



# Impact of an educational workshop on a nurse-led intervention in palliative care: a longitudinal analysis

**Background:** Although Quality of Life (QoL) assessment is a central concept in Palliative Care (PC) practice, the standardized application of clinical interventions focused on assessing QoL in clinical practice is limited. Also, current research is insufficient to determine how to implement such interventions and determine their impact on patient outcomes. QoL assessment is a complex intervention and as such includes many components that form a coherent structure that links the intervention to patient's QoL. The study was based on the conceptual model of The QoL Assessment Principles in Palliative Care developed according to phase 0 of the MRC framework. It consists of four sections, for a total of 11 principles to be considered in developing and/or evaluating clinical interventions focused on QoL assessment in PC. We designed an evidence-based intervention focused on QoL measurement in PC practice developed according to the Medical Research Council (MRC) framework for developing and evaluating complex interventions.

**Aim:** To evaluate palliative care staff self-perceived levels of competence and confidence at different points in time in delivering a complex intervention focused on quality of life assessment in palliative care area.

**Discussion:** This analysis was conducted to determine the effect of the educational workshop as a part of a multicomponent nurse-led complex intervention focused on quality of life assessment in palliative care on competence and confidence of healthcare professionals on delivering the intervention.

Our findings showed the effect of the workshop on competence level of participants and enabled competence to be sustained over a 6-month period supporting that educational initiatives can increase competence in performing quality of life assessment in routine daily practice. However, our results failed to demonstrate a statistically significant increase in confidence. Increase in confidence level over time may imply that even if it is not statistically significant clinical practice could be affected if such a difference is seen.

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**Methods:** This is a descriptive analysis of a larger quasi-experimental study (the INFO-QoL study) aimed at modelling a nurse-led complex multicomponent intervention focused on quality of life assessment in hospice units (i.e. the INFO-QoL intervention), and determining feasibility, acceptability, and potential effectiveness of the INFO-QoL intervention.

The multicomponent intervention included: 1) educating hospice staff about quality of life issues and about interventions that promote a better quality of life; 2) educating patients and their families on the importance of assessing quality of life in hospice homecare practice to develop plan care accordingly; 3) quality of life assessment using the Integrated Palliative care Outcome Scale (IPOS); 4) discussing IPOS results and developing plan care accordingly during the multidisciplinary team briefing.

The study sample for this analysis included 19 healthcare professionals (physicians= 2; nurses=10; and nursing assistants=7) of a 12-bed hospice unit of the urban district of Genoa in the north of Italy.

Palliative care staff attended a purposeful educational workshop on quality of life in palliative care (component #1); workshop contents were based on learning needs. Palliative healthcare professionals were asked at different points in time to rate their self-perceived competence and confidence level in delivering the intervention before, after 3 and 6 months they attended the workshop. According to Takase and Teraoka, competency was defined as "ability to effectively demonstrate a set of attributes, such as personal characteristics, professional attitude, values, knowledge and skills and to fulfill professional responsibility through practice". Definition of confidence was based according to Segesten who define it as "the individual's awareness and assurance of a certain ordering of things". Data were collected through 2 questions (i.e. to what extent do you feel competent/confident to carry out the intervention?) both of them rated on a 11-point Likert's scale from 0 (not at all) to 10 (very much).

A three-way repeated measures ANOVA was run to determine the effect of the educational workshop on retaining contents from T0 (baseline), to T1 (3 months) and to T2 (6 months). All tests were two-sided and considered significant at  $p < 0.05$ .

**Results:** All the sample (N=19) attended the educational workshop of whom 79% (N=15) were female. The mean age was 44 years ( $\pm 11$ ). Mean years in their professional role and palliative care area was 15 ( $\pm 9$ ) and 8 ( $\pm 7$ ), respectively. Eleven (79%) healthcare professionals completed all the three assessments. Competence and confidence

scores were normally distributed, as assessed by Shapiro-Wilk's test of normality ( $p > 0.05$ ). The mean competence score increased significantly over time so that it increased from 4.55 ( $\pm 2.11$ ) (T0) to 6 ( $\pm 1.78$ ) (T1) to 7.09 ( $\pm 1.04$ ) (T2). There was a statistically significant effect of educational workshop on perceived staff's competence  $F(2,22)=10.120$ ,  $p < 0.001$ . In opposite, although the mean confidence score increased over time from 5.45 ( $\pm 2.11$ ) (T0) to 5.91 ( $\pm 1.7$ ) (T1) to 6.82 ( $\pm 1.53$ ) (T2), the effect of the workshop on perceived staff's confidence to deliver the INFO-QoL intervention was not statistically significant,  $F(2,22)=2.648$ ,  $p=0.095$ .

**Conclusions:** Our results may contribute to fulfill ambitions for palliative and end of life care proposed in the UK national framework for local action 2015-2020. A framework developed to find new approach of delivering better palliative and end of life care.