

ONCOLOGY PHARMACY PRACTICE

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OUTLINE

- Describe career background
- Discuss pharmacy care in an Outpatient Oncology setting
- Discuss pharmacy care in an Inpatient Oncology setting
- Discuss opportunities for educational advancement

DR. SOLOMON'S EXPERIENCE

LSC1

- BS in Pharmacy from Auburn University
- After short period in retail pharmacy and long term care facility, began working at DCH Regional Medical Center in 1987
- Worked in central pharmacy, IV room, variety of satellite pharmacies covering OR, general medical, critical care, women's health, pediatrics.
- About 1996, began working at DCH Cancer Treatment Center.
- Continued working at the CTC and staffing inpatient until coming to Auburn University in 2008 as a Full Time Facilitator in IP.

MY EXPERIENCE

- No formal oncology training
- Trained by co-workers for the position
- Studied independently to improve my knowledge of oncology drugs
- Attended ASHP Board Certification in Oncology Prep Courses and Oncology Pharmacy Seminars at MD Anderson yearly
- READ a lot!
- Also, learned from the physicians and nurses and patients.

MY EXPERIENCE

- Provided drug information to nurses, patients, and physicians.
- Began to train other pharmacists and technicians.
- Developed clinical programs – precepted pharmacy students, provided nursing in-services, drug dosing protocols (Carboplatin and Zometa)
- Worked with 2 technicians who performed majority of admixtures

TYPICAL PATIENTS

- Regional Medical Center for adult cancer patients
- No pediatric cancers
- No bone marrow transplants (UAB)
- Many patients who received treatment recommendations from research site such as MD Anderson, Duke, Arkansas (myeloma)
- Hematology disorders – anemia of CKD, sickle cell, thrombocytopenias, any anemia

Slide 3

LSC1 Should you mention when you got your PharmD?
Laura Susan Cain, 9/23/2010

TYPICAL WORK DAY

- Outpatient clinic was open 7-4:30pm Mon – Fri
- 3 Medical Oncologists saw 70-90 patients per day
- 2 Radiation Oncologists
- 6-10 nurses and 2-3 nurse practitioners
- Some patients (1/3) were treatment and some were follow-up (2/3)
- Busiest in the mornings because those treatment patients received more time intensive chemo.
 - For example, a patient with colon cancer might receive Avastin – FolFox which has about 4 chemo drugs and could take 3-4 hours.
 - Small cell lung cancer patient would receive hydration plus Cisplatin and Etoposide (about 6-7 hours)

EXPECTATIONS AT WORK

- Provide all the chemo admixtures – efficiently and accurately (most important)
- Provide drug information to everyone!
- Review inpatient chemo orders for accuracy

WHY I ENJOYED MY JOB

- Challenging, stimulating atmosphere
- Unique new drugs
 - Love the Monoclonal Antibodies (MABs)
 - Love Erythropoietin Stimulating Agents (ESAs)
 - Love the weird side effects
- Compassionate, caring coworkers
- Sense of helping others
 - C word is scary
 - C word is not always a death sentence, so you know when you are providing life saving medicines
 - When the prognosis is poor, you become part of a patient's family support

WHAT I DIDN'T ENJOY

- **Budgets** – all new chemo drugs are astronomically priced. We dispensed \$3-4K medicines all day long. On a typical day, we ordered \$40K worth of drugs.
- **Mistakes** – no room for dosing errors. You will never read anything that makes you feel good in the Drug Overdose/Toxicity part of a package insert.
- **Workload and staffing shortages** – more cancer patients and treatment meant more work and the potential for errors.
- **Stress and Responsibility**

DR. CAIN'S EXPERIENCE

- PharmD from University of Georgia (Go Dawgs!)
 - Rotation with Medical College of Georgia's outpatient cancer center
- Staff pharmacist at University Hospital in Augusta, GA after graduation
- PGY-1 Pharmacy Practice Residency with a focus in Oncology
 - 2007/2008
- Assistant Clinical Professor with HSOP
 - August 2008–present
 - Practice Site: The Medical Center, Inpatient Oncology
- BCPS Certification
 - December 2009

MY RESIDENCY EXPERIENCE

- Elective time of PGY-1 residency focused in oncology
 - John B. Amos Cancer Center – Columbus, GA
 - Rounded with oncologists in inpatient setting – The Medical Center
 - Researched regimens and dosed chemotherapy for outpatient use
 - Provided patient education
- Research Project
 - Implementation of a Pharmacist-Coordinated, Protocol-Driven Anemia Management Program
- Grand Rounds
 - Advances in the Treatment of Breast Cancer
- Answered drug information questions

MY EXPERIENCE AS A FACULTY MEMBER

- Developed practice site at The Medical Center – working with oncology multidisciplinary team to improve patient care
 - Precepting P4 students
 - Dosing chemotherapy
 - Evaluating pharmacotherapy of oncology inpatients for all disease states
 - Quality/process improvements
 - Drug information questions for physicians, nurses, nurse practitioners, other pharmacists
- National meetings to learn from other oncologists and pharmacists

MY EXPERIENCE AS A FACULTY MEMBER

- Teaching in CAPP and Women’s Health elective
- Service to HSOP and profession through committee involvement
- Research
 - Case report
 - Febrile neutropenia
 - Others...
- Regional Coordinator for students assigned to Columbus

TYPICAL PATIENTS

- Adult inpatient setting
- Supportive care
 - Intractable nausea/vomiting
 - Pain management
- Chemotherapy
 - Regimens that are not able to be administered to outpatients
 - Examples: AML induction chemotherapy, EPOCH for relapsed lymphoma, HyperCVAD for ALL
- Oncology Emergencies
 - Febrile neutropenia
 - Tumor lysis syndrome

TYPICAL WORK DAY AT TMC

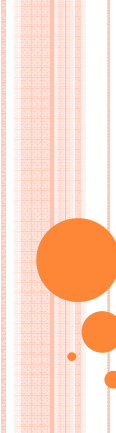
- Rounding with oncologist making interventions to improve patient care
- Working up and implementing new chemotherapy regimens
 - Researching regimen
 - Dosing based on patient-specific factors
 - Choosing appropriate anti-emetics
 - Determining if G-CSF prophylaxis is warranted
- Topic discussions with P4 students
- Drug information questions
- Work with Residency Advisory Committee and Residency Research Committee

WORKING WITH CANCER PATIENTS

- Try to understand their fears and concerns
- Treat each patient as if they are a family member
 - Provide accurate, safe medications
 - Be their advocate to avoid side effects
 - How would you want your Mom to be treated?
- Realize that many cancers can be treated and patients can continue to live many healthy years.
- Realize that some cancers can not be treated and have a good outlook on death and dying.

WHAT IF YOU ARE INTERESTED IN ONCOLOGY PHARMACY

- Try to schedule oncology rotations P4 year
- Consider a residency program after graduation – many are PGY2 residencies
- Seek out jobs in cancer center pharmacies
- Consider the BCOP exam – Board Certification in Oncology Pharmacy. Get information at www.bpsweb.org



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