OBJECTIVES

1. Become familiar with psycho-oncology as an oncological specialty and a subspecialty in consultation-liaison Psychiatry.

2. Become aware of some common themes in caring for cancer patients with psychiatric symptoms/disorders.

3. Become aware of the guidelines on cancer care for the whole patient, and the psychosocial oncology resources in UIHC.

OUTLINE

- History and Definition of Psycho-oncology
- Clinical Examples of Psycho-oncology Practice
  - Cognitive Impairment in Cancer
  - Anxiety in Cancer
  - Depression in Cancer
- Psycho-social Oncology at HCCC
**PSYCHO-ONCOLOGY**

Psycho-oncology is an oncology subspecialty that is concerned with the psychological, social, behavioral, and ethical aspects of cancer care.

- A multidisciplinary subspecialty of oncology concerned with the emotional response of patients at all stages of disease, their families and staff (psychosocial).
- An oncology specialty that handles the psychological, social and behavioral variables that influence cancer prevention, risk and survival (Cancer control).

**HISTORY OF PSYCHO-ONCOLOGY**

- In the 19th century:
  - Cancer was considered fatal, without a clear cause or treatment
  - Patients sometimes treated in separate wards or by religious authorities.

- In the 20th century, cancer became the target of surgical, radiation (1920), and medical treatments (1948, 1951) (1,2)
  - More optimism about cancer, public debate about revealing dx

**References**


---

**Celebrities talking**

- Betty Ford
- Happy Rockefeller

**Books Written**

- Betty Rollin

**Medical attention to psychological lagged behind**

- Lack of attention to patient
- Difficulty measuring variables
- Skepticism about psychiatry

**Note**

MILESTONES

- 2007: IOM Report; Impact on training, clinical care and policy
- ACSCcC and the association of community Cancer Center’s adopted their standards


WHAT IS WHOLE PATIENT CARE?

- Physical: pain, diarrhea, nausea
- Psychological: Anxiety, Depression
- Social: Standing in the community, friends
- Spiritual: Whether they are religious based or not
- Financial: paying bills, taking time off from work, child care
- End of life: Alone, at home? in pain?

1) CLINICAL VIGNETTE #1

Belinda is a 61-year-old African American disabled lady. She is a smoker with lung cancer. She completed chemotherapy without improvement in her cancer, and now she has brain metastasis. She declined brain radiation at this time, and thinks she might abandon cancer care altogether. "Everyone who has radiation dies", she tells you.

She uses marijuana, "in moderation", to alleviate her stress. When you counsel her to stop smoking cigarettes and marijuana, she tells you: "You can't stop living to keep from dying". When you invite her to the psycho-education classes at the cancer center, she says "Thanks but I have a severe case of chemo-brain. I won't remember nothing".

NEUROCOGNITIVE IMPACT OF CANCER

Radiation:
- Mechanism:
  - Vascular injury causes ischemia of surrounding brain tissue,
  - Therefore demyelination of white matter.
  - It also reduces hippocampal neurogenesis.
- Progressive demyelination takes months and hence the latent and progressive nature.
- Risk factors:
  - Greater volume of radiated tissue,
  - Higher total dose RT
  - Concomitant chemotherapy,
  - Age > 60,
  - Cardiovascular risk factors.

Chemotherapy:
- Risk factors:
  - Intrathecal
  - Combination with radiation
  - Procarbazine, lomustine, vincristine, methotrexate, cytarabine, Nitros-ureas, Cytosine arabinoside, and vincristine.
- Pattern:
  - Frontal and subcortical patterns of dysfunction.
  - Cognitive domains: attention, executive function, learning and retrieval of new information, psychomotor speed.
NEUROCOGNITIVE IMPACT OF CANCER

Breast Cancer:
- Risk Factors:
  - Tamoxifen, pre-treatment cognitive dysfunction
- Areas of dysfunction:
  - Inattention, short-term memory, inability to multitask
- Finding: 20-30% breast cancer pts have a low pre-treatment Cognitive fx


