

Structured communication in lung cancer care: Results of a randomized trial

Katja Krug¹, Jasmin Bossert¹, Nicole Deis², Johannes Krisam³, Matthias Villalobos², Anja Siegle², Corinna Jung^{2,4}, Laura Hagelskamp^{2,5}, Laura Unsöld², Jana Jünger⁶, Michael Thomas², Michel Wensing¹

Background

- The diagnosis of **lung cancer with limited prognosis** leads to multifaceted challenges for patients
- The Milestone Communication Approach (MCA) was especially developed and implemented aiming at providing **needs-oriented and goal-concordant care** for these patients
- Main elements of the MCA are **situation-specific conversations** along the disease trajectory at defined milestones (diagnosis, stable phase, progression, transition to best supportive care) which are conducted by an interprofessional tandem of physician and nurse
- After each conversation, the nurse conducts **additional phone calls** to follow-up on patients, to clarify questions occurring after the conversations, to assess palliative care needs and to sustain communication
- Before the implementation of the MCA in practice, physicians and nurses of the tandems received an **interprofessional communication training**

Aim

- To evaluate the effects of MCA on addressed support needs, quality of life, distress and depression of the patients as compared to standard oncological care

Methods

- Design:** patient-randomized trial
- Sample:** out-patients with newly diagnosed lung cancer stage IV at a German thoracic oncology hospital
- Instruments:** Short-Form Supportive Care Needs Survey (SCNS-SF34-G; primary outcome: subscale Health System and Information Needs at 3-month follow-up), Schedule for the Evaluation of Individual Quality of Life (SEIQoL), Functional Assessment of Chronic Illness Therapy (FACT-L), Patient Health Questionnaire (PHQ-4), Distress Thermometer (DT)
- Data collection:** at study inclusion (baseline), follow-up assessments at 3, 6 and 9 months
- Analysis:** between group differences at follow-up using linear models including baseline as independent variable

- Baseline (May 2018 to July 2019): n=157 (table 1)
- 3-month follow-up: n=102
- 6-month follow-up: n=85
- 9-month follow-up: n=67

Table 1: Baseline sample characteristics

	MCA intervention	Standard oncology care
N	79	78
Age M (SD)	67.2 (8.5)	65.3 (9.2)
Gender n (%)		
female	34 (43.0)	34 (43.6)
male	45 (57.0)	42 (53.8)
Living situation n (%)		
living alone	13 (16.5)	22 (28.2)
living with partner	62 (78.5)	50 (64.1)
other	2 (2.5)	2 (2.6)
Smoking status (self-reported) n (%)		
yes	10 (12.7)	13 (16.7)
no	31 (39.2)	32 (41.0)
occasionally	9 (11.4)	7 (9.0)
ex-smoker	29 (36.7)	24 (30.8)

- At 3-month follow-up, lower health system and information needs in MCA intervention group ($p=.03$) (figure 1)
- No significant differences in other subscales and at other assessment times (figures 1-4)

