POPULATION HEALTH CONTENT WITHIN ENTRY-LEVEL OCCUPATIONAL THERAPY PROGRAMS

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Note: The presenters have no relevant financial relationships with any commercial interests to disclose
BACKGROUND

- Improving the health of populations—distinguished from health care for individuals—is needed to meet global health targets.

- Population health defined (Kindig and Stoddart, 2003):
  - “The health outcomes of a group of individuals including the distribution of outcomes within the group”
  - as well as the “health outcomes, patterns of health determinants, and policies and interventions that link these two”

- Population health outcomes (NASEM Roundtable on PH Improvement, 2018)
  - “While not a part of the definition itself, it is understood that such population health outcomes are the product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors, and environmental factors”

- Institute for Healthcare Improvement: Triple Aim
  - Improving the patient experience of care
  - Improving the health of populations
  - Reducing the per capita cost of care
OCCUPATIONAL THERAPY AND PH

- Occupational science theorists endorse a broad perspective of occupational therapy that goes far beyond individualistic medical models of care (Wilcock, 2005)
- Braveman (2016) articulated a role of occupational therapy in promoting population health—but noted that population health least well understood aspect of the Triple Aim
- AOTA’s Vision 2025 speaks to “quality of life for all people, populations, and communities” and includes OT role in creating system-level change
- ACOTE accreditation standards (2018) speak to population-centered care and population health programs
- Many OT programs transitioning from MOT to OTD degree
PROBLEM AND PURPOSE

• It is a good time to address population health in OT programs
  • need to incorporate new accreditation standards that include population health
  • curriculum development for transition to the OTD degree

• Unknowns:
  • Extent of current population health content in OT programs
  • Opinions of occupational therapy educators about what population health content should be included

• Purpose:
  • Conduct a survey of occupational therapy programs directors to determine current and desired coverage of population health concepts within entry-level occupational therapy programs accredited by ACOTE.

• Needed: Framework for conceptualizing population health content
Clinical Prevention and Population Health Curriculum Framework (CPPH)

Healthy People Curriculum Task Force of the Association for Prevention Teaching and Research, US DHHS Office of Disease Prevention and Health Promotion, 2015

Broad brush curriculum that can be adapted and integrated into education programs for a variety of health professionals

Four major components
  - Foundations of population health
  - Clinical preventive services and health promotion
  - Clinical practice and population health
  - Health systems and health policy

Subcategories, topic areas, illustrative examples
### CPPH Subcategories

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<th>Prevention &amp; Promotion</th>
<th>Clinical Practice &amp; PH</th>
<th>Health Systems &amp; Policy</th>
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<td>Evaluation</td>
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QUESTIONNAIRE DEVELOPMENT

- Developed short description of each domain from phrases in the topic areas and illustrative examples of the CPPH Framework
- Developmental survey completed by 7 OT and PT program directors
  - Are descriptions clear enough?
- Pilot survey of edited descriptions completed by 6 OT and PT program directors
- Final questionnaire: 50-item, online, Qualtrics
  - 23 current coverage
  - 23 desired coverage
  - 4 other (consent, degree level, location, curricular approach)
DATA ANALYSIS

- Content item coding
  - 4: Strong (current), Strongly agree (desired)
  - 3: Moderate (current), Agree (desired)
  - 2: Minimal (current), Disagree (desired)
  - 1: None (current), Strongly disagree (desired)
- Gap variable: Desired score – current score
- Total PH scores: summed to determine total current, desired, & gap scores
- Means, standard deviations
- Comparison between master’s and OTD for total current score
PARTICIPANTS

- Population: 182 ACOTE-accredited entry-level OT program directors as of January 2018
  - Respondents: 60 program directors (32.9%)
    - 45 master’s degree programs
    - 8 OTD programs
    - 7 degree level not specified
  - Geographical distribution of respondents compared to population
    - 14% West (vs 11%)
    - 25% Midwest (vs 28%)
    - 38% South (vs 31%)
    - 23% NE (vs 30%)
Component 1 Foundations of PH

The diagram compares the desired content and current content across various components of Public Health (PH). The components include EBP (Evidence-Based Practice), H Determine, HP Intervent, H Research Eval, Evaluation, Epidemiology, and PH Informatics. The desired content is represented by blue bars, while the current content is shown by dotted bars. The comparison is made at different values ranging from 1.6 to 4.0.
Component 2 Clinical Preventive Services and Health Promotion

- Desired Content
- Current Content

Component: Clinical Preventive Services and Health Promotion

- Other P Intervent
- Counsel Behav Change
- Screening
- Prev Medication
- Immunization
Component 3 Clinical Practice and PH

- Cultural
- Partner w/ Pub
- Occ Health
- PH in Clin Care
- Eviron Health
- Global Health
- Emergency

Desired Content vs. Current Content
Component 4 Health Systems and Health Policy
TOTAL PH SCORES AND CURRICULUM MODEL

- Total desired PH score (n=34): 46 to 87, mean 79.9, sd 8.45
- Total current PH score (n=50): 59 to 92, mean 65.3, sd 9.44
- Total gap PH score (n=30): 0 to 35, mean 13.1, sd 8.25

- Master’s total current PH score (n=35): 46 to 87, mean 66.0, sd 9.27
- OTD current PH score (n=7): 64 to 79, mean 69.8, sd 4.87

- 44.2% concentrated PH content in one or more courses
- 28.8% threaded PH content across the curriculum
- 26.9% included PH content as an informal element
DISCUSSION: DESIRED CONTENT

- High level of agreement that most elements of the CPPH framework should be included in OT programs: mean total desired score 80/92
- Supports face validity of the CPPH framework for use by OT programs
- Exceptions:
  - Preventive medication (2.9)
  - Immunization (2.7)
  - Emergency preparedness (3.0)
DISCUSSION: CURRENT CONTENT

- At least moderate inclusion of most elements of the CPPH framework in OT programs: mean total current score 65/92
- Framework not exclusively about population health
- Includes domains that have been part of OT programs for some time:
  - Foundational research and epidemiological concepts
  - Individual-level disease prevention and health promotion content
  - Health systems information
DISCUSSION:
GAPS

- Clinical Practice and Population Health component had most gaps
  - Maps most closely to “population-centered care” in ACOTE standards
  - Global health (0.92 gap)
  - Environmental health (0.78 gap)
  - Occupational health (0.61 gap)
  - Partnering with public (0.54 gap)
  - Incorporating PH into clinical care (0.54 gap)
- Gaps in other components
  - PH informatics (0.81)(Foundations of Population Health)
  - Organization of health systems (0.73)(Health Systems and Health Policy)
DISCUSSION: LIMITATIONS

- Response rate of 33% acceptable
- Only 8 identified OTD programs among respondents not enough OTD data to make meaningful comparisons
- Five program directors with dual responsibilities
- Program director perceptions about population health content in their programs may not be accurate
- Several participants didn’t complete “desired” curriculum items
IMPLICATIONS FOR OT EDUCATION

- CPPH Framework has face validity for occupational therapy programs; potentially useful framework for curriculum development in OT programs
- Four domains with high scores for desired content and large gaps are potentially fruitful areas for curriculum development:
  - global health
  - environmental health
  - population health informatics
  - organization of health systems
- Programs that take an informal approach to population health may wish to formalize this content, given the AOTA Vision 2025 and the recently adopted ACOTE criteria
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