NEUROCOGNITIVE IMPACT OF CANCER

1: Treatment:
- Focuses on arousal reduction through relaxation training
- Use of tailored compensatory strategies
- Memory and scheduling aids
- Established routines

2: Cognitive Behavioral Therapy: Attention and Adaptation Training (MAAT)
- Focuses on arousal reduction through relaxation training
- Use of tailored compensatory strategies
- Memory and scheduling aids
- Established routines


CLINICAL VIGNETTE #2

Bella is a 39-year-old professional immigrant with breast cancer. She presents as a positive and optimistic person, and tells you that she maintains that facade because pessimism worsens cancer. She is afraid of voicing fear to her family as she worries they would lose hope. She does not disclose side effects from cancer treatment to her oncologist fearing that he might hold her chemotherapy treatment like he did last time.

She takes Xanax 6 times a day to help her relax, and would like a refill. When you recommend a visit to the psycho-oncologist's office, she declines and says, "I have cancer. It is natural to be afraid. I do not need a psychiatrist. I just need a good oncologist".
ANXIETY IN CANCER

Prevalence:
- ranges from 6-34%

Risk Factors:
- young age
- female sex
- separated, divorced, widowed
- lower socio-economic status
- What about advanced stage?


ANXIETY IN CANCER

- Anxiety level does not increase as death approaches
- Diagnosis: Duration of 6 months - not treatable
- Anxiety Fun Facts
  - Markertitis
  - Meta-worry
  - Scan anxiety
- People with anxiety were found to have more breast cancer screening and mammography


ANXIETY IN CANCER

Other Kinds:
- Panic disorder
- Specific Phobia
- Anxiety due to (medical condition-cancer)
  - Examples
    - Conditions that cause sharness of breath and tachycardia
    - CNS conditions cause non-classic anxiety, limbic and temporal lesions can cause panic
    - Uncontrolled pain is highly correlated with anxiety.

CLINICAL VIGNETTE #3

Dennis is a 55-year-old man with metastatic melanoma. He is on a new immunotherapy agent with excellent tumor response. Due to his cancer, he has had to retire from his job as a car salesman and is demoralized by his inability to predict his schedule. He ruminates on the loss of savings, loss of anticipated retirement with travel and family. He ruminates over burdening his young wife, and losing his standing in the community due to loss of income and independence.

Upon counseling him about his good prognosis, and despite reassurance by family that he is worthy of their care and time, he still cannot find solace or comfort. He remains demoralized, and in fact, he feels irritated by people encouraging him to be positive. He still likes going to church and spending as much time as possible with grandkids. He is aggressively going through his “bucket list” of travel and adventure.

DEPRESSION IN CANCER

Prevalence:
- ~25%

Differential Diagnosis:
- ADD
- Adjustment disorder with depressed mood
- Depressive disorder due to cancer
- Substance induced mood disorder

What about “Demoralization Syndrome”?


DEPRESSION IN CANCER

Diagnosis:
- Endicott Criteria
  - Depressed appearance instead of appetite and weight change
  - Social withdrawal/depressed tolerance instead of sleep disturbance
  - Brooding, self-pity or pessimism instead of fatigue
  - Lack of mood reactivity in the place of reduced concentration.
  - Jobing away with fatigue, loss of appetite, insomnia, inability to concentrate or rene

Endicott, J., Measurement of depression in patients with cancer, Cancer, 1984
**DEPRESSION IN CANCER**

<table>
<thead>
<tr>
<th>1- Personal factors</th>
<th>2- Cancer related factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hx of depression</td>
<td>Type: Lung, pancreas, breast and neck, Hodgkin’s disease</td>
</tr>
<tr>
<td>lack of family support</td>
<td>Disease burden: Advanced cancer stage</td>
</tr>
<tr>
<td>being single</td>
<td>Physical impairment &amp; discomfort</td>
</tr>
<tr>
<td>previous or current alcohol and drug use</td>
<td>Anti-cancer treatments</td>
</tr>
<tr>
<td>Concurrent medical illness that is associated with depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corticosteroids, interferon alpha, interleukin 2, taxanes, aromatase inhibitors, trastuzumab, vinorelbine, paclitaxel, docetaxel, bortezomib</td>
</tr>
</tbody>
</table>

