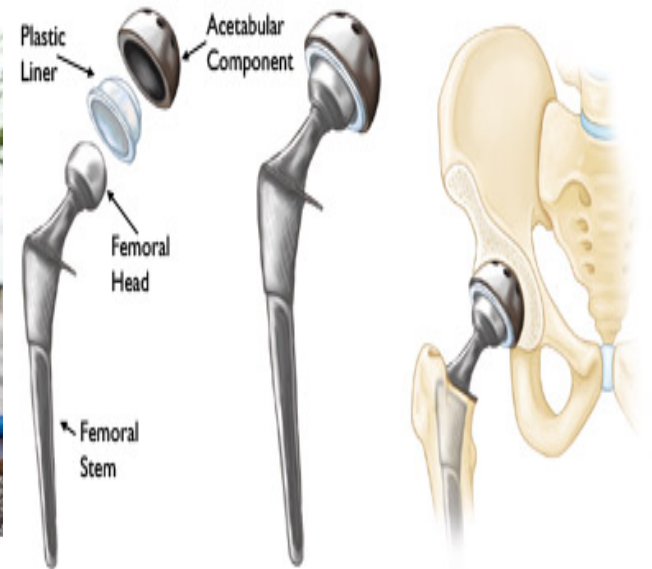
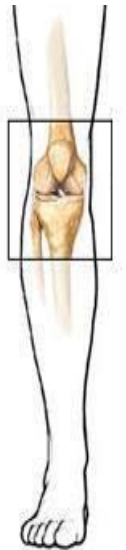


ELDERLY SINGAPOREANS' PERCEPTION OF UNDERGOING JOINT REPLACEMENT SURGERY: A QUALITATIVE STUDY

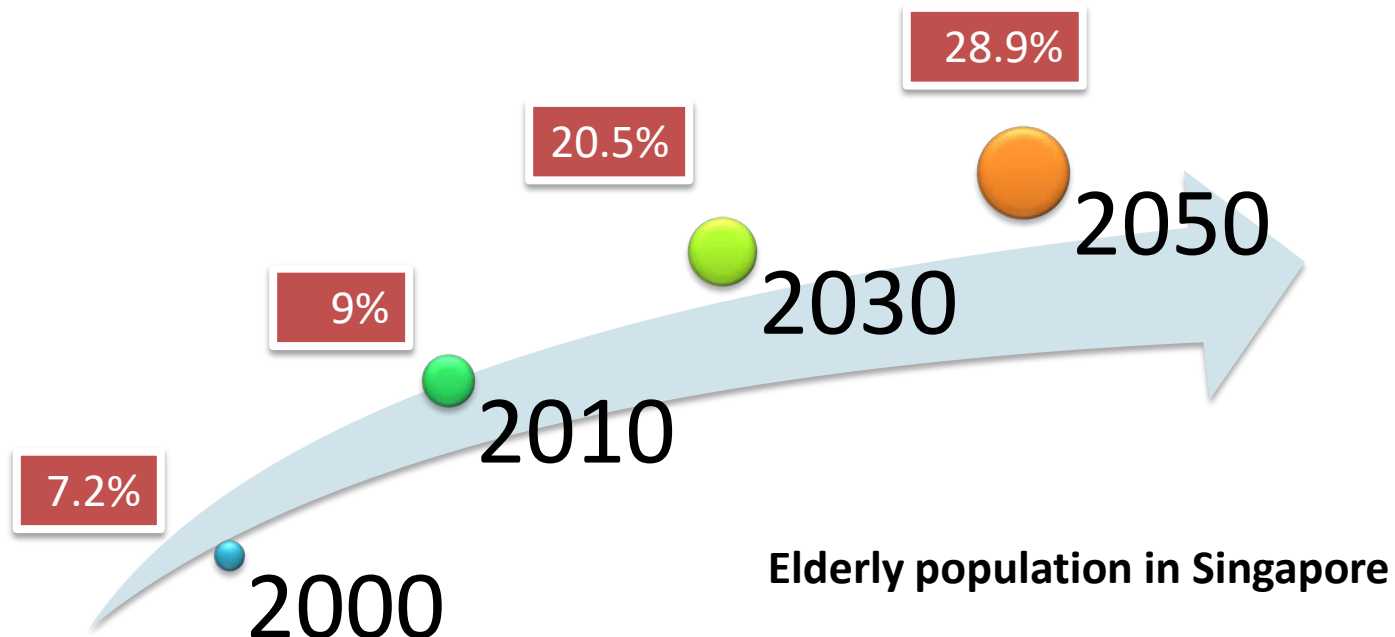


Presenter: A/Professor Rosy Tay, Deputy Programme Director,
Singapore Institute of Technology