Results

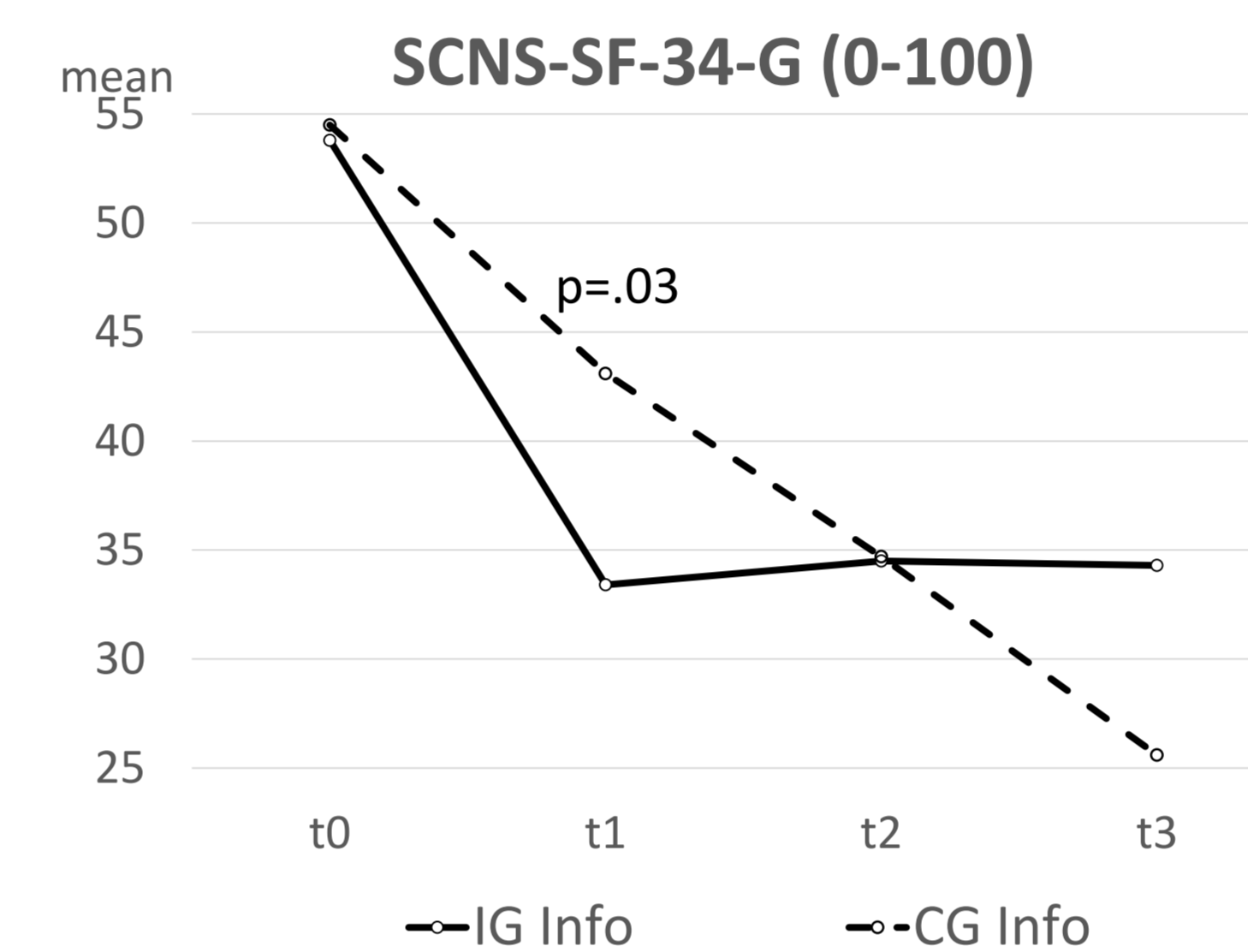


Figure 1: Supportive care needs (subscale Health System and Information Needs) in intervention (IG) and standard oncology care group (CG) at baseline (t0) and follow-ups (t1-t3)

