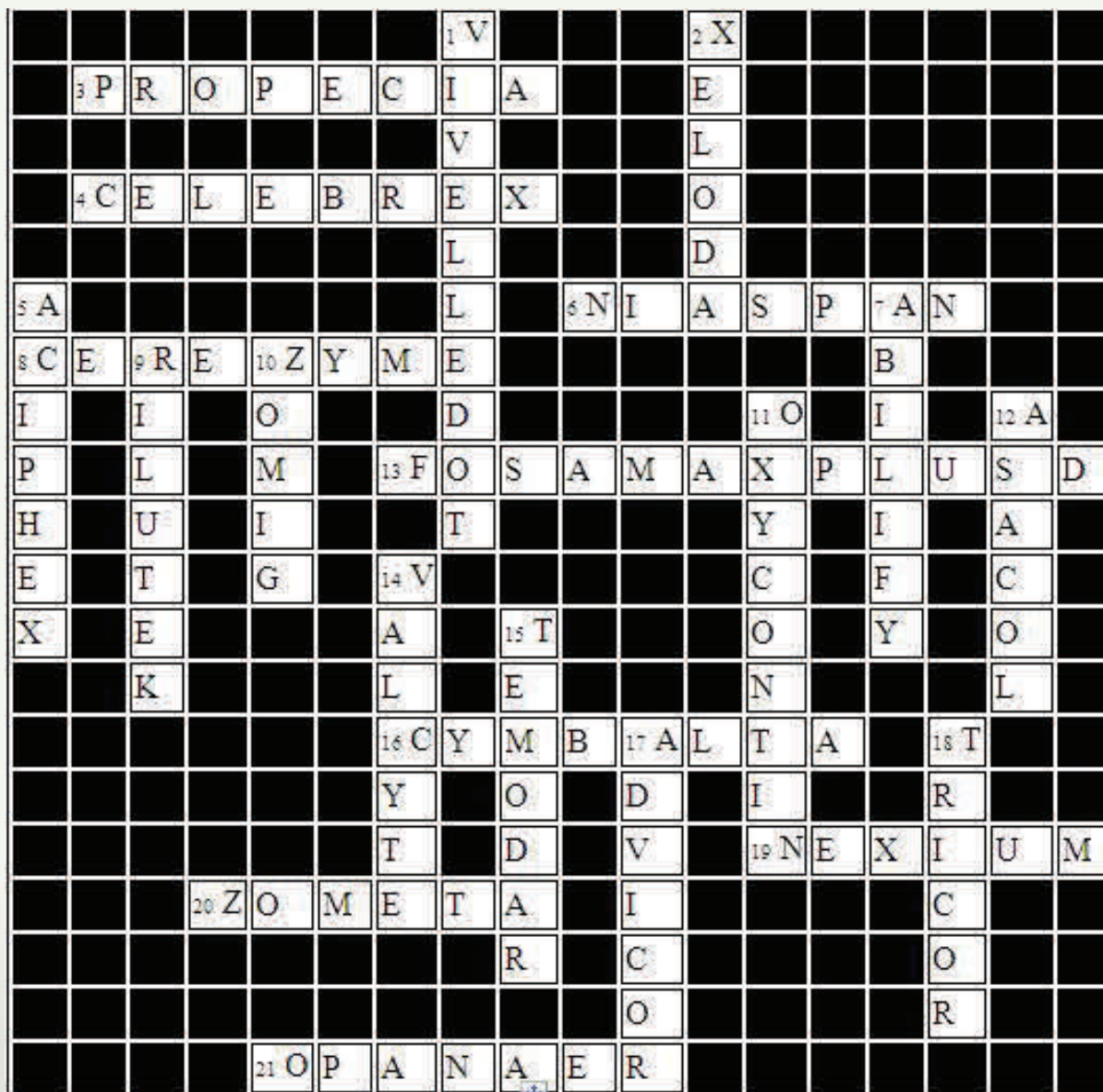
### **SOURCES:**

1. *Affordable Care Act Rules on Expanding Access to Preventive Services for Women.* Healthcare.gov. <http://www.healthcare.gov/news/factsheets/2011/08/womensprevention08012011a.html>. July 31, 2012. Accessed on Dec 29, 2012
2. Beardsley E. *In France, Free Birth Control For Girls At Age 15.* NPR. <http://www.npr.org/2012/12/18/167253336/in-france-free-birth-control-for-girls-at-age-15>. Dec 18, 2012. Accessed Dec 26, 2012
3. Jaslow R. *OB/GYN society says birth control pill should be sold over-the-counter.* CBS. [http://www.cbsnews.com/8301-204\\_162-57552743/ob-gyn-society-says-birth-control-pill-should-be-sold-over-the-counter/](http://www.cbsnews.com/8301-204_162-57552743/ob-gyn-society-says-birth-control-pill-should-be-sold-over-the-counter/). Nov 20, 2012. Accessed Dec 29, 2012.
4. Quijano E. *Doctors call for birth control to be sold over the counter.* CBS. [http://www.cbsnews.com/8301-18563\\_162-57552835/doctors-call-for-birth-control-to-be-sold-over-the-counter/](http://www.cbsnews.com/8301-18563_162-57552835/doctors-call-for-birth-control-to-be-sold-over-the-counter/). Nov 20, 2012. Accessed Dec 29, 2012.
5. Rovner J. *Feds Order Insurers To Cover Birth Control Free Of Charge To Women.* NPR. <http://www.npr.org/blogs/health/2011/08/01/138893475/feds-order-insurers-to-cover-birth-control-free-of-charge-to-women>. August 01, 2011. Accessed Dec 28, 2012.
6. Rovner J. *Post-Election, 'Morning After' Pill Advocates Want Age Rules Revisited.* NPR. <http://www.npr.org/blogs/health/2012/12/07/166694221/post-election-morning-after-pill-advocates-want-age-rules-revisited>. Dec 07, 2012. Accessed Dec 28, 2012.
7. Rovner J. *Under Health Law, 'No-Cost' Birth Control Starts Today.* NPR. <http://www.npr.org/blogs/health/2012/08/02/157674061/under-health-law-no-cost-birth-control-starts-today>. August 01, 2012. Accessed Dec 28, 2012.



## CROSSWORD PUZZLE (SOLUTION)

BY: MAHDIEH DANESH YAZDI, ASSOCIATE STUDENT EDITOR



Go Back to the Puzzle on [Page 10](#)?

# Do you enjoy our puzzles?

Send us a suggestion for a brainteaser at [rhochis@gmail.com](mailto:rhochis@gmail.com)

We will feature your work in our next issue!

