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Cancer Caregivers' Needs for Their Well-Being in Information Era

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Panel 1 Ubiquity: Challenges at Horizon!

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- Dr Koo Ah-Choo is an Associate Professor at the Faculty of Creative Multimedia (FCM), Multimedia University (MMU). Dr Koo received her B.Sc (Hons) from the Technology University of Malaysia and her PhD from Multimedia University. She is active in the research of media usage, interactive multimedia, creation and methods especially in the promotion of education, communication, collaboration and life-long learning.
- She was appointed as the deputy director of MMU Digital Cities Research Institute (2018-2019), Deputy Dean (2010-2013) for FCM and Dean (2014-2016) for the Learning Institute for Empowerment. Dr Koo is an alumna of the International Deans' Course (IDC 2014 / 2015). She is a senate representative to Senate Committee of her university for the cluster of Creative Multimedia and Cinematic Arts. She is a Tzu Chi Foundation volunteer for charity and recycling at her local community.

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Research Interest and Workgroup

- Research Interest: Interactive multimedia, media contents & usage; creation & methods especially in the promotion of education, communication, collaboration and life-long learning.
- Workgroup: Currently she is the Chairperson for the Research Centre for Interactive Multimedia in the Faculty of Creative Multimedia (url: creative.mmu.edu.my) and the lead for the Research Programme of Green and Wellness at her university (www.mmu.edu.my). Dr Koo is keen to facilitate / work with any collaborative group under the research area(s) of Interactive Multimedia and Creative Multimedia.
- She published her research in the Journal of Educational Technology and Society, International Journal of E-Health and Medical Communications, The Turkish Online Journal of Educational Technology, and Int. J. Innovation and Learning.
- She is currently the project leader for a Fundamental Research Grant Scheme (FRGS) by the Ministry of Higher Education, entitled, "eHealth Modality for Mental Wellness among Digital Talents". She also led research and creative projects funded by various agencies:- 1) Affective Roles of Ubiquitous Learning in a 'Patient Centred Health Care Model' for Malaysian Hospitals; 2) ProbMobile: An interactive mobile learning framework for Probability; 3) UNHCR's Health Media Production project; 4) Members of many other research projects.
- Her CV: https://mmuexpert.mmu.edu.my/ackoo



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Position of the current research:

>> Background & Issue

- Caregivers face with competing sources ("infodemic") => to identify accurate / trustworthy resources; required Internet and Information Literacy.
 - >> Mis- and disinformation can be harmful to people's physical and mental health;
 - >> mHealth/eHealth services and applications are able to offer opportunities on health / cancer education
- Increasing cases of cancer rate; challenges of caregiving (Being informal caregivers)
- Caregivers "someone who performs hands-on care and / or provides emotional support to patients, such as a partner, relative or friend"; caregivers can be partners and family caregivers, who are mostly informal
- Literature was conducted on the aspects of dealing with cancer, information access on caregiving and cancer caregivers' need, one aspect of needs is Learning Needs too.



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>>Purpose

The study explored the four + one dimensions (of needs) faced by cancer caregivers, namely:

- 1. Healthcare service
- 2. Psychological & emotional
- 3. Work & social
- 4. Information + 5. Learning need Girgis et al. (2011) suggested the four dimensions.

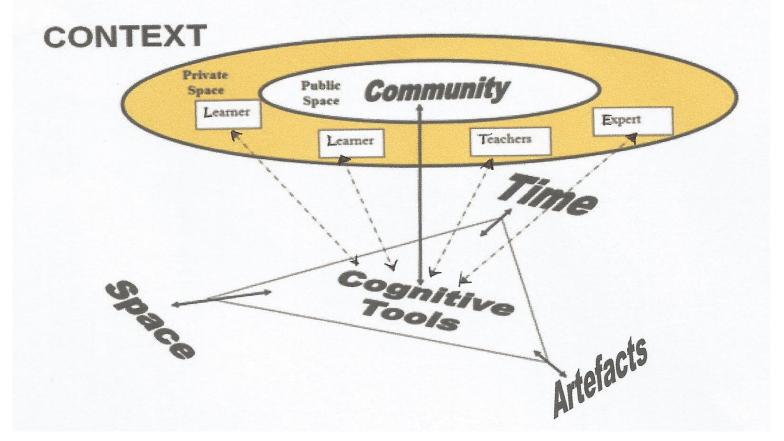


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Why Learning as another dimension?

>> Information and social context are seamless



A Seamless Learning Framework (Looi, et al. 2010.)



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>>Methods

- A survey was conducted at two private cancer clinics in a hospital; with support from an NGO.
- Number of survey respondents: 84 informal caregivers; mostly Malaysian Chinese.
- Instrument –adapted from Girgis et al. (2011).
- Factor analysis is employed in analyze the data with two main stages of analysis
 - Stage 1: Extracting factors → Stage 2: Factors rotation



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>> Findings

The six-factor of needs were identified in this study, they are elaborated based on research items:

- **Factor 1: Communication Need** Regular communication for better understanding and balance of needs between caregivers and person with cancer;
- **Factor 2: Personal Well-Being Need** -- Especially on the control of emotion, communication and spiritual beliefs mainly on the quest of meaning of life and the faith in the healing process;
- **Factor 3:** Basic Health Need Healthcare need, counselling and service;
- **Factor 4: Information Need** -- Access to Information related to cancer or patient care information and Services;
- **Factor 5: Need for Coping with Change in Life** Cope with the changes of life routine and perspective on life;
- **Factor 6: Learning Need** Learning through online information and connections with other people on caregiving / cancer care.



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>>Discussions, Conclusion and Future Work

- The known domain of needs emerged (as predicted):- Basic Healthcare Service,
 Psychological & Emotional (Personal Well-being Need), and Access to Information.
 >> Additional needs identified in this study: Communication Need, Coping with
 Change (In life), Learning Need.
- Communication Need being the moderate need by the caregivers (the higher need of all factors); learning need is low need. Other need-factors are between low to moderate need.
 - >> Communication Need for caregivers are multifaceted in nature: communication target, content, style, timing and preferences (Li et al., 2020; Yuen et al., 2014); it has influenced on Information Need; effective communications influence caregivers' well-being.



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>>Discussions, Conclusion and Future Work (continued...)

- Communication aspect and all other need-factors should be considered for any policy or training modules for caregivers.
- The study has sampling limitation; data from respondents may has some biases.
- Future directions >> Consider the different duties of caregivers and the level of quality of treatment received by patients; >> In depth study on specific well-being dimensions due to the reason that well-being is large construct.
- During pandemic time, caregivers' well-being should be safeguarded; research on Covid-19 caregivers is urgent, to study their unmet needs and also to compare their needs at different regions.
 - >> Future collaborative research on this area is welcome.