Background

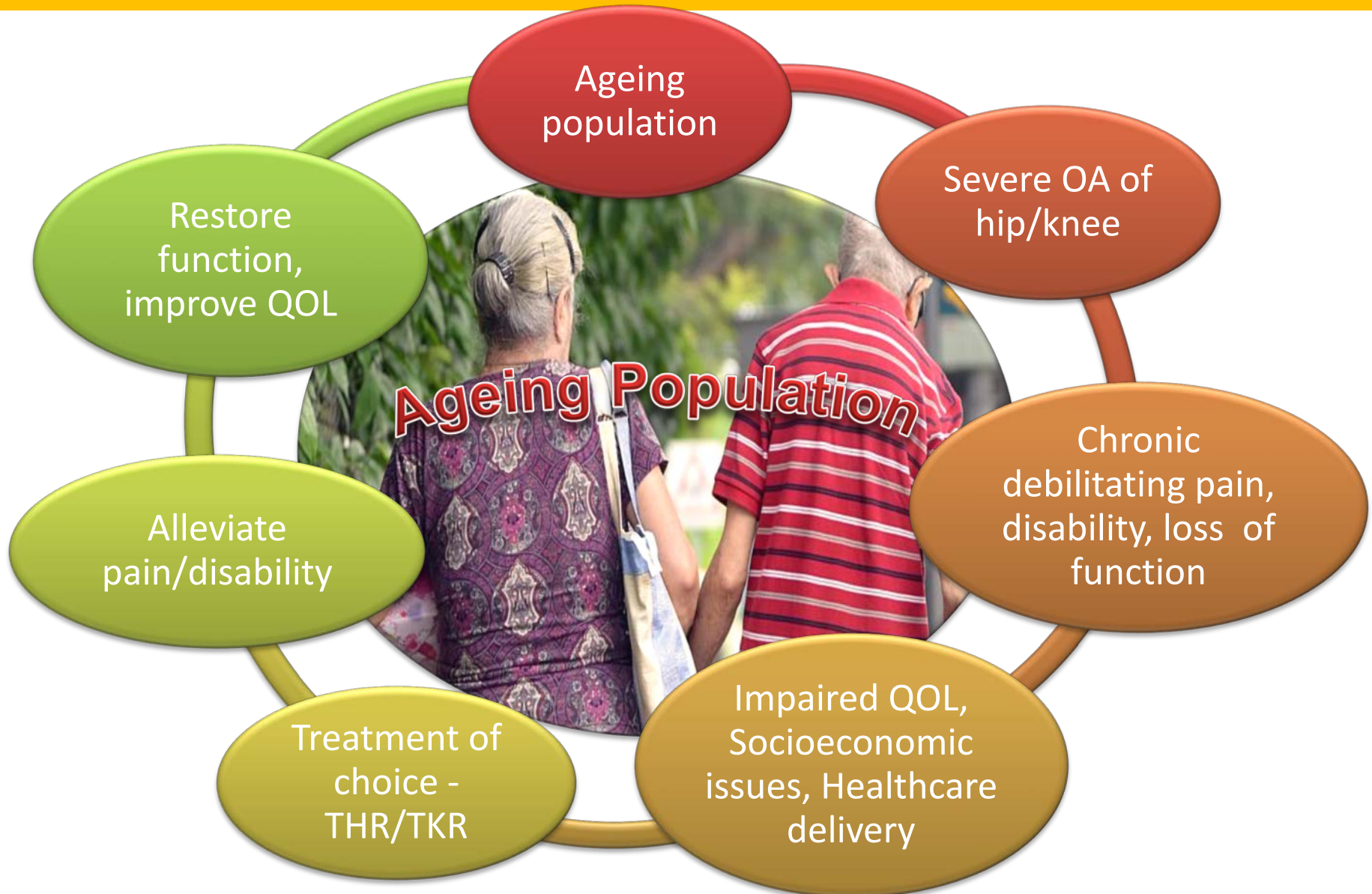
- In Singapore, elderly is defined as 'persons aged 65 years and above'.