## LETTER FROM THE EDITORS: WE NEED YOU!

Dear Reader,

We are always looking to engage with each of you. If you are a talented cartoonist or have a passion for art, feel free to contact one of the editors. It is a great way to express yourself and earn a spotlight for your artistic skills while drawing attention to an aspect of the pharmacy profession.

Can't draw? No problem, take pictures instead! We need photographers who can attend campus events and seminars that are related to healthcare or the pharmacy profession. Please feel free to send us the pictures with one or two paragraphs explaining the event. Perhaps you have a passion for writing; if so, feel free to write to us in response to an article you read. Even if it is just a question or a few comments on an article, email us!

Don't like what you see in the newsletter? Then let us know! Tell us what you would like to see in the newsletter, what topics you are interested in, and/or if you wish to read more about a specific topic. The newsletter is for you; so, your feedback is very important to us.

Do you have some clinical knowledge or experiences to share? Feel free to send us interesting drug information questions you have answered or share what you have learned throughout your rotations.

This is a commitment-free way to stay involved with the pharmacy profession. Contributing to our newsletter does not obligate you to contribute to every issue. We are more than happy to have guest authors and talented students work with us whenever they are available or free to do so. If you have any questions, comments, and/or concerns, please do not hesitate to email us at: [rhochis@gmail.com](mailto:rhochis@gmail.com).

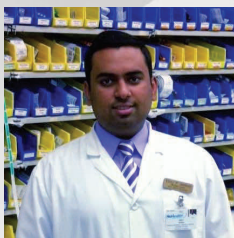
With much gratitude,

*The RCP Editorial Team*

Image Source: [easyvectors.com](http://easyvectors.com)

## RHO CHI POST: EDITORIAL TEAM

### CO-EDITORS-IN-CHIEF

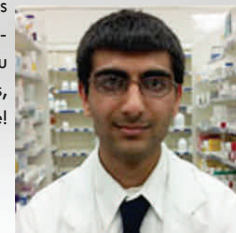


@ Steve P. Soman (6<sup>th</sup> Year, STJ)

Previously known as Ebey P. Soman, I really enjoy writing very opinionated articles. I strongly encourage all readers of our newsletter to respond with their own literary pieces. I look forward to hearing from you, and welcome your comments and constructive criticisms!

