Support and Survivorship Interventions for Chinese Immigrant Cancer Patients

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33% of U.S. residents are minorities (100 million)

3 largest groups: Blacks (40 mil), Hispanics (44 mil) and Asians (14 mil)

11.5% of population is foreign born (32.5 mil)

NYC = largest foreign born population (over 35% or 3 million people)

- 25% of NYC population is limited English proficient
Aims
To use a transdisciplinary community-engaged approach to more fully understand and effectively address cancer disparities at the local, national, and global levels.

Research
• To further understand why cancer disparities exist and their contributing factors, and successful interventions to overcome them.
• To facilitate inclusion of underserved minorities in research through the development of an inclusive research infrastructure.

Outreach, Education, Service Delivery
• To provide education and care based on latest evidence and tailored to cultural needs of different populations, considering socioeconomic and linguistic factors, co-morbidities, diagnostic, treatment, survivorship, and end-of-life concerns.

Training
• To develop a team of well trained practitioners and scientists, representative of the populations served, able to consider approaches to eliminate cancer disparities in their clinical and research practices.
Barriers to care: Language access research

- Interpreting strategies and outcomes
- Informed consent
- Training interventions and impact

Communication

- Communication is the cornerstone of effective, quality cancer care, from primary prevention to survivorship
  - Growing literature on language discordance and outcomes
- It is a final common pathway of all of our translational efforts
“Doctor, what do I have?”
Knowledge of cancer diagnosis among immigrant/migrant minorities

- **Design**
  - Immigrant cancer patients from Portal; Surveys and Chart Review

- **Results (n=434)**
  - Most common diagnoses: breast (29%), cervical (8%), colorectal (7%), and lung (6%).
  - 65% diagnosed at least 4 months prior to recruitment.
  - 16% had incorrect knowledge of their diagnosis (cervix/ovarian).
    - 87% preferred a non-English language in the health care setting (**28% Mandarin/Cantonese**, 55% Spanish)
    - Multivariate analysis – preferred language and cancer site jointly predictive of correct knowledge (L.R. = 17.01; \( p = 0.0002 \)). Those with ‘below the belt’ cancers were 2.75x, and those who preferred a non-English language were 2.54x more likely to give an incorrect diagnosis.

- **Next Steps**
  - Analysis of Audiotaped Encounters

Our data show

**Linguistically targeted interventions are imperative**

- **Intervention:** Interpreter Training and Patient Safety and Med Errors:
  - 27% of errors made by *untrained* interpreters in the cancer setting were of moderate or greater clinical significance vs. 8.5% of errors made by *trained* interpreters
  - Vocabulary precision rate .69 for trained vs. 0.34 for the untrained
  - Results have guided policy developments/NYS regulations

- **The RSMI Intervention**
  - “U.N. Style” Medical Interpreting
    - Pooled Resource, Multiple Languages
    - Remotely Located, Linked through Technology
    - RSMI almost two times faster....efficiency of service
    - RSMI 30% likelihood of medical error compared with Usual and Customary Interpreting (**P<0.05**)

RSMI vs. U & C Randomized Controlled Trial

- Patient Satisfaction
- Higher colonoscopy referral rates (OR of 1.7)
- More BDI-FS+ patients newly diagnosed with depression (27% vs 20%)
  - Higher rates of Rx/referral
- Mean # instructions per encounter

Language Access Research: Next Steps
- RCT of RSMI versus U&C on chemotherapy and RT adherence, disease outcomes, QOL, with cost analysis
- Physician threshold for calling an interpreter
- Policy change in New York State and nationally

Gany F, Leng J, Shapiro E, Abramson D, Motola I, Shield DC, Changrani J. Patient satisfaction with different interpreting methods: a randomized controlled trial. J Gen Intern Med. 2007 Nov;22 Suppl 2:312
Chinese Immigrants - Background

- NYS – 21.9% immigrant, 10.1% Chinese
- Of NYS Chinese population, 74% are immigrants, almost 85% (434,000) live in NYC
- Largest Chinese populations in NY, NJ, CA, HI, TX
- Asian Americans – only major US population group where annual number of cancer deaths is greater than that for heart disease
- Higher rates of cancers related to infectious diseases – gastric, liver, cervical, nasopharyngeal
Causes of Disparities in Survivorship

- Low income
- Medically underserved
- Limited English proficient – Language barriers
- Cultural barriers
- Cancer stigma
- Financial barriers
- Insurance
- Misconceptions about cancer symptoms and severity
- Limited knowledge about cancer and its treatment
- Limited knowledge about navigating health care systems
- Lack of resources to access support groups and services
- Survivors at increased risk of 2\textsuperscript{nd} primary or non cancer health conditions
  - Minorities less likely to receive health maintenance
The Immigrant Cancer Portal Project

- Social and economic assistance to low-income, immigrant and minority cancer patients
- 11 NYC cancer clinics where appt keeping is problematic
- Baseline treatment completion ~ 75% among immigrant cancer patients in NY safety net facilities

Design:
- Multilingual ‘facilitators’ meet with patients at 11 different cancer centers
- Connect patients with culturally and linguistically relevant insurance, transportation, food/nutrition, legal, financial, and psychosocial support resources
- Compare outcomes – U54 funded RCT
  - Appointment Completion
  - Quality of life
  - Cost Analysis with Prabal De, CCNY

Resources:
- Linkages with 300 community based organizations
- Over 850 participants
Targeting Social and Economic Correlates of Cancer Treatment Appointment Keeping among Immigrant Chinese Patients

- Cohort of 82 Chinese Portal patients 2008-2009
- All immigrants from China, Hong Kong, Taiwan
- 52% lived in US for 10 yrs or less
- 40% had not completed high school
- Nearly all preferred to speak Chinese
- 33% had no health insurance
- 23% reported working with a social worker
- Most common areas of needed assistance:
  - Financial (87%)
  - Food (18%)
  - Transportation (18%)
- 22% had missed appointments

Are Our Severely Ill Patients Hungry?