(Singapore Department of Statistics, 2011, p.8)



(Singapore Department of Statistics, 2011; United Nations, 2012)

Background



Significance of study

Increasing trend of joint replacement surgery

Gain an emic perspective of how cultural values, personal beliefs, mental, social adjustments and coping inform the perception

Review current healthcare policy, nursing policy, nursing practice, nursing education, patient education, community support

Strategies to facilitate perioperative continuum of care, Provide a strong emphasis on essence of caring, Culture & patient-centric

Aim

- The primary aim was to explore the elderly Singaporeans' perceptions of undergoing joint replacement surgery.
- The secondary aim was to examine how the elderly Singaporeans adjusted mentally and socially before, during and after undergoing joint replacement surgery.

Research Questions

- 1) How do **cultural values** inform the perceptions of elderly Singaporeans undergoing joint replacement surgery?
- 2) How do **personal beliefs** inform on the perceptions of elderly Singaporeans undergoing joint replacement surgery?
- 3) What is the nature of the **mental adjustments** of elderly Singaporeans undergoing joint replacement surgery?
- 4) What is the nature of the **social adjustments** of elderly Singaporeans undergoing joint replacement surgery?
- 5) How do elderly Singaporeans **cope** when undergoing joint replacement surgery?

Theoretical Framework

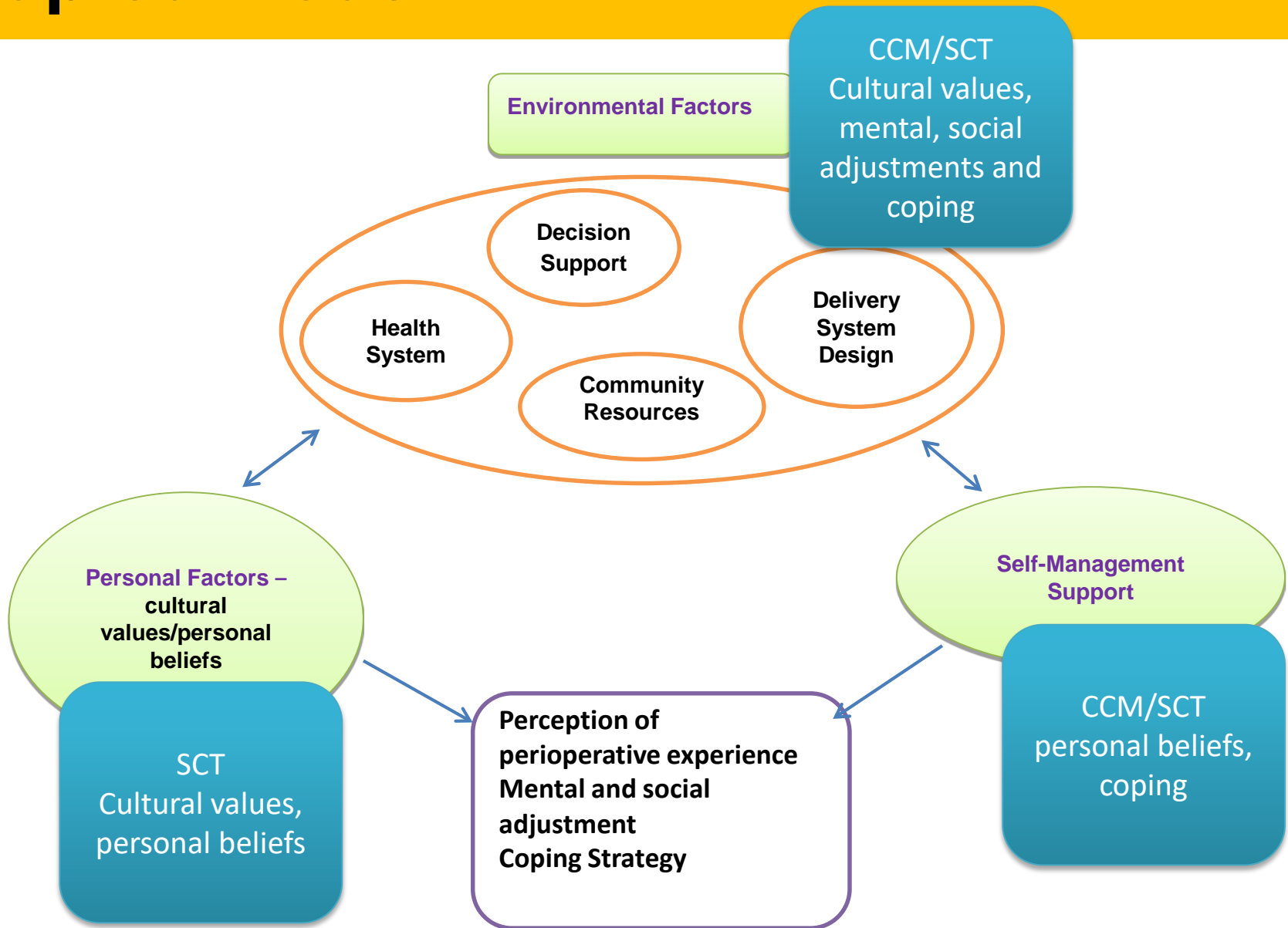
Chronic Care Model (CCM) (Wagner, 1998)

