# Using Mindfulness to Improve Medication Safety and Job Satisfaction

Lisa Bragaw, PharmD
Zen & Now Wellness Center
Simply Pharmacy
lisa@zenandnowct.com

# Conflicts of Interest

Lisa Bragaw declares no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, or stock holdings.

# Learning Objectives

At the end of this program, participants will be able to:

- Discuss the nature and scope of prescription errors
- Develop methods to detect and prevent medication errors
- Recall the benefits of stress reduction and practicing mindfulness to reduce the risk of prescription errors
- Use various mindfulness techniques to improve medication safety and job satisfaction

# Definition – Connecticut DCP

*Section 20-635-6*

*Prescription Error*

Act or omission of clinical significance relating to the dispensing of a drug that results in or may reasonably be expected to result in injury to or death of a patient

# Definition of an error

**A prescription error can be defined as:**

”…any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use."

*Source: The National Coordinating Council for Medication Error and Prevention (NCCMERP)*

# Most Common Errors

Reported by the State of CT DCP, Drug Control Division

- Interchanged drugs with similar names
- Adjacently stored drugs interchanged
- Incorrect directions for use
- Switched prescription labels
- Prescription given to the wrong patient
- Wrong Drug
- Wrong Doctor
- Not Reconstituted
- Outdated drugs dispensed
- Confusion of routes of administration
- Wrong dosage form
- Incorrect strength is dispensed

# Nature and Scope of Problem

- No pharmacist consciously decides to commit a prescription error
- Prescription errors are increasing
- Media attention is increasing
- Consumer awareness of prescription errors is increasing

# Types of Medication Errors

- A medication error may be broken down into two types:

1. Mechanical
2. Intellectual

# Frequency of Error Types

- One study concluded approximately 82% of the reported errors were mechanical and the other 18% were intellectual.

# Mechanical Errors

- A Mechanical Error:
  - Incorrect patient
  - Incorrect drug
  - Incorrect strength
  - Incorrect dosage form
  - Incorrect directions

# Intellectual Errors

- An Intellectual Error:
  - Improper drug utilization review
  - Neglecting to find the error in prescribed medication order
  - Improper or incorrect counseling

# Errors and Counseling

- Other studies show 83% of errors are *discovered* during the patient counseling process.

# Medication Errors

- " The single most important step pharmacists can take to avoid errors is to **spend time talking with the patients about their medications.** We should take advantage of the fact that patients know their medications, and they know how errors can happen."

Michael R. Cohen, founder of the Institute for Safe Medication Practices (ISMP)

# Are Medication Errors that Common?

- 0.13% of all Rx dispensed in the US are wrong-drug errors
- 4 billion Rx dispensed in US in 2010
- 0.13% x 4 billion = **5.2 million wrong-drug errors in US each year**
- 5.2 million/365 = **14,247 wrong-drug errors every day in US**

Using Indication Alerts to Prevent Wrong Patient and Wrong Drug Errors
Lambert, B., Galanter, W. NPSF webinar 2012

# Causes of errors

- Confirmation bias
- Similar drugs:
  - Look-alike/Sound-alike drugs
- Similar strengths
- Close proximity on pharmacy shelf
- "High Alert" drugs
- Written orders
- Low Health Literacy

# Most Common Causes of Error Cited By Pharmacists

- Too many telephone calls (62%)
- Overload/unusually busy day (59%)
- Too many customers (53%)
- Lack of Concentration (41%)
- No one available to double check (41%)
- Staff Shortage (32%)
- Similar Drug Names (29%)
- No time to counsel (29%)
- Illegible prescription (26%)
- Misinterpreted prescription (24%)

MABP. *Medication Error Study.* www.mass.gov

# Preventing Medication Errors

- Become familiar with similar sound-alike / look-alike drugs and be aware of their potential for error.

- Become familiar with “high alert” drugs and be aware of their potential for harm.