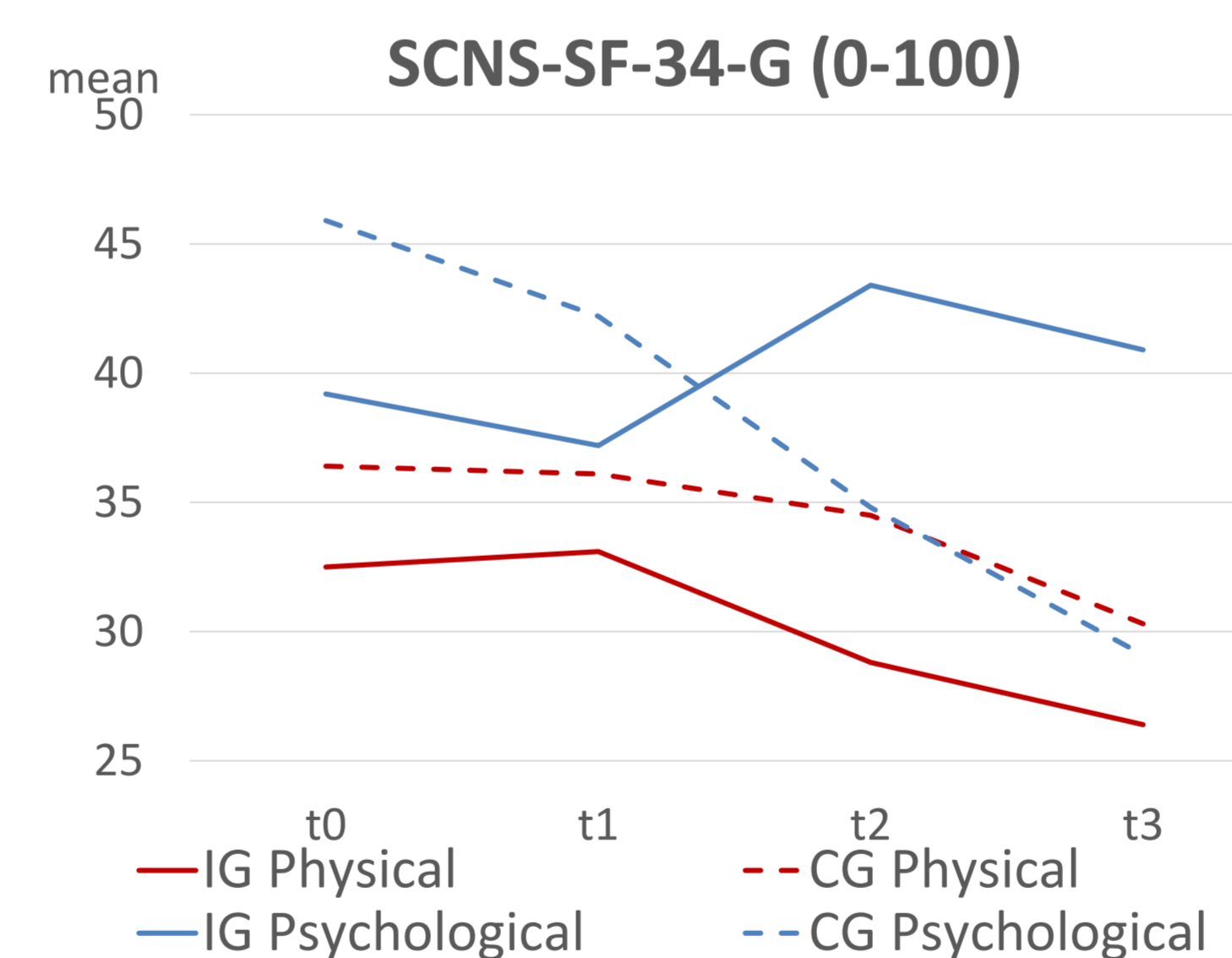


Figure 2: Supportive care needs (subscales Physical and Psychological Needs) in intervention (IG) and standard oncology care group (CG) at baseline (t0) and follow-ups (t1-t3)

Quality of Life SEIQoL (0-100)

