Occupational participation, Meaningful activity and Quality of life among colorectal cancer

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OUTLINE OF PRESENTATION

1. Study background
2. Methods
3. Results
4. Conclusion
5. Implication
STUDY BACKGROUND

Colorectal cancer is the third most common cancer
(Cancer Research, UK, 2010); American Ca Society, 2014)

• 1st most cancer in Malaysian men -16.4%
• 2nd most cancer in Malaysian women-10.7%
(Zainal & Saleha, 2011)

• Incidence increase at the age 50 and older
(American Ca Society, 2014, Muhammad Radzi et al 2014)

5 years Survival rates:
• Asia – 60% survivals - mostly late detection
• Malaysian – 40% overall survival rate (Stage I & II)
(Radzniwan et al, 2009)
Occupational Participation/participation – a key concept/outcome measure in OT;

(ICF, WHO 2001; Seekins et al., 2012; van der Mei, Dijkers, & Heerkens, 2011; Vessby & Kjellberg, 2010)

*Meaningful activity*

Link between ‘meaningful activity’ and ‘meaning in life’

(Eakman, 2013, 2014; Pergolotti, Cutchin, Muss 2014)

Little is known about engagement in personally meaningful activity
**METHODS**

<table>
<thead>
<tr>
<th>Ethical/Design/Setting</th>
<th>University Malaya Medical Ethics Committee: 201311-0508 Ministry of Health of Malaysia: NMRR: 13-1525-18789</th>
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</thead>
<tbody>
<tr>
<td>Cross-sectional survey design -</td>
<td>April to December 2014</td>
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<td>University Malaya Medical Centre &amp; Selayang Hospital</td>
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<tr>
<td>Sample size/Sample</td>
<td>Minima sample size N= 107; 80% power, ( \delta = 0.05 ); G*Power software 3.2 (Faul et al, 2009)</td>
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<td></td>
<td>113/152 (74.3% response rate)</td>
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<td>Procedure: Inclusion &amp; Exclusion criteria</td>
<td>&gt;18 years of age, Stage I-IV; No recurrent disease, No mental health problems.; Not consented</td>
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<td>Tools</td>
<td>1. OPQ-M (Sapihis, Loh, Roslani &amp; Chinna 2015)</td>
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<td>2. EMAS-M</td>
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<td></td>
<td>3. EORTC QOQ C30 ver 3 - Malay version (Yussof, Low, Yip et al 2010)</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>IBM SPSS version 22</td>
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<td>SmartPLS version 3.2 (Ringle et al 2014)</td>
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**RESULTS**

**A. Basic model**

- \[
  \text{Total effect}: \ c = 0.417^{***} \\
  R^2 = 0.174^{***}
\]

**B. Mediation model**

- \[
  \beta = 0.454^{***} \\
  R^2 = 0.207^{***}
\]

- \[
  \beta = 0.551^{***} \\
  R^2 = 0.471^{***}
\]

- \[
  \text{Indirect effect}: \ c' = 0.118 \text{ ns}
\]

Figure 1: Summary of mediating test of the association between occupational participation (OP), meaningful activity (MA) and health QoL.

*** p<0.001; ns =0.160
# RESULTS FOR MEDIATION TEST

## Table 1: Bootstrapping’s Test Results

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient (β) (a*b)</th>
<th>t-value &gt; 1.96</th>
<th>p-value</th>
<th>Confident Interval (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP-MA-QoL</td>
<td>0.250 (0.46*0.59)</td>
<td>3.91</td>
<td>p=0.05</td>
<td>0.116 – 0.365</td>
</tr>
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</table>

OP - occupational participation  
MA - meaningful activity  
QoL – quality of life
IMPLICATION

✓ OT practice in Malaysia
✓ OT education
✓ Future research
CONCLUSION

Subjective evaluation of engaging in meaningful activity from the individual appraisal is a determinant for successful participation in daily living activities, which in turn influences positive health QoL in colorectal cancer survivors.