# Similar Drugs

- Drug names that look alike when written
- Drug names that sound alike when spoken
- Drugs with overlapping strengths
- Drugs in close proximity on shelf

# ISMP

- Institute for Safe Medication Practices (ISMP) is certified as a Patient Safety Organization (PSO) by the Agency for Healthcare Research and Quality
  - Confused Drug Names
  - Do Not Crush List
  - Tall Man Letters (Look alike/Sound alike meds)
  - High Alert Meds
  - Error-prone Abbreviations
  - Additional Resources

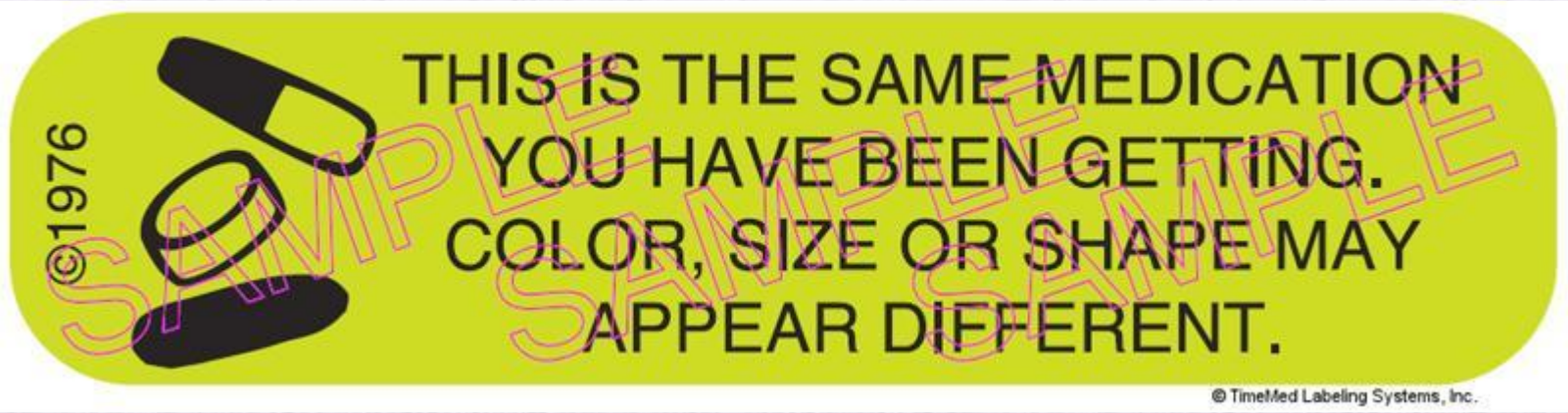
  Available at www.ismp.org

# Processing the prescription

- Double check the "5 Right's" (a nursing term)
  - **R**ight patient
  - **R**ight drug
  - **R**ight route
  - **R**ight dose
  - **R**ight duration
  - **R**ight directions (6th "Right" added for pharmacists)

# Dispensing and Counseling

- The patient is informed when a generic is substituted and understands both the trade and generic names.
- If the manufacturer of a generic changed, the patient is informed there may be a change in the size, shape, or color of the medication.



# Dispensing and Counseling – (con't)

- Create an organized environment.
- Create an atmosphere where questions are encouraged.
- Let your patients know you are available for counseling anytime.
- Have business cards available and hand them to your patients so they have your phone number.

# Dispensing and Counseling – (con't)

- Medication errors include patient misuse.
- Patient misuse because of poor understanding of the directions for use or storage of the product.
- Patient counseling prevents patient misuse.
- Patient counseling will detect and prevent errors.

# Resources for Preventing Medication Errors

- The Centers for Disease Control and Prevention (CDC) www.cdc.gov
- The Institute of Safe Medication Practices (ISMP) www.ismp.org
- The National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP) www.nccmerp.org

# “Top 10” System Errors

A deficiency in any of the following:

1. Pt info
2. Drug info
3. Communication
4. Drug labeling, packaging, & nomenclature
5. Drug standardization, storage & distribution
6. Medication delivery device acquisition, use & monitoring
7. Environmental factors
8. Staff competency & education
9. Patient education
10. Quality processes & risk management

# Errors of Omission

1. Failure to detect a disease state contraindication
2. Failure to detect a significant drug i/a
3. Failure to detect a significant drug allergy
4. Failure to prescribe the correct dose for a specific patient
5. Failure to monitor drugs with narrow TI
6. Patient knowledge deficits