- **Context**
  - Food insecurity (FI) - disruption in a household’s eating habits due to insufficient resources for food
  - Growing problem in the U.S
    - 17.4 million households are food insecure.
    - Especially detrimental to oncology patients.
    - No studies have assessed FI among oncology patients in major population centers.

- **Study Design**
  - Nested cohort of 411 immigrant cancer patients participating in Portal were surveyed using the USDA Food Security Survey.
  - **13% preferred Chinese language**, 34% Spanish

- **Results**
  - FI prevalence 55%
    - Treatment-appropriate food more expensive
    - 77% of all patients reported less money to spend on food since treatment began
      - Transportations costs (84%), decreased work hours (82%), Co-pays/med fees (39%)

- **FI screening should be considered as a component of the standard of care for all cancer and chronic disease patients.**

Food Insecurity: Are Community-Based Emergency Food Resources Enough for Our Patients with Cancer?

- **Study Design**
  - 25 NYC zip codes encompass 54% of ICCAN patients
  - 72 pantries randomly selected
  - 57 item assessment tool
    - Ease of contact, required documentation, available food, logistical issues, languages of service.

- **Results**
  - 43% open 3 hours per week or fewer, 69% with Spanish services, less than 5% with Chinese, 74% require documentation, 92% with limited food choices, 25% unreachable by phone and/or incorrect locations/hours

- **Conclusions**
  - Emergency food services potentially valuable resource
    - often inaccessible or with limited food choices
  - Multiple cancer appointments coupled with restricted food distribution hours unsurmountable barrier
  - Specific nutritional requirements of cancer patients compel a better solution
Food to Overcome Outcomes Disparities (FOOD)

- Two-part study
  - Impact of a scalable medically-tailored food pantry designed to address cancer patients’ food security needs
  - RCT
    - Three arms
      - F.O.O.D. Vouchers
      - Grocery Delivery
      - Emerging Standard: Hospital Food Pantry

Our Partners

- American Cancer Society - The Official Sponsor of Birthdays.™
- Deloitte.
Developing Support and Survivorship Interventions for Chinese Cancer Patients: A focus group study

- 4 focus groups, 28 patients
- In partnership with ACS Asian Initiatives
- Conducted in Mandarin or Cantonese
- Most Frequent Themes
  - Need for accurate cancer information
  - Need for information on treatment options
  - Role of language barriers in accessing care
  - Role of food in cancer care and need for nutritional information
  - Role of Chinese medicine in cancer treatment
  - Burden of disease on the family
  - Need for social, emotional, and spiritual support

Support Needs of Chinese Cancer Patients

- Needs assessment of 59 Chinese Portal patients
- Patients ‘very interested’ in information related to:
  - Financial assistance (79%)
  - Social assistance (74%)
  - Cancer treatment options (67%)
  - How to cope with burden on family (65%)
  - General health care (63%)
  - Clinical cancer care and treatment (63%)
  - How to improve communication with physicians (62%)
  - How to navigate the health care system (59%)
  - How to access interpreter services (57%)
  - How to make treatment decisions (53%)
Developing Culturally-Tailored Information-Based Support Groups for Chinese Immigrants with Breast Cancer: A Pilot Study

- **Primary Aim:**
  - To pilot and evaluate the feasibility of information-based, culturally-tailored in-person and virtual support groups for Chinese patients with breast cancer.

- **Secondary Aims:**
  - To evaluate the impact of participation in the two groups combined and in the in-person vs virtual groups on (QOL), pain, psychosocial outcomes, and perceived social support.
  - To assess satisfaction with the groups
  - To assess Internet use to inform feasibility of virtual groups.

- **Collaborators:** MSKCC (IHCD, Psych & Behav Sci, Cancer Survivorship Program, Breast Cancer Medicine Service, Integrative Medicine Service, Virtual Groups Program), Queens Cancer Center, the Cancer Support Community, ACS Asian Initiatives, Charles B. Wang CHC
Pilot Support Groups

- **Design**
  - 12 week information-based curriculum based on preliminary work
  - Culturally and linguistically appropriate
  - 32 patients to be randomly assigned: 16 in person; 16 virtual
  - Participants randomized to virtual w/o home Internet access will be provided with netbook computers/mobile Internet

- **Conceptual Framework**
  - Social-cognitive processing (SCP) model
  - SCP model social environment as a critical point of intervention

- **Curriculum**
  - 3 central topic areas: 1) Cancer care and treatment info; 2) Navigating the health care system; 3) Integrative Medicine

- **Virtual Platform**
  - MSKCC Virtual Groups Program
  - Hybrid telephone/online system
Traditional Chinese Medicine (TCM) and Cancer

- Use of TCM is high among ethnic Chinese cancer patients receiving allopathic treatment
- Language barriers/cultural factors may prevent patient report of TCM
- Patient lack of understanding of ‘separating’ use of TCM and allopathic meds (i.e. focus group study)
- Potential for negative interactions with TCM herbal treatments and chemotherapy
- Potential for TCM herbal toxicities (i.e. heavy metals)
- Key to gain a better understanding of TCM use among Chinese cancer patients

Next steps
- Ongoing pilot of questions on TCM use among Chinese cancer patients in Portal – so far - 1/3 report TCM use since diagnosis
- R21 to further explore patient and provider knowledge of use of TCM and allopathic cancer treatment
Immigrant Health and Cancer Disparities

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