@ Neal Shah (6<sup>th</sup> Year, STJ)

I frequently assist several professors on campus with their research. My goal is to provide my fellow students with research-based information that correlates with clinical pharmacotherapy. If you have any topics of interest or comments on currently-published articles, please do not hesitate to email me!



### STUDENT EDITORS

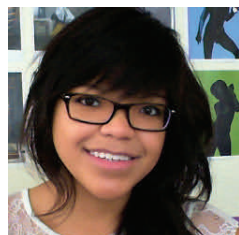


@ Mahdiah D. Yazdi (6<sup>th</sup> Year, STJ)

I like to stay current with all the changes in our profession, both legal and clinical. I hope to keep you informed with all that I learn. Please enjoy Rho Chi Post, and provide us detailed feedback so that we may improve our newsletter.

@ Mohamed J. Dungersi (6<sup>th</sup> Year, STJ)

I am enthusiastic about promoting the pharmacy profession, and what better way to do this than by being a part of the Rho Chi Post? Should you have any comments or concerns, feel free to contact me!



@ Marie Huang (6<sup>th</sup> Year, STJ)

I am in a continuous process of self-definition, and constantly testing the boundaries of this world. I enjoy channeling my inspiration through words and photographs. As a witness to an evolving profession, I look forward to keeping you updated! Who knows where we will be tomorrow?

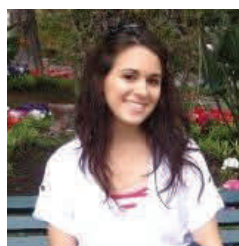
@ Shannon Tellier (6<sup>th</sup> Year, STJ)

I believe it is important for students and everyone else in the profession to stay informed about current pharmacy events. Rho Chi Post is a great way to continue learning information about what is happening on our campus and in the nation.



@ Addolorata Ciccone (6<sup>th</sup> Year, STJ)

I am thrilled to serve as a Co-Copy Editor of Rho Chi Post. Whether you are brand new to the world of pharmacy, a seasoned veteran of this profession, or anywhere in between, I hope you find our work engaging, relatable, and informative. I look forward to reading your comments and feedback.



@ Aleena Cherian (5<sup>th</sup> Year, STJ)



The Rho Chi Post has been a source of current information and great advice to students and professionals in this evolving profession. After years of experience in media and graphics-related work, it is now my privilege to be a part of this endeavor as a Co-Copy Editor. I hope you learn as much from future editions of the newsletter as I have, and I welcome your feedback!



### CO-COPY EDITORS



## RHO CHI POST: EDITORIAL TEAM

### CO-COPY EDITORS

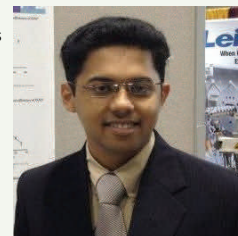


@Katharine Cimmino (4<sup>th</sup> Year, STJ)

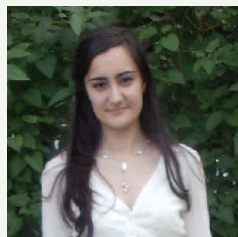
I have always been an avid reader and writer. As a co-copy editor of the Rho Chi Post I am able to merge my passions with the professionalism that comes with aspiring to be a healthcare provider. I am eager to be a part of a publication that promotes my interests and vocation. Contact me at [katharine.cimmino09@stjohns.edu](mailto:katharine.cimmino09@stjohns.edu)

@Bharat Kirthivasan (PhD Candidate, STJ)

I am a doctoral candidate in Industrial Pharmacy researching nanoparticles for delivery to the brain. The only thing I enjoy more than reading a well-written piece of work is writing it. I am glad to work for the Rho Chi Post, and I encourage others to do the same. Email me at: [bharatkirthivasan@gmail.com](mailto:bharatkirthivasan@gmail.com)



### ASSISTANT STUDENT EDITORS

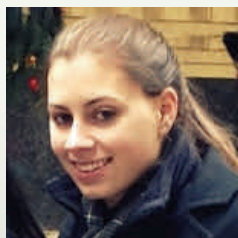
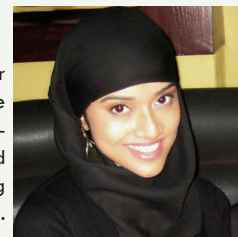


@Tamara Yunusova (2<sup>nd</sup> Year, STJ)

My name is Tamara Yunusova, and I am a 2nd year Pharm D candidate at St. John's University. I enjoy articulating information in a captivating and insightful way. I hope to make this publication more informative, student-friendly, and innovative. Feel free to contact me: [tyunusova93@gmail.com](mailto:tyunusova93@gmail.com)

@Tasnim Nabi (3<sup>rd</sup> Year, STJ)

Writing has always been my greatest outlet for experience and knowledge, through which I hope to keep you engaged and informed. It is imperative to keep up with our changing profession and community, and I look forward to bringing pertinent information to the newsletter.