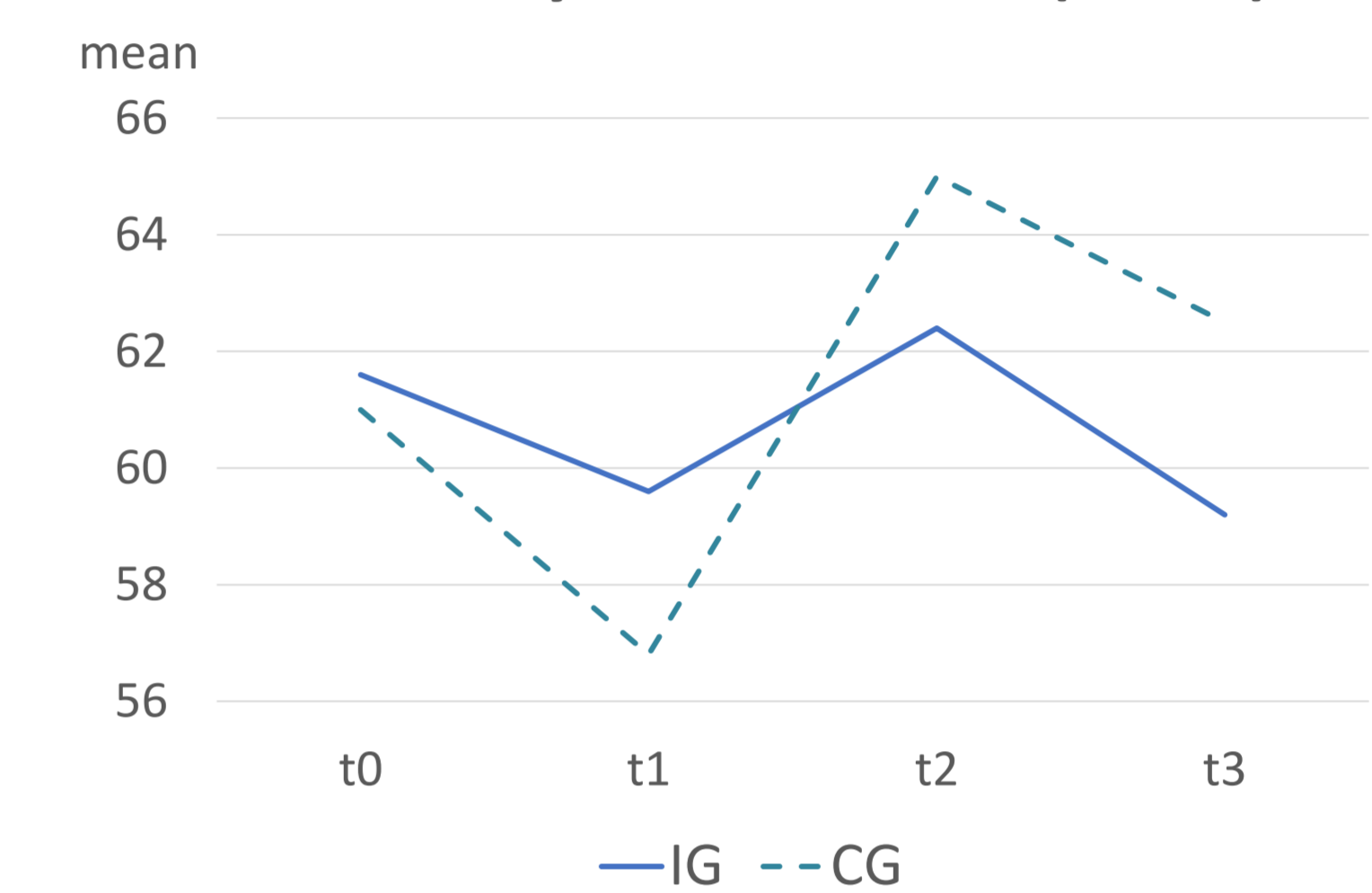


Figure 3: Quality of life in intervention (IG) and standard oncology care group (CG) at baseline (t0) and follow-ups (t1-t3)

Distress Thermometer (0-10) and PHQ (0-12)