# Communication is Key!

- Barriers to effective communication: illegible handwriting, abbreviations, verbal orders, ambiguous orders and fax or eRx problems
- Many errors can be avoided by counseling the prescriber &/or patient
  - Outline specifics of the problem
  - Keep focused on the patient
  - Provide possible solutions
  - Ask for provider feedback
  - Document the final decision
- Stay objective and professional

# Reduce At-Risk Behavior to Reduce Rx Errors

- "Grab and Go"- without fully reading the label before dispensing, administering or restocking
- Not asking for help or clarification
- Failure to educate patients
- Using meds without complete knowledge of the med
- Failure to double check high-alert meds before dispensing or administering
- Not communicating impt info (e.g., pt allergies, diagnosis, co-morbid conditions, weight, etc… )

# Reduce At-Risk Behavior

- Double check pt info using 2 identifiers
- Check allergies and complete medication profile
  - Validate or reconcile meds and doses pt states they take
- Review information on medications you're not familiar with before dispensing
- Speak up! Question if concerned (e.g., inappropriate dose, potential for i/a, etc… )
- Counsel patient.
- Double, triple, quadruple check!
- Do not sacrifice safety for speed
- Avoid overriding computer alerts without careful consideration
- Report and learn from errors and near misses

# “But there’s just no time!”

How to manage stress in a Workplace full of risks

- D/C caffeine
- Engage in regular exercise
- Practice relaxation-breathing exercises (20 min 2x/wk)
- Get adequate sleep
- Nurture your leisure time, get involved in a hobby
- Set realistic expectations
- Be optimistic
- Eat right
- Maintain a sense of humor
- Talk and vent
- Journal your thoughts
- Avoid unhealthy habits
- Set limits (learn to say “no”)
- Get help from a professional
- Switch jobs, if necessary

# Confirmation Bias

- Recognize Confirmation Bias

  Confirmation bias refers to a type of selective thinking whereby one selects out what is familiar to them or what they expect to see, rather than what is actually there. Many errors often occur when practitioners, due to familiarity of certain products, see the one they think it is rather than what it is. It is human nature for people to associate items by certain characteristics. It is very important for the health care community to recognize the role that confirmation bias may play in medication errors and to work together to address associated problems.

*Source:* *www.ISMP.org*

# Can you read this?

I cdnuolt blveiee taht I cluod aulaclty uesdnatnrd waht I was rdgnieg. The phaonmneal pweor of the hmuan mnid Aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer in waht oredr the ltteers in a wrod are, the olny iprmoatnt tihng is taht the frist and lsat ltteer be in the rghit pclae.

# Continued

The rset can be a taotl mses and you can sitll raed it wouthit a porbelm.

Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe.

Amzanig, huh? Yaeh and I awlyas tgohhut slpeling was ipmorantt!!

# Keep Your Eye on the Ball


http://www.theinvisiblegorilla.com/videos.html

# Confirmation Bias

- Confirmation Bias is important to be aware of in your daily practice.  You may want to keep confirmation bias in mind when you are performing your final check. When checking the prescription look at the medication from a different point of view.

# Confirmation Bias

- Ask yourself:
  - Is this a new medication?
  - Can it be a new dosage form?
  - Can this drug look or sound like another?

# 6 Factors That Bring Satisfaction

1. Can I live comfortably on this salary?
2. Is what I do purposeful?
3. Do I enjoy the people I work with?
4. Is this challenging or exciting?
5. Do I have flexibility?
6. Are there incentives/rewards?