- **Widely applied to chronic illnesses such as osteoarthritis across healthcare settings/target populations**
(Dhatt, Simpson & MacDonald, 2012; Rosemann, Laux, Szecsenyi & Grol, 2008)
- **Six synergistic elements - Health system, delivery system design, decision support, clinical information systems, self-management support, and community resources and policies influence healthcare behaviours, perception and experience managing osteoarthritis**

Social Cognitive Theory (SCT) (Bandura, 1997)

- **Self-efficacy improved physical functioning of older adults undergoing joint replacement surgery before and after surgery**
(Fiala et al., 2013; Wylde et al., 2012)
- **3 interacting determinants - Personal, environment and behaviour influence deliberation on decision to undergo joint replacement surgery**

Adapted Model



Adapted from Wagner (1998) and Bandura (1997)

Methodology

Qualitative descriptive study

- Presents an emic perspective of the voices of participants
- Provides rich, in-depth accounts of participants thoughts and perceptions undergoing joint replacement surgery related to osteoarthritis.

(Magilvy & Thomas, 2009; Sandelowski, 2010; Sullivan-Bolyai, Bova & Harper, 2005)

Method

Clinical Setting:

Local Tertiary Hospital

Sampling:

Convenience

(Holloway & Wheeler, 2010)

Inclusion Criteria:

- ≥ 65 years
- Primary TKR/THR
- English speaking

Exclusion Criteria:

- Cognitive impairment
- Revision of TKR/THR

Study period:

1 year

Oct 2012 to Nov 2013

Ethics:

CIRB approval
Oct 2012 – Nov 2013

Data Collection

- Semi-structured - repeated interviews
- Field Diary/Memos
- 2 interviews each
- 1 hour each
- 2 pilot interviews

End of Recruitment:

- 14 Participants
- A total of 28 interviews
- Theoretical/ Data Saturation

(Glaser & Strauss, 2012; Sandelowski, 2010)

Modified thematic analysis

1 Familiarising yourself with the data

2 Generating initial codes

3 Thematic analysis

4 Reviewing themes

5 Defining and naming themes

(Braun and Clarke , 2006)

Criteria	Strategy
Credibility	Prolonged engagement, persistent observations, peer review, negative case analysis, progressive subjectivity
Transferability	Essence of the thick and rich descriptions
Dependability	Regular review Consistency of findings Data coherence Audit trail
Confirmability	Audit trail, intellectual honesty

(Guba and Lincoln , 1989)

Findings - Demographics

Demographic	Male (n=10)	Female (n=4)	Total (n=14)
Mean age, in years (SD)	64.6 (5.4)	68 (5.4)	71.6 (5.4)
Range in years of age	66–83	65–76	65–83
Ethnicity (n)			
Sri Lankan	1	0	1
Malay	1	0	1
Chinese	8	3	12
Caucasian	0	1	1
Marital status (n)			
Married	10	3	13
Widow	0	1	1