**TREATING ANXIETY AND DEPRESSION IN CANCER**

1- Psychosocial interventions:
- Psychoeducation
- Psychotherapy:
  - CBT, interpersonal, supportive therapy, existential, life narrative, dignity conserving, meaning-centered therapies, problem solving

2- Pharmacological interventions:
- SSRI
- SNRI
- Other Classes

Turner, J., et al., Clinical practice guidelines for the psychosocial care of adults with cancer. *Psychooncology*, 2005

**PHARMACOTHERAPY PEARLS**

1. Pre-existing psychiatric illness
2. New onset of psychiatric illness
3. Psychiatric comorbidities without a DSM diagnosis
4. Off-label use of psych meds to treat non-psychiatric symptoms

Okamura, M., et al., Clinical experience of the use of a pharmacological treatment algorithm for major depressive disorder in patients with advanced cancer.
### Clinical trials on antidepressants:
- Fluoxetine, Paroxetine, Mianserin
- Small trials, case series: Ketamine, Scopolamine, ECT
- Bupropion: Sexual Function, and Cancer Related Fatigue
- Psychostimulants, Modafinil, Armodafinil

<table>
<thead>
<tr>
<th>TCA's</th>
<th>SNRI's: Duloxetine and Venlafaxine</th>
</tr>
</thead>
</table>


### Hot Flashes: Mirtazapine and Venlafaxine
- Also: Paroxetine, Citalopram, Fluoxetine

### Pruritus: Paroxetine and Mirtazapine

### Nausea: haloperidol, Olanzapine

<table>
<thead>
<tr>
<th>Anti-emetics: Ondansetron, Granisetron</th>
<th>Procarbazine Linezolid</th>
</tr>
</thead>
</table>
- Ondansetron
- Granisetron
- Procarbazine
- Linezolid

### CYP450 2D6 And Tamoxifen
- Tramadol + Other Opiates
- Meperidine
- Nausea, parasthesia, and somnolence
- Clonazepam and Escitalopram
- Venlafaxine and Mirtazapine

<table>
<thead>
<tr>
<th>CYP450 2D6 And Tamoxifen</th>
</tr>
</thead>
</table>
- Tramadol + Other Opiates
- Meperidine
- Nausea, parasthesia, and somnolence
- Clonazepam and Escitalopram
- Venlafaxine and Mirtazapine
PSYCHO-SOCIAL ONCOLOGY IN HCCC:

Core services:
- Behavioral Oncology Clinic
- Cancer Therapy Groups
- Social Services
- Neuropsychology
- Cancer Information Center
- Nutrition
- Palliative Care

Cancer Therapy Groups

Acceptance and Commitment Therapy
Open group, every other week, 90 minutes
Co-facilitated by:
Arwa Aburizik, MD
JoAnna Cartaya, PhD

Internally-funded from departmental support of junior faculty building new services

DISTRESS SCREENING

Psychosocial distress screenings:
- Electronic tool
- Objective:
  - Identifies patients in need of psychosocial services
  - Characterizes their distress
  - Directs them to the appropriate resources.
DISTRESS THERMOMETER

- Two screening tools at this time
  - A tool for patients 13-31 years
  - A tool for patients aged > 31

EDUCATION

a) Debriefing sessions:
   - burnout, empathy, resilience, interest in oncology.

b) Psychosocial oncology fellow curriculum:
   - depression and its treatment in cancer
   - anxiety in cancer, and fear of cancer recurrence
   - Ethical Issues in Cancer Care
   - What Goes on in the Psychologist's Office? (ABC's of Psychotherapy)


EDUCATION

d) Nursing Enrichment Seminars
   - Teaching the topic of psycho-oncology

e) Patient Education:
   - Psycho-education seminars.
   - Linking distress screening to automatic material distribution
QUESTIONS

REFERENCES


REFERENCES

REFERENCES


REFERENCES


REFERENCES