Tom Gardner, Motley Fool CEO
"Conscious Mind, Conscious Business"

# Mindfulness

“Mindfulness is paying attention to the present moment, on purpose, and in a nonjudgmental way”

~Jon Kabat Zinn
Founder of the University of
Massachusetts Center for Mindfulness

# Meditation

- Does not require belief in any particular religious or cultural system
- Goal is to maintain awareness in a moment by moment experiential practice, disengaging from strong attachment to beliefs, thoughts, or emotions in a way that generates a greater sense of emotional balance and well-being
- Holds the potential to reduce practitioner burnout, handle challenges and illness, and reduce generalized stress for the practitioner and patient

# The Evidence Behind Meditation

- Research as early as 1935 demonstrated HR reduction (almost to zero on ECG). Anecdotal reports date back over 4,000 years.
- Newer studies have focused on increasing immune response, stress reduction, disease management, preventing recurrence of depression, improving pain management.
- Additionally, beneficial effects have been shown in the treatment of insomnia, tension H/A, psoriasis, BP, heart disease, dyslipidemia, smoking cessation, alcohol abuse, longevity and cognitive function in the elderly, psychiatric disorders.
- Reproducible results on brain imaging studies, ECG, and blood tests

*Prim Care Clin Office Pract.* 37 (2010) 81-90.

# Using Mindfulness to reduce errors

- Mindfulness meditation may help:
  - Foster present-moment awareness, reducing distractions
  - Reduce snap judgments
  - Reduce inadvertent stereotyping
  - Practitioners to motivate patients to make significant positive health changes

# Getting started with a mindfulness meditation practice

## SOLAR

- **S**TOP
- **O**BSERVE
- **L**ET IT BE

  …**A**nd
- **R**ETURN

## TIES

- **T**ALK
- **I**MAGES
- **E**MOTIONS
- PHYSICAL **S**ENSATIONS

# Practices

- Practice “The Pause”
- Mantras and Affirmations
- 4-Square Breath
- 4 – 7 – 8 Breath
- Body Scan
- “Thinking”
- Walking Meditation
- Yoga Nidra or Guided Meditations


Worrying doesn't
take away
tomorrow's
troubles
it takes away
today's
peace.
Lessons Learned In Life

# How to Meditate

## Sit Still

Just be still. Outer stillness will lead to inner stillness.

## Relax

It's not a process. You just let go. Surrender. It's a beautiful thing.

## Pay Attention

To nothing in particular.
Just be awake.

## Let the happiness bubble up!*

* The happiness only comes if you let go of wanting it.

# Mindfulness Resources

- https://www.pocketmindfulness.com/6-mindfulness-exercises-you-can-try-today/
- https://www.mindful.org/10-ways-mindful-work/
- https://mindfulnessexercises.com/
- https://positivepsychologyprogram.com/mindfulness-exercises-techniques-activities/
- https://yogacaps.org/

# Mindfulness & Meditation Apps

- Calm
- Insight Timer
- The Mindfulness App
- Mindfulness Coach
- Breethe
- Stop, Breathe & Think
- Present

# Questions?

# References


- National Coordinating Council for Medication Error Reporting and Prevention. What is a medication error? Available at: https://www.nccmerp.org/about-medication-errors.  Accessed on May 14,2019.

- Patient Safety Network. Interruptions and Distractions in Health Care: Improved Safety with Mindfulness. Available at: https://psnet.ahrq.gov/perspectives/perspective/152/interruptions-and-distractions-in-health-care-improved-safety-with-mindfulness. Accessed on May 14, 2019.

- Annals of Family Medicine. Abbreviated Mindfulness Intervention for Job Satisfaction, Quality of Life, and Compassion in Primary Care Clinicians: A Pilot Study. Available at: http://www.annfammed.org/content/11/5/412.full. Accessed on May 14, 2019.

- Kabat-Zinn,J. (2013) *Full Catastrophe Living*. New York: Bantam Books.

# References & Resources


- Institute for Safe Medication Practices. ISMP. Available at: http://ismp.org
- Pharmacists Letter
- Massachusetts Board of Registration in Pharmacy. *Medication Error Study.* Massachusetts Office of Health and Human Services. www.mass.gov. Accessed May 14, 2019.
- Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err is Human: Building a Safer Health System.* Washington, DC: National Academy Press; 2000.
- Gianutsos, G. Identifying factors that cause pharmacy errors. *US Pharm.* 2008.
- Pharmacy Times. Voices of Pharmacy: Job Satisfaction Among Pharmacists. Available at: https://www.pharmacytimes.com/publications/career/2015/pharmacycareers_august2015/voices-of-pharmacy-job-satisfaction-among-pharmacists. Accessed on May 13, 2019.