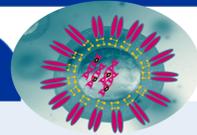


Informing the professional improvement of skills among oncology providers educating patients with HER2+ breast cancer

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Significance & Background:



- **Overexpression of human epidermal growth factors receptors (HER+)** accounts for ≈15% of US cases of breast cancer (BC)
- Continuous evolving treatment options highlight a **need for an open exchange between HCPs and patients**
- **Patient education** on how to appropriately report health status and monitor disease progression **is key to optimal patient care**

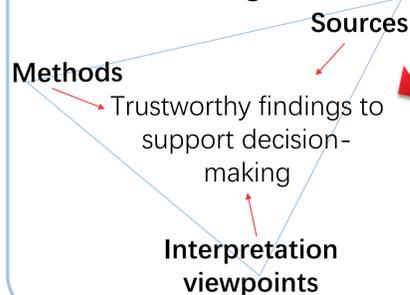
Purpose & Methods:

- **Identify the challenges and barriers** affecting the care of patients with HER2+ BC
- **Recognize how oncology providers can be better supported** to educate and counsel this patient population

Phase 1: Identified context and priorities

- Reviewed literature
- Engaged clinical experts (NH, SF, VK)
- Determined focus
- Obtained Ethics approval

Phase 4: Triangulation



Mixed-Methods Design

Phase 2: Qualitative exploration

- 45-minute interviews (n=32)
- Thematic analysis (NVivo)

Phase 3: Quantitative validation

- 15-minute survey (n=258)
- Descriptive and inferential analysis (SPSS) with chi-square tests

Sample:

Sample	RNs	NPs/PAs	MOs	PATH	Total
Phase 2	8	8	8	8	32
Phase 3	65	63	64	66	258

Legend: RNs (registered nurses), NPs (nurse practitioners), PAs (physician assistants), MOs (medical oncologists), PATHs (pathologists) all practicing in oncology

% of oncology providers who rated their skill level as sub-optimal when educating patients with HER2+ BC

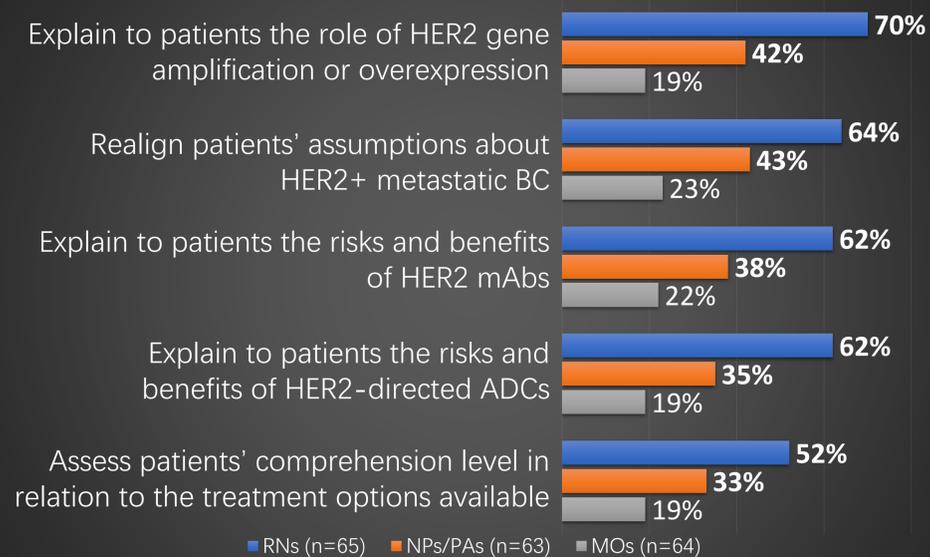


Figure 1: Percent of participants surveyed who rated their skill level for each item at sub-optimal levels (i.e., "none", "basic" or "intermediate" as opposed to "advanced" or "optimal") according to what is expected of their current professional role. Chi-square distributions between RNs, NPs/PAs and MOs were significantly different for all items presented at p-value < 0.05.

"... the physician would be the one [who] is letting them [patients] know [...] their treatment plan, but we are the ones [who] are actually sitting down with them, going over their side effects, how to minimize their side effects, what to report ..."

-Registered Nurse

Findings & Interpretation:



- **Triangulated findings indicated suboptimal skills**, especially among RNs and NPs/PAs, to:
 - **Educate and counsel patients about their HER2+ diagnosis**
 ≈ 42% of NPs/PAs had suboptimal skills to explain what HER2+ means and realign assumptions about metastatic BC
 - **Involve patients in quality-of-life and treatment related discussions**
 ○ 41% of RNs had suboptimal skills to discuss with patients their desired quality of life prior to treatment
 ≈ 35% and more of NPs/PAs had suboptimal skills to explain risks and benefits of available therapies

"If I just say, "Have you had any issues taking your medication?" they'll say no. [...] if I pose this question,... "How many doses did you miss in the last three weeks?" ... I get a different answer. [...] So I've learned that I have to ask them a more specific question than just, "Have you had any problems?"

-Physician Assistant

Discussion & Implications:

- **Oncology RNs, NPs and PAs would benefit from professional development interventions** designed to help them better understand, interpret, and effectively communicate to patients the continually **evolving scientific evidence related to HER2+ BC, available treatment options and associated risks/benefits.**

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