Themes and subthemes

3 critical phases

PHASES	Beginning of pain				Finding a solution	Recovering			
	Onset of osteoarthritis to preoperative period				During surgery	Transfer to post anaesthesia care unit till recovery from surgery			
THEMES	A deteriorating, disabled and limiting body wanting a functioning abled body	Gathering information to decide on surgery	Living in fear, anxiety and uncertainty in anticipation of surgery	Receiving information in preparation for surgery	Detachment from the body	Adapting to an unfamiliar body	Cultural beliefs / practice on the recovering body	Adjusting to a new body and life again	
SUBTHEMES	Enduring pain and limiting body Awareness of self-image A hope to regain life Placing hope on complementary therapy Fear over side-effects of painkillers	Positive influence Negative influence	Fear and anxiety Drawing peace of mind and inner strength from faith and religion Drawing from past experiences Entrusting the outcome of surgery to formal carers		Awareness of operation-related sounds and scenes Feelings of physical detachment from the body	Experiencing problems related to surgery Discovering possibilities and limitations to own body	Yin-Yang of foods for the recovering body	Getting the body to be in charge again Adaptation to life with new leg Appreciative of support from informal carers Togetherness with family members and friends Encouraging others to undergo surgery	

8 THEMES AND 21 SUBTHEMES

Beginning of pain

Theme : A deteriorating, disabled and limiting body wanting a functioning abled body

Subtheme: Awareness of self-image

“One day... when I go to...my grandson's school, one old lady said, ‘I see you from the back... your walking...I thought you are 70 plus. You're so young. Your leg... what happened?’” (Hua FC14-65).

“I think I don't worry so much people (how) think of me, how people see it. You feel the need, you have to do it.. whether you use the stick or wheelchair. Now I find a need (using the stick), I just don't care how people see me” (Huay MC2-78).

Discussion

Patients experienced negative thoughts relating to their body image even as they attempted to camouflage their disfigurement.

Self-consciousness, loss of pride and fear of losing independence deterred patients from accepting assistive devices such as walking stick.

(Cash & Smolak, 2012)

Beginning of pain

Theme : A deteriorating, disabled and limiting body wanting a functioning abled body

Subtheme: Placing hope on complementary therapy

“They (Chinese sinseh - Traditional Chinese doctor) always say 'Mi Fang' (secret recipe). But I'm the patience [sic] type. I still give them ... a chance. Let them treat me at least for 5-6 months until they themselves give up” (Ngian MC5-66).

“When he (doctor) give [sic] me the pain killer, he also asked me to go for acupuncture. So, I go there one week...4 times, then reduced 2 times. But I don't know whether it...help(s)” (Hua FC14-65).

Discussion

Acupuncture accorded temporal relief and reduction in the level of chronic pain, which facilitated the acceptance of acupuncture.

(Bishop & Lewith, 2013; Hopton, Thomas & MacPherson, 2013)

A Taiwanese study found that female patients preferred using Chinese herbal medicine compared to male patients for osteoarthritis.

(Chen et al., 2014)

Theme : Adapting to an unfamiliar body

Subtheme: Discovering possibilities and limitations to recovery

“Very important to get through this, and have to return to normal life; otherwise, the whole exercise was a waste of time” (Panu ML4-67).

“Why I refused to go [to] physiotherapy because when the joint, when you move a lot...the thing [suture] will burst more”(Boo MC9-66).

“Blood, very painful..Aiyah! [expression meaning ‘goodness’] Si [die]”, call me to exercise. I said cannot. ..very painful, cannot move, then how to do. At night I dream my bone broken (Lian FC11-72).

Discussion

- A positive outlook was testified to be a key influence in motivating some participants to be proactive in navigating their trajectory of recovery.
- Faced a dilemma in coping with mobility and social activities as they weighed and negotiated with the uncertainty on their functional possibilities and limitations in getting back normal self.

Recovering

Theme : Cultural beliefs/practice on the recovering body

Subtheme: 'Yin-yang' of foods for the recovering body from surgery

“Being a Cantonese ...drink more soup. Dun Tang [herbal soup] is very important....since Sang Yu [snakehead fish]....help [wound healing], must....have it“ (Lim MC6-72).