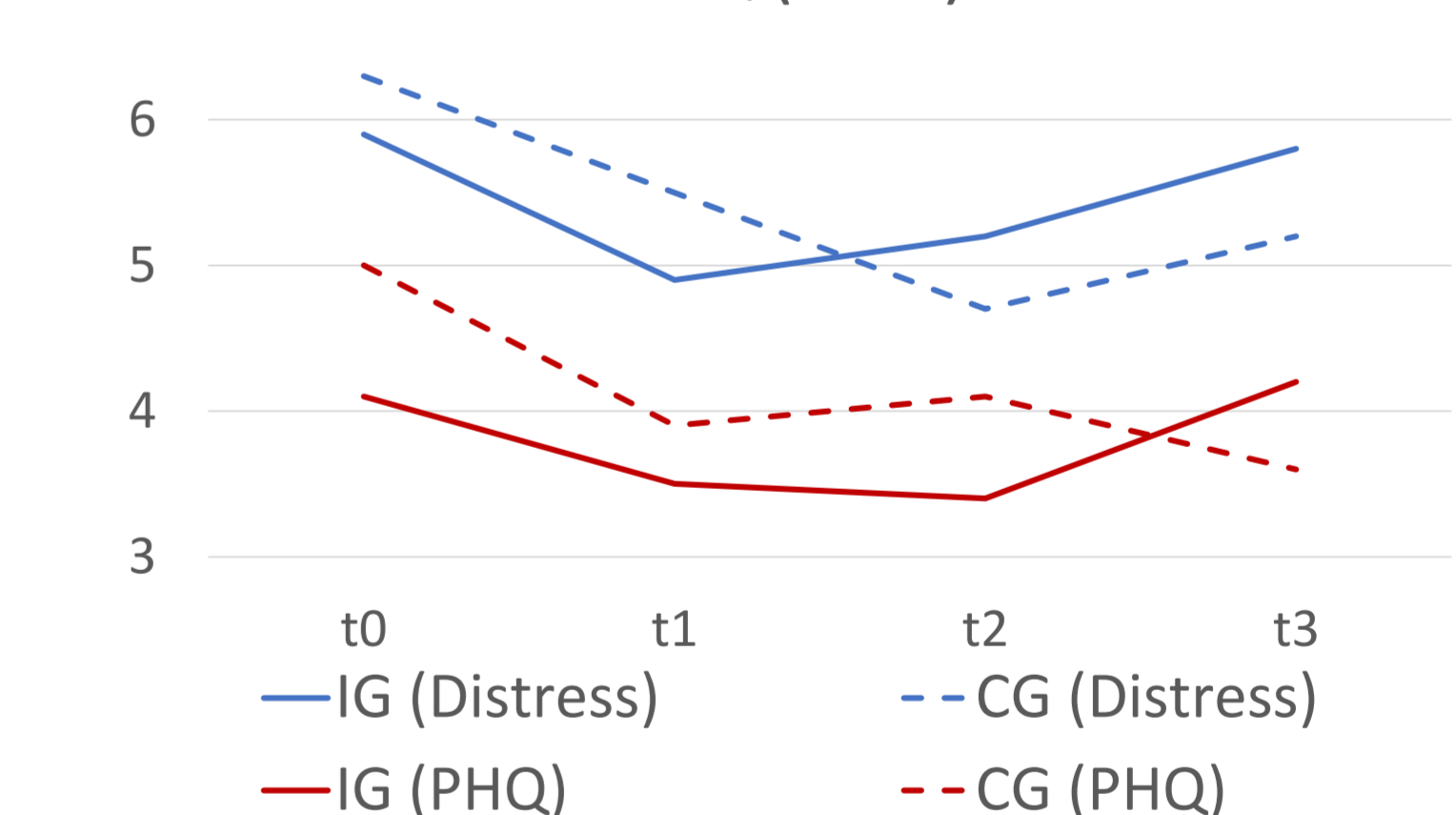


Figure 4: Distress and patient health in intervention (IG) and standard oncology care group (CG) at baseline (t0) and follow-ups (t1-t3)

Discussion

- The most prevalent health system and **information needs** for support of newly diagnosed lung cancer patients were **adequately and timely addressed** by the MCA
- Patients with standard oncological care also received the information, but delayed
- The communication approach is a method to address relevant issues **along the disease trajectory**
- By addressing relevant health system and especially information needs at pre-defined times, the MCA is a tool to **enhance goal-concordant care** and to **facilitate early integration of palliative care**

Affiliations

- Dept. of General Practice and Health Services Research, University Hospital Heidelberg, Germany
- Thoracic Clinic, Dept. of Thoracic Oncology, Translational Lung Research Center Heidelberg (TLRC-H), German Center for Lung Research (DZL), University Hospital Heidelberg, Germany
- Institute of Medical Biometry and Informatics, University Hospital Heidelberg, Germany
- Medical School Berlin, Germany
- University Hospital Tuebingen, Institute of Health Sciences, Department of Nursing Science, Germany
- German National Institute for State Examinations in Medicine, Pharmacy and Psychotherapy, Mainz

Dr. sc. hum. Dipl.-Psych. Katja Krug, B. Sc. (Statistics)
+ 49 (0)6221 - 56 8420 • katja.krug@med.uni-heidelberg.de