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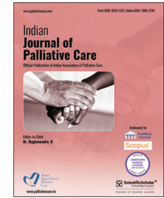

Review Article

From Broad Theoretic Postulating to Precision Communication – A Contemporary Narrative Review of Cancer Communication

R. Vinayak Padmanabhan[1], V. Srinivasan[1]

[1]Department of Radiation Oncology, Government Arignar Anna Memorial Cancer Hospital, Centre of Excellence for Cancer Diseases, Kanchipuram, Tamil Nadu, India.

ABSTRACT

This narrative review explores emerging strategies in precision cancer communication, with a focus on tailoring interactions to meet the complex needs of diverse patient populations. The purpose of this review is to highlight how theoretical frameworks and established communication protocols can be adapted to enhance patient-centred care in oncology, especially during the delivery of difficult news and discussions around prognostic awareness. Sources for this review were drawn from key journals and major databases in the fields of oncology, communication studies and digital health. The literature was selectively reviewed to identify influential models, communication protocols and empirical studies that address both verbal and non-verbal aspects of patient care. By integrating classical frameworks such as the health belief model, narrative communication theory and the extended parallel process model, along with established structured protocols, this review examines how communication still lacks individualisation to align with patient values and psychosocial context. While advances in cancer biology and treatment continue to evolve, effective communication between clinicians and patients remains a persistent challenge. Existing protocols have provided a structured approach to breaking bad news and managing sensitive conversations, yet they often overlook the subtleties of non-verbal communication and the individual emotional needs of patients. This shortfall is particularly evident among vulnerable groups. Emerging digital health tools and clinical decision support systems show promise in augmenting traditional communication methods, though they have yet to fully replicate the connection that human interaction offers. Limitations of this review include its narrative nature, which may not encompass the full scope of available evidence, and the rapid evolution of digital health interventions that may outpace current literature.

Keywords: Cancer communication, Health literacy, Patient-centred care, Precision communication, Theoretical frameworks

CONTEXT, RATIONALE AND LACUNAE

Difficult communication is a skill with few masters. Striking a balance between factual accuracy and empathy is easier discussed than practised. Clinicians face the challenge of directing a patient through inevitable trauma, tough decisions and multidimensional distress.[1]

We know cancer biology and grief processing more deeply than ever before. Theoretically, such progress must translate to better outcomes. Oncologic communication gaps, whether it be interdepartmental confusion or insufficiency in training, heighten patient distress.[2] The National Cancer Institute states 'Effective Cancer Communication is a clinical and public health priority.'[3] Acknowledging the deficit is a step toward correction. This review explores emerging prospects in precise cancer communication, challenging broad-averaged frameworks that overlook individual needs.

Hippocrates (circa 460-377 BC) mentions cancer with reference to the Καρκίνος, the beast of Hera subdued by Heracles in his second labour at Lerna-the crab being a metaphor for the vigour of a vascular breast tumour.[4] After two millennia, cancer still plagues humanity.

Engel ponders the need of the human mind to deny reality, instinctively denying death.[5] Identifying grief as a disease despite the initial scepticism with the argument - 'Nobody ever dies of grief' marks progress in psycho-oncology. Death does have dominion over the cancer patient, a hanging sword of Damocles, if to quote Cicero.[6,7] Physician practices in disclosing information have changed substantially since the 1960s, as documented by Novack *et al*.[8]

***Corresponding author:** R. Vinayak Padmanabhan, Department of Radiation Oncology, Government Arignar Anna Memorial Cancer Hospital, Centre of Excellence for Cancer Diseases, Kanchipuram, Tamil Nadu, India. vinayakpadmanabhan@gmail.com

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THEORETICAL FRAMEWORKS IN COMMUNICATION

Rosenstock's health belief model (HBM) explains health-related behaviours on the basis of perceived susceptibility, severity, benefits, barriers, cues to action and self-efficacy.[9,10] It plays a role in determining needs and causes of a patient, up to predicting acceptance of advanced modalities, and actionable cues to facilitate informed decision making.[11] Fear-based messaging posited by the extended parallel process model triggers defensive avoidance.[12] Popova advocate effective mitigation of fear through practical action plans.[13]

Anecdotal evidence and storytelling with the Narrative theory, as Hinyard demonstrated, with need-based therapy, have the appeal that rote theory fails. According to Kreuter, narrative can 'overcome resistance… and provide surrogate social connections.'[14] Integrating multiple communication models is essential for an oncologist to optimise patient interaction in precision medicine.

Established protocols such as SPIKES, BREAKS and ABCDE help structure the emotionally charged terrain of critical illness discussions.[15,16] However, adherence to protocols remains inconsistent. Many oncologists, despite expertise in cancer care, find themselves undertrained in difficult conversations.[17,18] Lack of formalised training in non-verbal cues–eye contact, tone modulation, strategic silences and body language–these subtle elements play pivotal roles in patient perception and trust.

Training on SPIKES with validation through the breaking bad news attitudes scale can guide assessment and reinforcement.[19]

A well-articulated treatment plan may extend survival, but a well-communicated one fosters dignity, autonomy and acceptance.

NAVIGATING ACROSS THE ONCOLOGIC CONTINUUM

Across the trajectory of diagnosis to treatment to post-treatment care, from survivorship on one end and end-of-life care on another, infinite variations in communication are required.

Navigating ambiguity and building rapport make the pre-diagnosis phase tolerable. Establishing trust, providing clear explanations and setting achievable and acceptable expectations form this phase.