@Erica Dimitropoulos (4<sup>th</sup> Year, STJ)

As pharmacy students, we often fail to keep current with healthcare developments. My aim is to sort through the news and provide quick updates that are important to our profession. Feel free to contact me if there are any topics you would like to see covered in the next issue!

### @This could be you!

We are looking for creative and motivated students to join the editorial team. If you are interested in becoming a full-time student editor, graphics editor or a assistant student editor for the Rho Chi Post, please contact us at [rhochis@gmail.com](mailto:rhochis@gmail.com)!



A STUDENT-OPERATED NEWSLETTER BY THE  
ST. JOHN'S UNIVERSITY COLLEGE OF PHARMACY AND HEALTH SCIENCES'  
RHO CHI BETA DELTA CHAPTER

[www.rhochistj.org](http://www.rhochistj.org)

## RHO CHI

The Rho Chi Society encourages and recognizes excellence in intellectual achievement and advocates critical inquiry in all aspects of Pharmacy.

The Society further encourages high standards of conduct and character and fosters fellowship among its members.

The Society seeks universal recognition of its members as lifelong intellectual leaders in Pharmacy, and as a community of scholars, to instill the desire to pursue intellectual excellence and critical inquiry to advance the profession.

## THE RHO CHI POST

### MISSION

The Rho Chi Post aims to promote the Pharmacy profession through creativity and effective communication. Our publication is a profound platform for integrating ideas, opinions, and innovations from students, faculty, and administrators.

### VISION

The Rho Chi Post is the most exciting and creative student-operated newsletter within the St. John's University College of Pharmacy and Health Sciences. Our newsletter is known for its relatable and useful content. Our editorial team members are recognized for their excellence and professionalism. The Rho Chi Post sets the stage for the future of student-run publications in Pharmacy.

### VALUES

Opportunity, Teamwork, Respect, Excellence

### GOALS

1. To provide the highest quality student-operated newsletter with accurate information
2. To maintain a healthy, respectful, challenging, and rewarding environment for student editors
3. To cultivate sound relationships with other organizations and individuals who are like-minded and involved in like pursuits
4. To have a strong, positive impact on fellow students, faculty, and administrators
5. To contribute ideas and innovations to the Pharmacy profession

## CURRENT EXECUTIVE BOARD



*Anh, Eilissa, Majd, Moisey, and Zinnia at the 2013 Induction Ceremony*

President: **Moisey Rafailov**  
 Vice President: **Majd Ahmad**  
 Secretary: **Eilissa Tam**  
 Treasurer: **Anh Nguyen**  
 Historian: **Zinnia L. Yu**

Faculty Advisor: **S. William Zito, PhD**

## UPCOMING EVENTS

### Jan 26 - Jan 27: FPA Clinical Conference

Hilton Sandestin Beach Golf Resort and Spa,  
Destin, Florida

### Jan 27 - Feb 1: Antibodies as Drugs

Fairmont Hotel Vancouver, Vancouver, Canada

### Jan 28 - Jan 31: Arab Health 2013 Conference

Dubai World Trade Centre, Dubai, UAE

### Feb 6 - Feb 8: 2013 National Pharmacy Forum

Hilton La Jolla Torrey Pines, La Jolla, California

### Feb 6 - Feb 10: 2013 NCPA Multiple Locations Pharmacy Conference

Hyatt Regency Aruba Resort, Palm Beach, Aruba

### Feb 10: MPhA/MD-ASCP Mid-Year Meeting

The Conference Center at the Maritime Institute,  
Linthicum, Maryland

### Feb 13 - Feb 14: PharmaPack Europe 2013 Exhibit

Grande Halle De La Villette, Paris, France

## Promote your event through us!

Submit the name, location, date, and time of your venue to our editors at:

[rhochis@gmail.com](mailto:rhochis@gmail.com)

We welcome all pharmacy-related advertisements