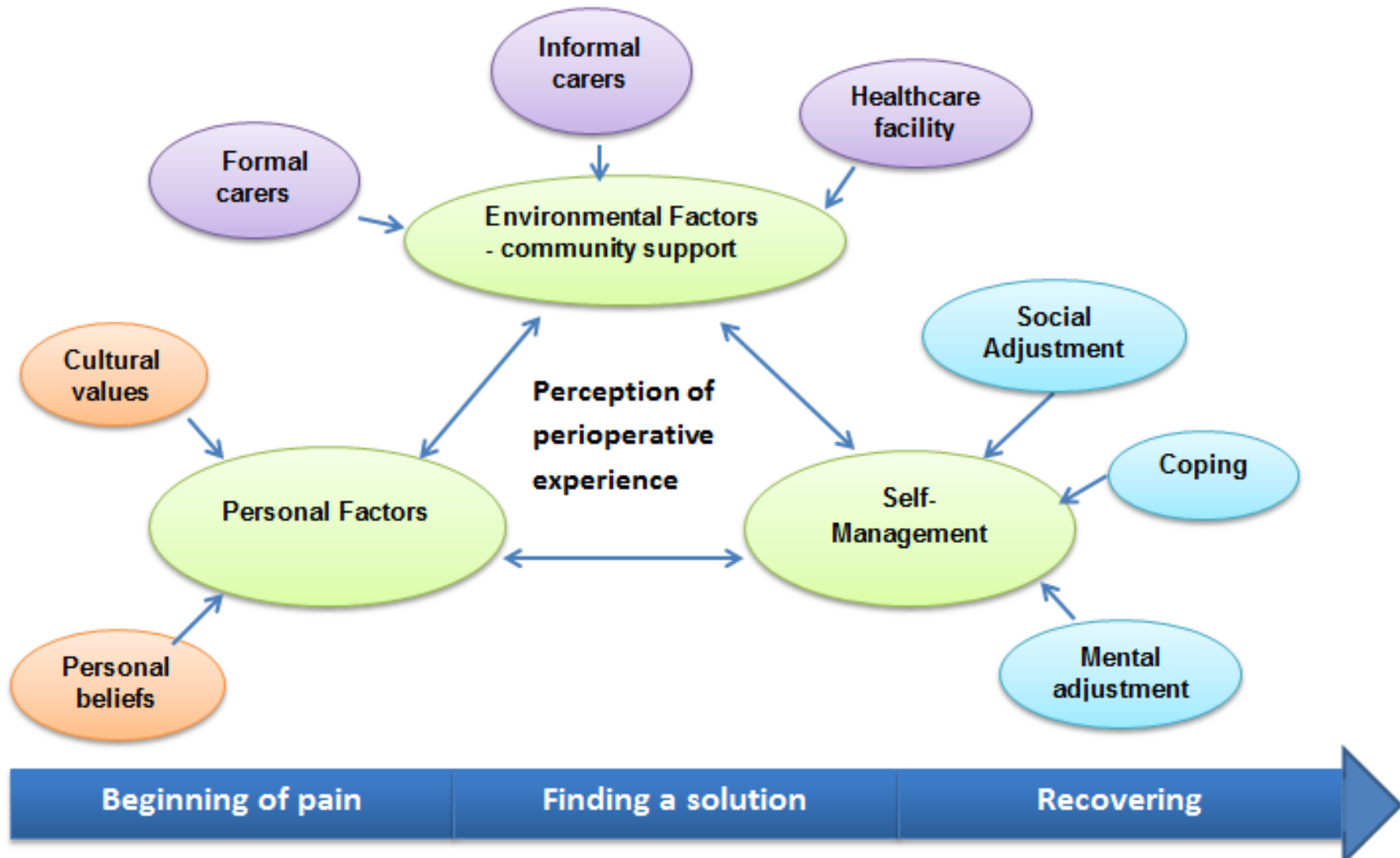
“I [am] very scared [eating prawns]. This one [wound] cannot (stop bleeding). Maybe I take some poison food like eggs, prawns...still oozing“ (Mien FC13-66)

“I will take it [cultural belief of food on health] with a pinch of salt. I think modern medication play much...bigger part...antibiotics, cleanliness, anti-infection (Lim MC6-72).

Discussion

No studies have discussed Asian cultural beliefs regarding the yin-yang of foods for the recovering body after surgery.

The 'Journey to regain life' (Tay, 2015)



Adapted from Wagner (1998) and Bandura (1997)

Limitations

Future research

Homogenous participants with 11 Chinese, one Malay, one Sri Lankan and one Caucasian; more males than females participants.

Need to recruit participants in other ethnic groups. May need to conduct study in other healthcare institutions.

Lack inclusion of multi-ethnic elderly Singaporeans who spoke mainly Chinese dialects, Mandarin, Malay and Tamil

Include of multi-ethnic participants who speak Chinese dialects, Mandarin, Malay and Tamil.