No protocol can be effective in the absence of emotional intelligence and clinical judgment. After diagnosis, falling into the trap of information overloading, or 'info-dumping,' is easy. Cancer information overload causes avoidance due to excessive available information.[20] Many confusing, overwhelming options, or a single autonomy-negating decision - both extremes fail to contextualise informed decision-making. Acknowledging the middle ground- the 'Goldilocks communication' finds use.[21]

Post-treatment, there is a spiral of relief and fear. Post-Treatment Communication must aim at alleviating anxiety and reinforcing Follow-up. Recurrence Risk must be interpreted with context so as to not insinuate fear, but also to not dismiss symptoms as being insignificant.[22] Dismissal of symptoms harms trust; validating lived experience is vital.[23]

Transitioning to survivorship brings its own challenges. Hope is difficult to earn and even more to sustain.[24] Rehabilitation and surveillance help reintegrate the patient into normalcy in this phase.[25] Beyond the medical part, the patient must be brought to find meaning in life, in relationships, and in addressing existential anxiety.

Palliation and end-of-life care are the other end of this spectrum. Palliative communication often follows futile curative efforts. Now the focus shifts again-blunt answers may devastate ("You are at the last stage- nothing more can be done."), and euphemisms obscure reality ("You may not benefit from a treatment that can cure your disease- maybe we can consider comfort care?").[26] To make decisions between hospice care and hospital care, addressing fear of death, spiritual preparation amid cultural values, all coalesce into a scaffold hard to articulate.[27] To be detached from the devastations while being attached to understanding is crucial for the oncologist.

CANCER COMMUNICATION THROUGH PROGNOSTIC AWARENESS

Applebaum defines prognostic awareness as 'awareness of a terminal prognosis or shortened life expectancy in the setting of advanced cancer.'[28] Assessing illness understanding helps cultivate realistic expectations. Communication goals are tailored to stabilise expectations and hopes, as with the pendulum model.[29] To identify receptivity, ambivalence and resistance on a case-to-case basis and deliver prognostic information can modify responses. Safe early exploration of options can model this rhetoric-this time is a luxury that can modify the course to a hopeful one. With adequate prognostic awareness, aggressiveness of treatment was reported to be reduced, adapting to patient goals and integrated care. [29,30] In new incurable cases, prognostic awareness may worsen quality of life despite improving realism.[31]

PRECISION COMMUNICATION

To tell someone of news, be it good or bad, involves nuance and rhetoric. Oncologists have been documented to be better equipped to deliver such news.[32]

LGBTQ+ patients often need alternatives to prevalent heteronormative communication. Inclusive language and tailored strategies may suit such populations better.[33] Including the biological next of kin rather than the significant other/partner has undertones of discrimination. Providing personalised treatment takes priority over perceived notions.[33,34] Building trust and avoiding disrespect are cornerstones.[35]

Adolescent and young-adult oncology requires separate focus. Developing identity and body-image during these ages is a significant modulator in perception of communication, and hence perceptions of autonomy, individuality and independence warrant tailored frameworks.[36] Their psychosocial needs differ, and survivorship is an important aspect to address in this population.[37,38] Coping trends, family dynamics and peer support reflect a desire for connection over practicality.[39] Practical needs such as fertility, sexuality counselling and promoting normalcy also need to be addressed.[40]

Decision making in people living with HIV/AIDSme (PLHA) populations has certain difficulties. Despite reduced stigma in urban circles, drug–drug interactions and poor interdepartmental communication remain barriers.[41] There is a considerable lack in health literacy among PLHA populations as to HIV-associated malignancies, while low-income countries struggle with achieving literacy, American studies show that ~20% of care providers were reluctant to discuss treatment adverse effects.[42,43]

Ethnic/religious minorities often face poorer communication, shorter consultations and perceived lack of intelligence.[44] Guided communication in religious minorities with the Giger and Davidhizar Assessment model for Transcultural assessment may provide frameworks for culturally diverse populations.[45] Inclusion of diverse populations in clinical trial data may help, as advocated by the American Society of Clinical Oncology-Association of Community Cancer Centers recommendations for equity, diversity and inclusion in cancer clinical trials.[46] Societal communication strategies require strengthening in indigenous populations, and protocols with one-size-fits-all approaches may be discarded.[47]

EVOLVING APPROACHES AND DIGITAL INNOVATIONS

Increasing amounts of tasks are being relegated to computing systems. Clinical decision support systems (CDSSs) are reshaping existing paradigms. Personalisation is more plausible with the advent of such modalities.[48] CDSSs are primarily designed to serve as decision-optimisers rather than decision makers. Integrating apps into cancer care is elusive owing to evidential insufficiency and data privacy concerns.

The alienisation of the treating physician from the patient is where digital modalities find their niche. Although modern machinations might be useful in outcome-driven patient care, it begs the question - 'Are we becoming worse at communicating?'

FUTURE DIRECTIONS, IMPLICATIONS AND RECOMMENDATIONS

Patient's preference for artificial intelligence responses should be a clarion call for medical education reform. Oncologists must cultivate communication competencies that transcend barriers and honour the patient's deeply personal narrative.

Technological innovation and holistic care unite at this juncture, leading us to identify the art of communication as the major cornerstone of the oncologist's arsenal - a double-edged sword. Diverse patient simulation models may be employed to train oncology trainees. Communication quality assessment must be done with validated tools and feedback reinforcement.

CONCLUSION

Communication demands nuance. While the landscape of cancer care evolves, the core remains unchanged–delivering difficult truths with clarity, empathy and respect for individual needs.

We advocate shifting from broad-stroke frameworks in cancer communication to a tailored, patient-centred approach.

In an era of personalised care and precision medicine, why not precision oncological communication? Future directions should focus on integrating communication training as a core competency in oncology education. Standardised curricula employing verbal, non-verbal and cultural training with diversification are essential. Furthermore, incorporating real-time feedback systems to assess and refine physician–patient interactions could improve trust, adherence to treatment and overall patient experience. Compassionate, individualised patient care and accessible healthcare rely on precision communication.

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