Lack triangulation of data sets

Include another population group such as caregivers

Lack exploration on spiritual coping

Include the role of spirituality coping in the interview guide

Clinical Implications and Key Recommendations

Healthcare Policy

- Recognise the importance of non-biomedical health belief systems and a cultural diversity within its elderly population in the trajectory of severe osteoarthritis.
- MOH to initiate collaboration with various healthcare organisations and agencies to create a robust healthcare infrastructure to support an elder-friendly living environments and facilities.

Nursing Policy

- Project nursing manpower and training to support competent nursing care of elderly patients across acute care, community, nursing homes and home care.

Nursing Education

- Emphasis on knowledge and practice of cultural sensitivity in delivery of perioperative education.
- Focus on nursing specialities such as community, rehabilitation and mental health nursing to support the mental and social adjustments of these elderly patients in the community.

References

- Ackerman, I. N., Bennell, K. L., & Osborne, R. H. (2011). Decline in Health-Related Quality of Life reported by more than half of those waiting for joint replacement surgery: a prospective cohort study. *BMC Musculoskeletal Disorders* 12(108), 1-9.
- Bachrach-Lindstrom, M., Karlsson, S., Pettersson, L. G., & Johansson, T. (2008). Patients on the waiting list for total hip replacement: a 1-year follow-up study. *Scandinavian Journal of Caring Sciences*, 22(4), 536-542.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: USA: W.H. Freeman and Company.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Brownlow, H. C., Benjamin, S., Andrew, J. G. & Kay, P. (2001). Disability and mental health of patients waiting for total hip replacement. *Annals of the Royal College of Surgeons in England*, 83(2), 128-133.
- Chen, F. P., Chang, C. M., Hwang, S. J., Chen, Y. C. & Chen, F. J. (2014). Chinese herbal prescriptions for osteoarthritis in Taiwan: Analysis of National Health Insurance dataset. *BMC Complementary & Alternative Medicine*, 14, 91.
- Dawson, J., Fitzpatrick, R., Fletcher, J., & Wilson, R. (2004). Osteoarthritis affecting the Hip and Knee. In A. Stevens, J. Raftery, J. Mant & S. Simpson (Eds.), *Health Care Needs Assessment: The epidemiological based needs assessment reviews* (2nd ed., pp. 549). United Kingdom: Radcliffe Publishing Ltd.
- Denzin, N. K. & Lincoln, Y. M. (2011). *The Sage handbook of qualitative research*. London: Sage Publications.
- Fujita, K., Makimoto, K., & Hotokebuchi, T. (2006). Qualitative study of osteoarthritis patients' experience before and after total hip arthroplasty in Japan. *Nurs Health Sci*, 8(2), 81-87.
- Glaser, B. G. & Strauss, A. L. (2012). *The discovery of grounded theory: Strategies for qualitative research*. Piscataway, NJ: Transaction Publishers.
- Grant, S., St John, W. & Patterson, E. (2009). Recovery from total hip replacement surgery: 'It's not just physical'. *Quality Health Research*, 19(11), 1612-1620.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. New York: Sage Publications, Inc.
- Gustafsson, B. A., Ponzer, S., Heikkila, K., & Ekman, S. L. (2007). The lived body and the perioperative period in replacement surgery: older people's experiences. *J Adv Nurs*, 60(1), 20-28.
- Hamel, M. B., Toth, M., Legedza, A., & Rosen, M. P. (2008). Joint replacement surgery in elderly patients with severe osteoarthritis of the hip or knee: decision making,
- Holloway, I. & Wheeler, S. (2010). *Qualitative research in nursing and healthcare* (2nd ed.). West Sussex: Wiley-Blackwell.
- Joanna Briggs Institute. (2011). Joanna Briggs Institute reviewers' manual: 2011 edition. Retrieved from <http://joannabriggs.org/assets/docs/sumari/ReviewersManual-2011.pdf>
- Kaplan, R. J. (2008). Total knee replacement. In W. R. Frontera, J. K. Silver & T. D. Rizzo (Eds.), *Essentials of physical medicine and rehabilitation: Musculoskeletal disorders, pain and rehabilitation* (2nd ed., p. 399). Philadelphia, PA: Saunders, Elsevier.
- Luong, M. L., Cleveland, R. J., Nyrop, K. A. & Callahan, L. F. (2012). Social determinants and osteoarthritis outcomes. *Ageing Health*, 8(4), 413-437.